**Draft EIR**
**Appendices**

# UCSC MARINE SCIENCE CAMPUS CLRDP

## *Environmental Impact Report*

*SCH No. 2001112014*

*January 2004*

*Prepared for*

*University of California, Santa Cruz*
*Environmental Assessment Group*

***Draft EIR Appendices***

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200385

# CHAPTER 11

APPENDICES

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Appendix B. Agricultural Resources LESA Study Worksheets and Maps and Agricultural Viability Analysis
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# APPENDIX A

NOTICE OF PREPARATION

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

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PHYSICAL PLANNING AND CONSTRUCTION SANTA CRUZ, CALIFORNIA 95064

November 1, 2001

Terry Roberts
State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

CERTIFIED MAIL

**NOTICE OF PREPARATION—ENVIRONMENTAL IMPACT REPORT (EIR)**

**Project Title:** Long Marine Laboratory Coastal Long Range Development Plan

**Project Location:** University of California

**County:** Santa Cruz

**Project Description:** The proposed project is a Coastal Long Range Development Plan (Coastal LRDP) for the 98-acre Long Marine Laboratory (LML) site located on the west side of the City of Santa Cruz (See Figure 1). LML, as part of the University of California Santa Cruz, has embarked on a planning program to provide for the expansion and enhancement of its research and education capabilities. Through this process the University plans to bring together distinguished scientists, educators, and students at a major new Marine Science Campus. The Coastal LRDP includes project goals, a description of the project program and space requirements, planning principles, a land use plan and illustrative concept plan, and plans and policies to provide for the physical development of LML over the next 20 years. (An LRDP identifies the physical development needed to achieve the mission and goals of University of California institutions. A Coastal LRDP is provided for under the California Coastal Act of 1976 and addresses additionally issues arising from coastal proximity. A Coastal LRDP is similar to a Local Coastal Program prepared by a local agency, in that once it is approved by the Coastal Commission, the University will be responsible for coastal permitting of future projects under the Coastal LRDP.)

The development of the Coastal LRDP program was based on a variety of factors, including: known demands on existing research facilities; projected increase in the number of UCSC-based marine biology faculty and the amount of research conducted; the desire to promote joint research in marine biology and increase opportunities for undergraduate, graduate, and post-doctoral research by allowing for affiliated research entities at LML; and the desire to continue to expand LML's commitment to community education by providing facilities for such educational programs. The Coastal LRDP program would provide for 250,000 square feet of Marine Research and Teaching Facilities, 11,000 square feet of Support and Ancillary Facilities, 30,000 of Equipment Storage and Maintenance Facilities, and approximately 100,000 square feet of short-term and rental Housing.

The Marine Research and Teaching Facilities program would provide for the following facilities planned for near-term implementation: Ocean Health Phase II, National Marine Fisheries Service Phase II, and a new facility for the U.S. Geological Survey. This program would also provide for long-term research facilities for the following: future LML expansion, USGS expansion, and facilities for other marine research and education uses.

The Support and Ancillary Facilities program would provide for a seminar auditorium, which would support academic seminars and lectures, as well as community education activities. Meeting rooms may also be provided to allow for small conferences and symposia to be conducted. A dining hall would be provided to reduce the need for on-site researchers, staff and students to leave campus for meals and to allow food service to be provided for seminars and lectures.

The Equipment Storage and Maintenance program would provide for a shared warehouse and equipment yard for LML and affiliated uses, which would continue to allow on-site outfitting of vessels and storage of expensive and sensitive equipment.

The Housing program would provide accommodations for the following: caretakers, visiting scientists, graduate students conducting research at LML, new faculty and researchers in marine research, pre-college students attending Sea Camp, and K-12 teachers attending summer programs. The housing is intended to be integrally related with the coastal-dependent marine research and educational functions at LML. All of the housing would accommodate short-term uses, ranging from over-night stays for visiting scientists to transitional housing for new faculty and researchers. The types of accommodations planned include small for-lease 1-, 2-, and 3-bedroom townhouses or apartments (80 units), dorms (28 rooms with a total of approximately 140 beds), and visitor over-night accommodations (10 rooms).

The Coastal LRDP would allow for development in three distinct development zones located on the Lower Terrace, the Middle Terrace, and the Upper Terrace. The Lower Terrace would continue to serve as the focus of LML growth and expansion. The Middle Terrace, the largest of the three zones, would serve as the core of new development on the site. The Upper Terrace would be adaptable to a number of suitable uses within the LML campus and may provide an important flexible role for unanticipated and future program needs. The remainder of the property, not within the development zones, would be within resource protection zones established to protect the natural resources within those areas.

**Project Site:** The LML Coastal LRDP addresses 102 acres of land owned by UCSC. The property is located at the western edge of the City of Santa Cruz and consists of the Younger Lagoon Natural Reserve (25 acres), the existing LML complex (16 acres), and the mostly undeveloped upland site formerly known as Terrace Point (57 acres) (See Figure 2). The Younger Lagoon Natural Reserve (YLNR) is included in the University of California's Natural Reserve System and is managed as a habitat preserve for permanent protection. The YLNR is one of the few remaining natural coastal wetlands in Santa Cruz County. A great diversity of bird species is known or expected to occur there. Approximately 21 special-status bird species are known to forage in the YLNR as non-nesting species. A pair of saltmarsh common yellow throats, a CDFG Species of Special Concern, were observed showing nesting behavior in the reserve and may in fact be nesting in the YLNR. Tidewater gobies, a federal Endangered species and a CDFG Species of Special Concern, were found during 2000 surveys of the lagoon. Western red bats, a Western Bat Working Group "High Priority" species, are expected to roost in YLNR. Additionally, California red-legged frog (CRLF), a federal Threatened species, may occasionally move across the northern portion of the YLNR; however, the seasonal drainages that feed the YLNR are too ephemeral to support CRLF reproduction or non-reproductive rearing habitat. No other special-status wildlife species are expected to occur on this portion of the site. Additionally, no special-status plant species were identified in the YLNR during biotic surveys conducted during 2000 and 2001.

The original 16-acre development area for LML is located on the coastal terrace east of and immediately adjacent to the YLNR and west of McAllister Way. It is mostly separated from the reserve by a 10- to 12-foot high berm or fence. There is approximately 74,000 square feet of existing development in the original development area. The Ocean Health Building and the CDFG Marine Wildlife Center are the major facilities on this portion of the site. Remaining habitat on this portion of the site consists of primarily non-native grassland and ruderal vegetation. No special-status wildlife or plant species were observed on this portion of the site, nor would they be expected to occur here.

The eastern half of the site (previously known as the Terrace Point site) is mostly undeveloped except for the Seymour Marine Discovery Center located on the southern edge of the site and the National Marine Fisheries Service building located on a 2.5-acre federal inholding located in the center of the area. The undeveloped portion of the property consists primarily of non-native grassland habitat and coyote brush-scrub-grassland habitat. Seasonal wetlands also exist on this portion of the site. No special-status wildlife species were observed to be breeding or nesting on this portion of the site during these surveys. A pair of northern harriers, a CDFG Species of Special Concern, regularly forages over the site, and a white-tailed kite, a federally Protected species, was observed foraging. Additionally, California red-legged frog, a federal Threatened species, may occasionally move across the northern portion of the site; however, the seasonal wetlands on the site are too ephemeral to provide CRLF reproduction or non-reproductive rearing habitat. No other special-status wildlife species are expected to occur on this portion of the site. Additionally, no special-status plant species were identified during biotic surveys conducted during 2000 and 2001.

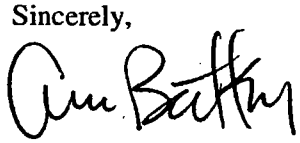
In compliance with State CEQA Guidelines and the University of California CEQA Handbook, this Notice of Preparation is hereby sent to inform you that the University of California, Santa Cruz is preparing a Draft Environmental Impact Report (EIR) on the above-named project. It is intended that the EIR would be a program EIR that would support the approval of the Coastal LRDP. The EIR would also provide project-specific coverage for approximately 3 to 6 near-term projects.

As Lead Agency we need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. The topics to be addressed in the EIR are: geology, soils and seismicity; hydrology and water quality; biological resources; visual quality; land use; population, employment, and housing; traffic, circulation, and parking; air quality; noise; public services; utilities; energy; and hazardous substances. Information on the anticipated scope of EIR analyses of these topics is attached to this NOP.

A Scoping Meeting will be held on **November 14, 2001** between 6:00 PM and 8:00 PM, at the Seymour Marine Discovery Center at the Long Marine Laboratory. Parking will be available at the Seymour Marine Discovery Center parking lot. Public agencies and members of the public are encouraged to provide early input into the EIR process by attending this meeting or by responding in writing to this Notice of Preparation. Due to the time limits imposed by State law, your response must be sent at the earliest possible date, but not later than 30 days after receipt of this notice. Please designate a contact person in your agency and send your response to the address below.

Ann Bertken
Environmental Assessment Group
515 Swift Street
University of California
Santa Cruz, CA 95060

Sincerely,

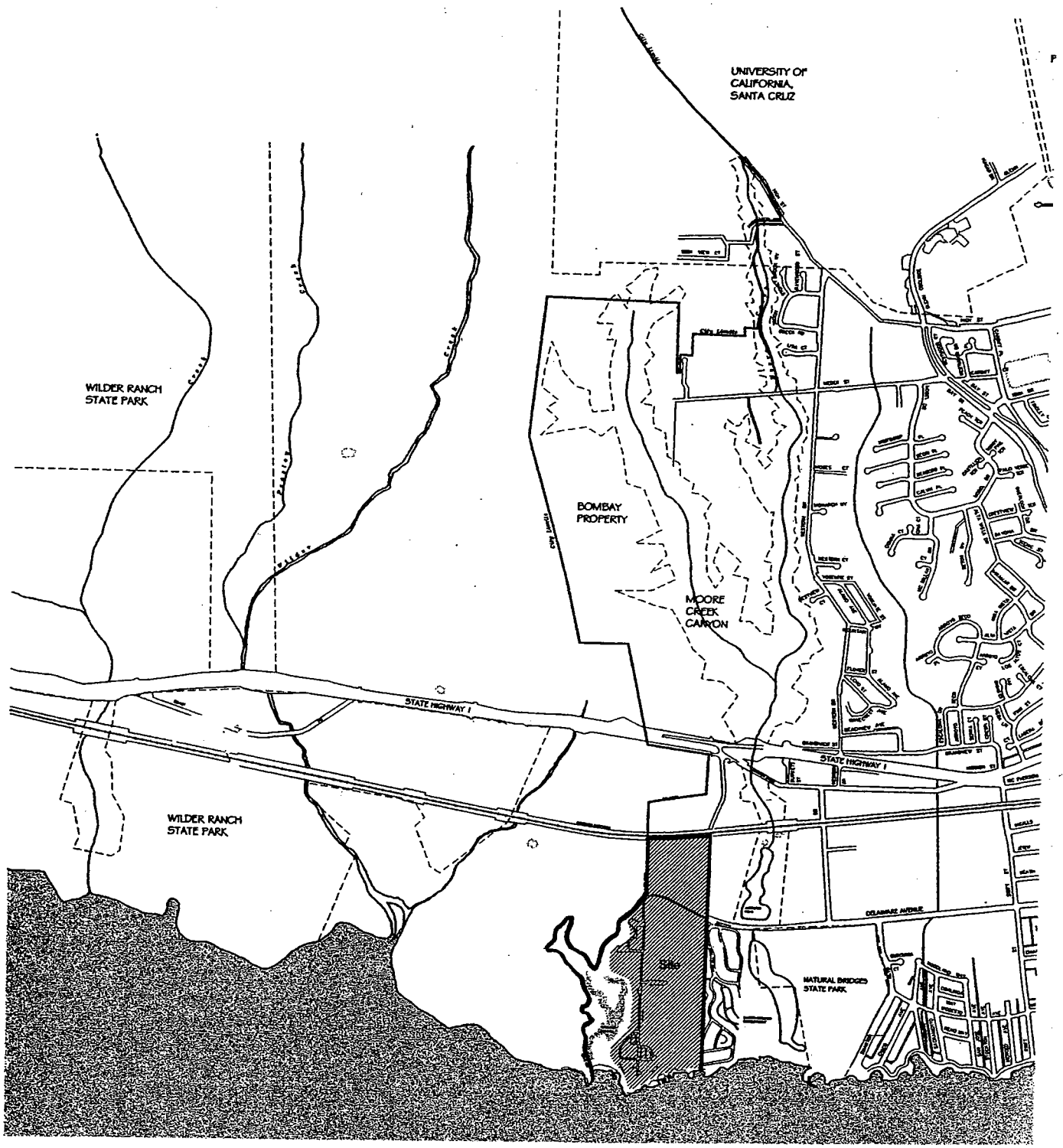


Ann Bertken
Associate Planner

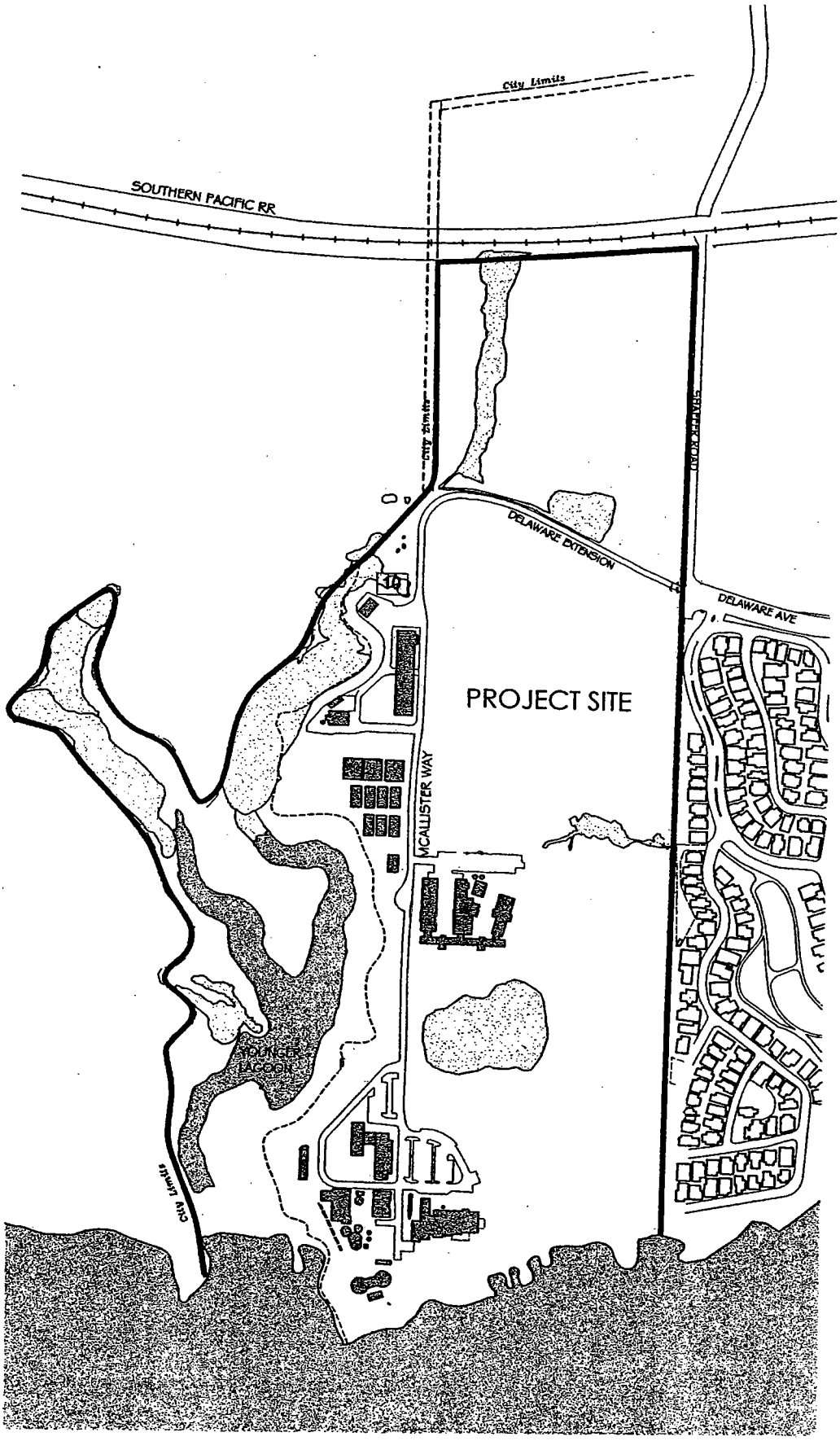
Enclosure

cc: A. James, Santa Cruz County Planning
M. Bocchicchio, U.C. Assistant Vice President
N. Papadakis, Association of Monterey Bay Area Governments
K. Thomas, Santa Cruz City Planning and Community Development
A. Waltner, U.C. General Counsel
J. Holst, U.C. General Counsel
J. Maguire, U.C. Plan Review Coordinator
UCSC CEQA Distribution List

# FIGURE 1: PROJECT LOCATION



# FIGURE 2: PROJECT SITE



# PRELIMINARY EIR SCOPE
# LONG MARINE LABORATORY COASTAL LRDP EIR

The following is a preliminary description of the intended scope of EIR analyses for the Long Marine Laboratory Coastal Long Range Development Plan (CLRDP). It is being circulated to agencies and members of the public as an attachment to the Notice of Preparation (NOP) to allow these parties an opportunity to make specific and timely comments on the proposed content of the EIR. The scope of the EIR will be refined, taking these comments into consideration.

## Geology and Soils

The project site is located in a seismically-active region of California on mudstone overlain by marine terrace deposits. Movement on regional faults is capable of producing substantial groundshaking at the LML site. The site is situated on a broad, flat-lying uplifted marine terrace truncated by an actively eroding vertical seacliff. The site is subject to coastal erosion and is identified as an area of "moderate risk" for cliff erosion in the City's General Plan. The site has shallow soils, areas of perched groundwater, and potential localized areas of high shrink-swell potential. Although liquefiable soils are likely not a concern due to competent materials underlying the site, some soils may exhibit expansive characteristics and could require special treatment.

Coastal erosion, seismic hazards, and static hazards will be fully evaluated in the LML CLRDP EIR using data provided by the 1992 Foxx, Nielsen Geologic and Coastal Erosion Study prepared for the former Terrace Point site, available maps and reports of the California Division of Mines and Geology (CDMG) and the U. S. Geological Survey (USGS), prior geotechnical studies of the property, local fault and seismic studies, and site reconnaissance. The 1992 Foxx, Nielsen Study will be thoroughly reviewed in light of changes in site conditions, analytical methods, and standards over the past 9 years and the findings of this report will be reviewed and verified.

## Hydrology and Water Quality

Drainage in the project vicinity generally consists of overland flow into Younger Lagoon, the DeAnza Mobile Home Park, Antonelli Pond, and the ocean. A subsurface clay layer underlain by nearly impermeable mudstone results in somewhat poorly drained soils that often create perched groundwater conditions. Younger Lagoon is a small, relatively closed lagoon system. Water quality impacts in Younger Lagoon and the ocean could potentially occur due to project-related erosion and sedimentation and due to urban contaminants from project runoff, storm water discharge, and seawater system discharge. A reduction of stormwater flows into Younger Lagoon could also affect water quality conditions. Additionally, impervious surfaces, alteration of drainage patterns, and under-sized drainage-ways can result in localized flooding especially during peak rainfall periods.

Existing runoff volumes and project runoff volumes for two design storms will be estimated in the EIR using the Rational Method. Impacts associated with an increase in runoff volume (e.g., erosion and localized flooding due to under-sized drainage ways) will be identified and evaluated. Any changes in water quality with the implementation of the project will be identified and evaluated to determine whether water quality standards could be exceeded and/or whether Younger Lagoon and marine water quality could be adversely affected. Any changes in the quantity of storm water flows to Younger Lagoon will

be evaluated, as runoff from the site is a source of fresh water for the Lagoon. Additionally, marine water quality impacts from project stormwater discharge and from the intake and discharge of seawater from an expanded seawater system will also be evaluated. A previous study prepared by Kinnetics Laboratory (1993) for the expansion of the LML seawater system to 6,000 gpm will be the basis for analyzing marine water quality impacts associated with an expanded seawater system. The requirements for the development of a Stormwater Pollution Control Prevention Plan for construction on sites greater than five acres and compliance with NPDES requirements for seawater discharges will also be evaluated.

**Biological Resources**

The property is located at the western edge of the City of Santa Cruz and is composed of the Younger Lagoon Natural Reserve (25 acres), the existing LML complex (16 acres), and the mostly undeveloped upland site formerly known as Terrace Point (57 acres). As identified in the Notice of Preparation, the Younger Lagoon Natural Reserve (YLNR) is included in the University of California's Natural Reserve System and is managed as a habitat preserve for permanent protection. Based on review of biotic surveys conducted during the early and mid 1990's and surveys conducted during 2000-2001 in support of the LML CLRDP EIR, a variety of special-status species are known to occur or may occur in the YLNR, including approximately 22 bird species (1 of which may be nesting), tidewater goby, Western red bat, and California red-legged frog. Several special-status species are also know to occur or may occur on the undeveloped upland portion of the site, including northern harrier, white-tailed kite, and California red-legged frog. The seasonal drainages that feed the YLNR and the seasonal wetlands on the upland portion of the site are too ephemeral to support CRLF reproduction or non-reproductive rearing habitat. No special-status plant species occur on the site.

Sensitive habitats on the site, which include Environmentally Sensitive Habitats under the California Coastal Act, include the YLNR and seasonal wetlands on the undeveloped upland portion of the site. New wetland delineations under California Coastal Commission definitions and under Corps of Engineers definitions are being prepared in support of the CLRDP.

Project construction and operational impacts related to sensitive habitats, special-status species, and wildlife movement will be evaluated. This analysis will focus on the following issues of primary concern: direct and indirect impacts to special status plant species and to foraging and nesting/breeding special-status wildlife species; indirect impacts on sensitive habitats, including Environmentally Sensitive Habitats, from night lighting, noise, pets, the increased presence of people, and decreased water quality; direct impacts to wildlife movement across the site; the applicability of local plans and policies; and indirect impacts on adjacent habitat areas. The adequacy of wetland buffers and other protection measures and long-term maintenance programs identified in the CLRDP will be determined within the analysis of impacts noted above.

**Cultural Resources**

No evidence of cultural or paleontological resources has been found during previous archaeological surveys and studies of the site conducted between 1985 and 1992. Additionally, a 2000 cultural resource survey of the YLNR (which had not been previously surveyed) did not find any evidence of cultural resources on this part of the site. The closest documented archaeological site is approximately 2,400 meters east of the project site. Underwater and intertidal remains of the 1924 shipwreck of the *La Feliz* do, however, exist south of the site. The mast of the ship was placed in the bluff top, along the southern

edge of the site, to mark the site of the wreck and is still visible today. The State Lands Commission has indicated that the remains of *La Feliz* should be protected.

The potential for encountering as yet unidentified subsurface cultural or paleontological resources during excavation and other construction activities will be identified and evaluated. Additionally, any direct or indirect impacts to the remains of the *La Feliz* from project construction and operation will be evaluated.

**Visual Resources**

The project site is located on a series of low marine terraces immediately adjacent to the coast. The area transitions from urban development to rural and agricultural uses. Inland from Highway 1 (north of the site), the terrain becomes hilly, gradually rising to form the Santa Cruz Mountains. The site offers panoramic views to the south and southwest of Monterey Bay and coastal terrace landforms, with views of the existing buildings at LML and the De Anza Mobile Home Park. The site is visible to varying degrees from off-site public vantage points along Highway 1 (a designated scenic highway), Wilder Ranch State Park, Natural Bridges State Park, portions of West Cliff Drive, and the City's Bombay greenbelt property. Project development would result in the conversion of some of the site's fallow agricultural land to developed urban uses, thus altering the visual character of the project site and views from on- and off-site locations.

Changes in the visual environment that would result from project implementation would be described and analyzed using visual simulations that depict what development under the CLRDP could look like from up to ten representative vantage points. They are anticipated to include, at a minimum, views from Highway 1 (particularly the potential for disruption of ocean views), from Natural Bridges State Beach, and from West Cliff Drive. Project impacts on scenic vistas, scenic resources, and the visual quality of the site and surroundings will be evaluated. Impacts associated with the creation of new sources of light and glare will also be evaluated.

**Land Use**

Existing development on the site includes LML buildings, the National Marine Fisheries Service building (located on a federal inholding), and the California Department of Fish and Game Marine Wildlife Center. The property is located at the western edge of the City of Santa Cruz and is composed of the Younger Lagoon Natural Reserve (25 acres), the existing LML complex (16 acres), and the mostly undeveloped upland site formerly known as Terrace Point (57 acres). Land uses surrounding the site include the De Anza Mobile Home Park and Antonelli Pond to the east, the Southern Pacific rail line and industrial development to the north, agricultural lands to the west, and the Pacific Ocean to the south. The site is within the City of Santa Cruz and lies entirely within the California Coastal Zone. No Local Coastal Program (LCP) land use designations have been certified by the California Coastal Commission for the project site, although the City of Santa Cruz has site-specific and general LCP policies for the former Terrace Point site which was previously private land.

The undeveloped portion of the site was formerly under cultivation for brussel sprouts, but has lain fallow since 1988. The site includes primarily non-prime farmland, although a mix of non-prime and prime farmland may exist on the site, depending upon the criteria used to define such land. The site is not located within or adjacent to any agricultural lands protected under Williamson Act contracts.

The CLRDP EIR will evaluate the project's consistency with applicable land use plans, policies, or regulations of agencies with jurisdiction over the project, such as the California Coastal Commission. The project's consistency with all relevant California Coastal Act (CCA) policies will be evaluated in the EIR. Particular attention will need to be paid to agricultural policies (see further discussion below), the maintenance of a stable urban/rural boundary, the provision of an appropriate land use transition to adjacent north coast agricultural lands, the protection of environmentally sensitive habitats, the protection of coastal views, and whether various project uses are considered to be Coastal Priority Uses. But all relevant Coastal Act policies will be addressed. Although the project will not be subject to City of Santa Cruz regulations, the project's consistency with local zoning, other Planning Code provisions, and other pertinent City land use and Local Coastal Program (LCP) policies will also be evaluated. Project changes in land use and character of the site will be evaluated as they relate to the compatibility of project land uses with other nearby uses, particularly adjacent agricultural uses (see further discussion below). Moreover, the project's potential to physically divide an established community will be evaluated.

The EIR will fully analyze the proposed project for agricultural impacts under CEQA and under CCA. The agricultural classification of the site for CEQA purposes will be determined pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. The agricultural classification of the site for CCA purposes will be determined based on the USDA Soil Survey Capability test, the Storie Index test, the grazing land test, and the $200/acre return test. The soil testing conducted to support the prior 1995 agricultural suitability study conducted for the former Terrace Point site will also be used in the determination of the agricultural classification of the site.

The EIR would determine whether or not the project would result in: (a) a conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland); (b) conflicts with existing agricultural zoning or Williamson Act contracts; (c) changes in the environment which could result in the conversion of Farmland to non-agricultural uses; (d) creation of nuisance impacts by construction of a project which is incompatible with existing land uses, (e.g., agriculture); and (e) conflicts with applicable policies of an agency with jurisdiction over the project. As part of (c) and (d) above, the adequacy of the project's proposed agricultural buffers will be evaluated based on the county agricultural commission's setback requirements, the Agricultural Buffer Survey prepared by Mintier & Associates (July 1998), and a review of other compatibility issues including pesticide and dust drift, odor, noise, "right to farm" issues, and pilferage. Emissions of particulate matter under 10 microns (PM10) from adjacent agricultural operations would be evaluated per Monterey Bay Unified Air Pollution Control District standards and data, as part of the above compatibility analysis. The analysis of pesticide drift would be based on existing information from relevant agencies, as available.

The project's compliance with relevant CCA agricultural policies, including 30241 and 30242 will be evaluated. If it is determined that the viability of agriculture is already severely limited by conflicts with urban uses, the project's conformance with CCA Section 30241.5, regarding the economic viability of agriculture on the site, will also be evaluated. For example, the EIR would provide an analysis of historic and potential gross revenues and expenses from agricultural activities on and immediately adjacent the site to the north. The analysis would take into account the potential to conduct both traditional and organic agricultural production, water availability and cost, the presence of sensitive habitats on the site that may not be available for renewed agricultural use, and the presence of lands on the site that would need to be retained in an agricultural buffer that would not be available for renewed agricultural use.

**Population, Employment, and Housing**

The LML, National Marine Fisheries Service, and California Department of Fish and Game uses on the site currently employ approximately 170 people. There is currently no housing (other than temporary caretakers residences) provided on the site. The project would result in the construction of new research/office, laboratory, and other support and ancillary space, as well as housing, in an area that transitions from urban development to rural and agricultural uses. In addition, the project would extend roads and other infrastructure to and through the project site. As such, the project would have the potential to either directly or indirectly induce population growth and increase the demand for additional housing.

The number of jobs that the project would create and whether any jobs would be eliminated or displaced as a result of the project would be evaluated in the EIR. The expected change in demand for housing units as a result of the project and whether the proposed units included in the project would adequately meet the increased demand would also be analyzed. If there is a net increase in the demand for housing from the project, the availability of housing in the local community will be evaluated. If other nearby projects would also increase the demand for housing, the demand for housing from the project will be evaluated within the cumulative context of the project region. Housing impacts will be evaluated compared to existing conditions and to future conditions in 2010 and 2020. The population, employment, and housing section will be based on analysis derived from existing available sources of information, including census data, AMBAG data, and the City of Santa Cruz General Plan.

**Traffic, Circulation, and Parking**

Automobile access to the site is currently provided by Delaware Avenue. Access to Delaware is provided from Highway 1/Mission Street via Natural Bridges Drive or Swift Street and from West Cliff Drive via Swanton Boulevard. The existing Highway 1/Mission Street corridor is dominated by signalized intersections; changes in numbers of lanes (from 2 to 1 in each direction) and the lack of left turn lanes has resulted in delays along the corridor. The Highway1/Mission Street corridor is currently being widened to 4 full lanes between Chestnut and Swift Streets, with left-turn channelization at all signalized intersections. The 4 phases of the Mission Street widening project are scheduled to be completed by early 2002.

The transportation analysis in the EIR will analyze the following: (1) roadway operations; (2) site access and circulation (including emergency access); (3) vehicle, pedestrian, bicycle, and transit access and conflicts with policies supporting alternative transportation modes; (4) parking capacity and demand; and (5) neighborhood impacts. The analysis will include discussions of existing, project, and cumulative conditions (in 2010 and 2020) at 24 intersections. Existing conditions will be based on new AM and PM peak period turning movement counts at 24 intersections and 24-hour machine counts at three locations. Mission Street volumes will be adjusted based on Caltrans 24-hour counts. The intersections to be included in the analysis are as follows:

- Empire Grade and Western Drive
- Empire Grade and Heller Driver
- Bay Drive/Coolidge Drive and High Street
- Meder Street and Western Drive
- Highway 1 and Western Street
- Mission Street and Highway 1

- Shaffer Road and Highway 1
- Swift Street/Grandview Street and Mission Street
- Natural Bridges Drive and Delaware Avenue
- Delaware Avenue and Shaffer Road
- Delaware Avenue and Swanton Boulevard
- Delaware Avenue and Swift Street
- Delaware Avenue and Almar Avenue
- Mission Street and Almar Avenue
- Bay Street and Laguna Street
- Bay Street and Mission Street
- King Street and Bay Street
- Bay Street and Escalona Drive
- Bay Street and Iowa Drive
- Mission Street and Laurel Street
- Laurel Street and California Street
- Walnut Avenue and Mission Street
- Union Street and Mission Street
- Chestnut Street and Highway 1
- River Street and Highway 1

The roadway segments to be included in the analysis are as follows:

- Western Drive between Western Court and Monarch Way
- Bay Street between Escalona Drive and Kenneth Street
- Delaware Avenue between Seaside Street and Surfside Avenue

The project will be evaluated under the following traffic scenarios: Phase I of the project (development through 2010) + Existing Conditions; Phase I and II of the project (development through 2020) + Existing Conditions; Phase I + 2010 baseline conditions; and Phase I and II + 2020 baseline conditions. Level of Service calculations will be conducted to evaluate roadway operations under these scenarios. Existing conditions and baseline conditions in 2010 and 2020 will also be reported without the addition of project traffic. The 2010 baseline condition will include traffic volumes from the approved, but not yet constructed projects, plus existing traffic volumes. Development between 2010 and 2020 will likely be estimated using a growth factor based on AMBAG model projections or other acceptable method. Traffic volumes from this growth will be added to the 2010 baseline volumes to obtain the traffic projections for 2020 baseline conditions. The City of Santa Cruz's Traffix model will be used in the analysis.

A Traffic Infusion on Residential Environments (TIRE) analysis will be used to evaluate project impacts on the three nearby residential street segments identified above, as the basis for evaluating likely neighborhood impacts. Additionally, a roadway segment analysis (using v/c ratios) will be conducted on the same three nearby residential street segments, as well as on a segment of Mission Street, which is to be determined.

**Air Quality**

The project site is located in the North Central Coast Air Basin, which is currently a state nonattainment area for fine particulate matter (PM10) and a nonattainment-transitional area for ozone. The North Central Coast Air Basin was previously a federal moderate nonattainment area for the 1-hour ozone standard, but was redesignated as a federal ozone maintenance area in March 1997. The basin is also an

attainment area with respect to federal PM10 standards. Regional air quality plans have been developed to improve air quality within the Basin. The project site is an exposed, coastal bluff location that experiences high wind conditions at times.

The CLRDP EIR will evaluate construction and operational air quality impacts of the project in conformance with the Monterey Bay Unified Air Pollution Control District's (MBUAPCD) *CEQA Air Quality Guidelines*. The potential for local and regional exceedences of the MBUAPCD significance thresholds for criteria pollutants will be quantified in accordance with the guidelines. Regional motor vehicle emissions will be evaluated using the URBEMIS7G model. The potential for local carbon monoxide (CO) "hot spots" from motor vehicle emissions that could exceed applicable standards will be evaluated at two intersections most affected by project traffic, using a screening method acceptable to the MBUAPCD. The CALINE4 model will be used to further analyze CO concentrations if the results of the screening effort predict concentrations above standards. The consistency of the project with the MBUAPCD's Air Quality Management Plan will determined by the Association of Monterey Bay Area Governments (AMBAG) via a request for a consistency determination. Such consistency determinations form the basis for the evaluation of a project's cumulative impact on regional ozone concentrations.

The potential impacts from any toxic air contaminant emissions (TACs) from the project will also be evaluated. Potential sources of TACs include laboratory fume hoods and diesel particulate emissions from trucks and diesel-powered emergency generators. Based on a 1993 health risk assessment for laboratory fume hood emissions prepared for the LML Master Plan EIR, the general magnitude of expected project emissions will be evaluated. The MBUAPCD permitting required to control TAC emissions and to allow for the operation of laboratory fume hoods will be discussed. Additionally, the likely range of diesel emissions that could result from emergency generators and other sources will also be quantified, to the extent possible. The potential for these diesel particulate emissions to result in adverse health conditions for residents will also be evaluated.

**Noise**

The noise environment at the project site is influenced by traffic, neighboring agricultural activities, existing outdoor marine mammal tanks at the LML, and natural noise sources such as the ocean and wind. Ambient noise levels in the vicinity of the project site are primarily influenced by vehicle travel on local roadways (e.g., Delaware Avenue and Mission Street to the north of the site).

The LML CLRDP EIR will evaluate the noise impacts of the project, including: (1) impacts of construction noise on existing site facilities and neighboring residential and other land uses, (2) operational noise impacts from on-site activities and building equipment (e.g., HVAC systems) on both on-site and off-site land uses, and (3) operational noise impacts from project-related traffic increases on off-site sensitive receptors. New noise measurements will be taken in the project vicinity to characterize the baseline ambient noise environment at the project site and in the site vicinity. Measurement locations will focus on sensitive academic/research facilities and housing units proposed under the Plan and other sensitive receptors (including off-site receptors) that could be affected by project construction or long-term operation of the project. Construction-related noise levels will be estimated in surrounding areas and at identified sensitive noise receptors. The change in noise levels due to project and cumulative traffic along the roadways most affected by project traffic will be calculated using the noise prediction model of the Federal Highway Administration (FHWA). Additionally, typical noise generated by various elements of the project, including potential commercial-type activities (e.g. truck unloading, HVAC systems) will

be estimated. The potential for project noise to adversely affect sensitive land uses or activities or to conflict with noise compatibility standards used by the University will be determined.

**Public Services**

The City of Santa Cruz is responsible for providing fire and police protection services to all areas within the City limits including the project site. The UCSC Fire Department is responsible for providing first response for emergencies at LML. The project site is located within the Santa Cruz City School District, with the closest schools to the site being Natural Bridges Elementary, Mission Hills Junior High, and Santa Cruz High. There are currently three neighborhood parks and two school sites that provide recreation facilities in the vicinity of the project, in addition to Natural Bridges State Park, West Cliff, and area beaches.

The LML CLRDP EIR will evaluate the potential increase in demand for public services, including fire protection, police protection, schools, parks and recreational facilities, and emergency response. Any impacts that would alter the ability of a service provider to maintain acceptable service ratios, response times or other performance objectives will be identified and evaluated.

**Utilities**

The City of Santa Cruz provides water, sewer, and solid waste services to the project site and vicinity.

The LML CLRDP EIR will evaluate the potential increase in demand for utilities, including water, wastewater/sewer, and solid waste services. The net service water, wastewater, and solid waste generation rates for the project will be estimated through the use of commonly-accepted engineering, planning, or community service standards and the project demand will be calculated. The City of Santa Cruz will be consulted in the determination of project impacts due to shortages in the City's water supply during drought conditions; possible inadequacies in sewer lines, pump stations, or treatment facilities; and potential shortfalls in permitted landfill capacity. If new facilities or expansion of existing facilities are required to serve the project, this will be identified.

**Energy**

The site is currently provided with electrical and natural gas services by Pacific Gas & Electric Company.

The LML CLRDP EIR will estimate the energy consumption that would be associated with the construction and operation of the project. Any inefficient or wasteful use of energy proposed by the project will be evaluated. Existing utility infrastructure for electricity may not be adequate to meet the demands of the project, and the construction of new energy production or distribution facilities or the expansion of existing facilities could be required. The implications of project facilities and cumulative growth on PG&E transmission and distribution facilities will be analyzed.

**Hazardous Substances**

Existing buildings on the project site, especially those containing laboratories, use and store hazardous materials. It is the policy of the University of California to maintain a safe environment for its students, faculty and visitors. It is also the University's policy to conduct University operations in compliance with all applicable regulations and health and safety standards. UCSC has charged the campus Office of

Environmental Health and Safety (EH&S) with compliance monitoring to ensure a safe and healthy campus environment and with coordinating the management of hazardous materials on campus and at LML. EH&S has the authority to require abatement of any condition or operation that could endanger people or facilities on campus or result in violations of pertinent federal or state laws or campus policies concerning health and safety. EH&S develops specific policies and programs in the following areas: industrial hygiene; chemical safety; physical safety; radiation safety; biohazard safety; hazardous waste management; and environmental protection. Additionally, the previous use of the site for agricultural purposes has lead to the presence of residual pesticide concentrations in on-site soils.

The CLRDP EIR will evaluate potential hazards posed by the project from hazardous substances. Operation of new facilities that would be constructed under the CLRDP would likely increase the use of substances on the site that are considered hazardous under Federal or State criteria. These materials could include solvents, chemicals containing heavy metals, gases, or poisons and may be a potential exposure risk to workers, employees and students. LML must comply with Federal and State requirements for the storage and disposal of hazardous substances. The health impacts of hazardous substances use of the project will be evaluated for conformance with the regulatory requirements for use, storage, and disposal. Any potential health impacts from past or present hazardous materials use, storage, or disposal, that have resulted in residual contamination in the project area will also be evaluated as they relate to both the construction and operation of the project.

The potential health affects of pesticide residues in on-site soils will also be evaluated in the EIR. This analysis will be based on a review of previous studies (i.e., Phase I Site Assessment Due Diligence Report for the Acquisition of Campus-Related Property, Residual Pesticide Investigation, Raas, 1997; and Health Risk Assessment, Applied Science and Engineering, 1997) and on a new Phase II site assessment and health risk assessment to be prepared for this EIR. A new Phase II site assessment and health risk assessment will be performed, because there were a range of critical comments about the methodologies used in the prior studies and because there is new California Department of Toxics Substances Control guidance for performing these studies on school sites, which the University's Office of Environmental Health and Safety has recommended be used for this project. The health affects of exposure to pesticide residues in on-site soils during construction and operation of the project will be evaluated.

**Cumulative Analyses**

The effects of the CLRDP project in combination with the cumulative effects of other past, present, and future projects will be addressed. Project and cumulative impacts will be addressed in 2010 and 2020. The project, as it is likely to be completed through 2010 and 2020, will also be compared to existing conditions.

**Alternatives**

The EIR will address a reasonable range of alternatives that could reduce or avoid any identified significant effects of the LRDP project. The alternatives would likely consist of a no project alternative, a reduced project alternative, a larger alternative with additional housing to reduce vehicle trips, and a modified development configuration alternative.

# APPENDIX B

AGRICULTURAL RESOURCES LESA STUDY WORKSHEETS AND MAPS AND AGRICULTURAL VIABILITY ANALYSIS

# APPENDIX B

## ANALYSIS OF THE AGRICULTURAL VIABILITY OF THE SITE

### *California Agricultural Land Evaluation and Site Assessment Model*

An analysis of the project site farming suitability and viability utilizes the 1997 California Department of Conservation – California Agricultural Land Evaluation and Site Assessment (LESA) Model as an approach for rating and relative quality of land resources based upon specific measurable features. These features include soil resource quality measured by the Capability Classification and Storie Index Rating, the project's size water resource availability, surrounding agricultural lands, and surrounding protected resource lands. In terms of agricultural productivity, the size of a farming operation can be considered not just from total acreage, but the acreage of different quality lands that comprise the operation. Each of these factors is rated on a 100-point scale and then weighted and combined for an overall score out of 100 points possible. It is the total score that becomes the basis for making a determination of an area's potential significance or agricultural use. The California Agricultural LESA Model does not specifically consider the issue of pesticide use, crop revenue, or buffer setbacks.

The four LESA worksheets include the following information.

**Worksheet #1:** The Land Evaluation Worksheet – includes the soil map unit, the soil acres, the soil proportion of the project area, the Land Capability Classification, the Land Capability Classification Points (provided by LESA), the resultant Land Capability Classification Score, the Storie Index, the Storie Score, and the project Size Score. The Highest Project Size Score is provided by LESA where greater than 80 acres would achieve a score of 100 points and less than 10 acres would receive 0 points. Soil data were obtained solely from the USDA published Soil Survey.

**Worksheet #2:** The Site Assessment Worksheet for Water Resources Availability – includes listing existing irrigated crops and the number of acres, existing dryland crops and the number of acres, water sources, the proportion of the project area that water could be supplied to, the LESA water availability score, and the LESA weighted availability score. To determine the score a number of LESA Options are given ranging from irrigation being feasible with no physical restrictions and no economic restrictions for 100 points, to no feasible irrigation for zero points.

**Worksheet #3:** The Site Assessment Worksheet for Surrounding Agricultural Land and Surrounding Protected Resource Land – includes determining the Zone of Influence acreage one-quarter mile outside of all site perimeters, agricultural acres within the ZOI, protected resource acres within the ZOI, percent of ZOI in agriculture, percent of ZOI in protected resources and the respective LESA agricultural land score, and protected resource land score. To determine the score a number of LESA percentages are given. For example, 900 to 100 percent equals 100 points and less than 20 percent equals 0 points. Protected resource land includes dedicated conservation easements, Land Conservation Act land, parks, and established resource areas.

**Worksheet #4:** The Final LESA Scoresheet for the Land Evaluation and Site Assessment Factors – includes determination of LESA Weighted Factor Scores based on the totals from the above Land Evaluation and Site Assessment Factors.

The LESA methodology total from Worksheet #4 is commonly used to determine the significance of the conversion of agricultural land to urban use as part of a CEQA analysis Initial Study whereby:

LESA Scoring Thresholds include the following for agricultural land:

| | |
|---|---|
| 0 to 39 points | Not Considered Significant |
| 40 to 59 points | Considered significant only if the Land Evaluation and Site Assessment subscores are each greater than or equal to 20 points |
| 60 to 79 points | Considered significant unless either the Land evaluation or Site Assessment subscore is less than 20 points |
| 80 to 100 points | Considered significant |

Because of the Terrace Point complex soils and land use compatibility issues, five agricultural production scenarios were evaluated by the LESA methodology.

The five scenarios include the following:

1) No Constraints – this scenario assumes that approximately 54 acres of the site could be utilized for agricultural production. Pesticide use would be minimal or organic farming. No setbacks would be utilized in order to maximize soil acreage.

2) ESHA Wetlands Setback – this scenario assumes a 100-foot setback from Environmentally Sensitive Habitat Areas containing wetlands and from existing buildings. Approximately 6.27 of wetlands, nine acres for recommended 100-foot setbacks, and two acres for building setbacks would leave about 36 acres in this scenario. Pesticide use would be minimal or organic farming.

3) 1995 Agricultural Suitability Study – this scenario includes about 23 acres of remaining Terrace Point property that was considered to be lower suitability farmland due to previously mentioned constraints. Pesticide use would be minimal due to proposed 30-foot setbacks from buildings.

4) A 300-foot Pesticide Use Setback – this scenario utilizes a 300-foot interior setback from existing habitable structures. Approximately 17 acres would be available for farming on the Terrace Point site. Pesticide use would be allowed and wetlands would be avoided.

5) A 500-foot Compatibility Setback – this scenario utilizes a 500-foot interior setback from existing habitable structures. Approximately 5.6 acres would be available for farming on the Terrace Point site. Pesticide use would be allowed and wetlands would be avoided.

Summary worksheets are included for each of the following five scenarios in the appendices.

An example of the LESA methodology is provided below for Scenario #2 – ESHA Wetlands Setback. Of the above scenarios, this particular one would probably be the best case from a farming standpoint.

**Worksheet Page 1:** The area is 36 acres in size and contains three USDA soil series or types of soil. The soil series are #132 – 11.4 acres, #133 – 5.3 acres, and #178 – 19.3 acres.

The Land Capability Classifications are I (if irrigated), IIIe, and IIIw, respectively. Total Land Capability Classification Points are 74.3 based on multiplying the proportion of the soil area times the LESA LCC Scoring.

The Storie Index of the soils are 73, 66, and 50, respectively that equal a total Storie Score of 59.8 based on multiplying the proportion of the soil area times the Storie Index.

The size score is determined from the other LESA tables on Worksheet Page 1. For either 11.4 acres of Capability Class I soil, or 24.6 acres of Class III soils the maximum size score is 30 points.

Because of previous controversy on soil classifications, we have taken a very conservative approach and have assumed for all scenarios that soil map #132 is Capability Class I event though it would only achieve this classification if the soil was under active irrigation which it is not.

**Worksheet Page 2:** Continuing for the 36-acres area, the current irrigated crop use is zero acres, and for dryland crops is zero acres. The water sources include City of Santa Cruz water at $1,500/acre/year plus $30,400 hook-up fee plus $1,238 yearly readiness fee. No existing water deliver infrastructure exists of the site for crop irrigation. A further analysis of water use is included latter in this section. A number of LESA-derived options exist for water availability. For this site, we have taken a range from zero points where irrigation is not feasible to 30 points where irrigation would be feasible but with physical restrictions and economic restrictions. High water costs, a high hook-up fee, a yearly readiness fee, lack of an onsite water deliver infrastructure, and future potential water use cost increases all contribute to lower feasibility. Well water is not considered feasible because there is no well or water storage reservoir, potential well sites are in ESHA wetland areas, and water quality is substandard for agricultural use.

The water resource score is constant for all scenarios.

The LESA Model does consider economic restrictions if a rise in the cost of water goes to a level that forces a reduction in consumption. Irrigated agricultural production is considered feasible when:

- There is an existing irrigation system on the project site that can serve the property. None exist on Terrace Point for agricultural uses.
- Physical and/or economic restrictions are not severe enough to halt production. See following analysis.
- It is possible to achieve a viable economic return on crops through irrigated production. See following analysis.

**Worksheet Page 3:** This worksheet determines the zone of influence (ZOI) for all scenarios. A one-quarter mile rectangle was drawn around the perimeters of the Terrace Point site and the

acreages by land use were planimetered. Total ZOI area was about 434 acres of which 118 acres (28 percent) are currently used for agriculture. Approximately 214 acres are considered as protected resource areas including the Antonelli Pond area, Natural Bridges State Park, Younger Lagoon, and the Pacific Ocean. From the LESA tables the surrounding agricultural land score is 10 points since 28 percent is in agricultural use. The protected resource land score is 60 points since between 51 percent of the surrounding land is in long-term open space.

The zone of influence is constant for all scenarios for the overall exterior perimeter Terrace Point property footprint.

**Worksheet Page 4:** This worksheet totals the scores on the previous worksheets and determines the significance of the agricultural resource.

The Land Evaluation Factors includes a Land Capability Classification score of 74.3 points times a factor weight of 0.25 that equals a weighted factor score of 18.6 points. A Storie Index score of 59.8 points times a factor with of 0.25 that equals a weighted factor score of 15 points. These scores added together equals a 33.6 point subscore.

The Site Assessment Factors includes a Project Size of 30 points times a factor weight of 0.15 that equals 4.5 points. A Water Resource Availability score of 0 to 30 points times a factor weight of 0.15 that equals 0 to 4.5 points. A Surrounding Agricultural Land score of 10 points times a factor weight of 0.15 that equals 1.5 points. A Protected Resource Land score of 60 points times a factor weight of 0.05 that equals 3 points. Totaling the weighted factor scores equals a 9 to 13.5 point subscore.

Adding the Land Evaluation Subtotal of 33.6 points and the Site Assessment Subtotal of 9 to 13.5 points equals 42.6 to 47.1 points. Per the LESA Model this point range is to be considered as a significant agricultural resource only if both the LE and SA subscores are each greater than or equal to 20 points. The SA subscore is 9 to 13.5 points.

**Summary of LESA Scenarios**

| Scenario # | Land Evaluation Subscore | Site Assessment Subscore | Final LESA Total Points |
|---|---|---|---|
| 1 | 35.1 | 12 to 16.5 | 46.1 to 51.6 |
| 2 | 33.6 | 9 to 13.5 | 42.6 to 47.1 |
| 3 | 33.1 | 9 to 13.5 | 42.1 to 46.6 |
| 4 | 35.5 | 6 to 10.5 | 41.5 to 46 |
| 5 | 36.2 | 4.5 to 9 | 40.7 to 45.2 |

Note: 40 to 59 points are considered significant only if both subscores are each greater than or equal tot 20 points.

In conclusion, the LESA Model would consider none of the five scenarios as a significant agricultural resource.

### *Economic Analysis of the Agricultural Viability of the Site*

In addition to the LESA analysis, further analysis of the agricultural viability of crop production versus costs is provided below. Average crop production in tons per acre for Brussels sprouts and average gross revenues per acre were determined from the Santa Cruz County Agricultural Commissioner's Office crop reports. Brussels sprouts were used since this crop appears to be the most feasible for the site's microclimate based on the experience of other farmers.[1,2] The average gross revenues for LESA Scenario 2's 36 acres of agricultural production were then estimated. Sources included average production costs as determined from the Santa Cruz County Farm Advisor cost sheets and from Farm Advisor updates on costs. Production costs include land preparation, fumigation, cultivation, fertilization, planting and harvesting costs. Materials include fertilizers and pesticides. Cash overhead includes general expenses, management, interest, rent, and repairs. Average gross revenues and production per acre for 2001 were used in the calculations as the most recent available data. Water costs are incorporated below.

The approximate projected average net income for LESA Scenario 2's 36 acres is estimated to be $45,000 ($1,250 per acre) for Brussels sprouts (excluding water costs and assuming the land is rented), with average production at 9.1 tons per acre, production costs at $3,500 per acre, and an average gross revenue of $522 per ton. Average production yields were used as a conservative estimate; actual historical site yields may have been lower due to drainage-impaired soils and poor irrigation water quality.

City of Santa Cruz water rates for a two-inch irrigation water meter includes a $26,848 connection cost, a $3,102 installation cost, a $444 water meter cost, and a $1,238 yearly readiness to serve charge. An actual irrigation water cost of $2.29 for 748 gallons equates to about $1,500 per acre per year (1.5 acre-foot – 488,777 gallons of irrigation water per year). Total yearly irrigation-water-only costs for 36 acres would be about $54,000 plus the yearly readiness fee of $1,238 would equal $55,238. Net return including irrigation-water-only costs for 36 acres would be a loss of approximately $10,238 for the first year. Farming under this scenario would therefore not be considered viable. Note that the production costs and gross revenues would vary yearly. In addition, the water connection, installation, and meter costs would be a one-time $30,394 cost, excluding interest. The water costs also do not include the cost of water line infrastructure within the site, and future cost increases and availability from an urban server. A first year loss would actually total $40,632 if the one time hook-up fee was included. The LESA analysis for Worksheet #2 water availability ranges from 0 to 30 points depending on the specific production year and actual water availability.

The agricultural viability report format contained in the Watsonville Municipal Code is also of interest, as it analyzes the productivity of agricultural sites and the surrounding areas for the preceding five years. The Watsonville viability report, at a minimum, is to contain an analysis of the following factors: soil types, and Capability Classification, Storie Index, net dollar return for crops grown on each soil type, crop types and dollar return, agricultural uses not dependent on soil, agricultural constraints (such as climate), management techniques, proximity of agricultural and urban uses, water uses-costs-availability, access, production history, risk factors, and

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1 Goode, Helen, Owner Younger Ranch, Comment on Monarch Village Draft EIR: City of Santa Cruz Planning Department, October 19, 2001, and personal communication, November 9, 2002.

2 Roth, Victor, California State Parks Land Agent, personal communication, January 4 and 5, 2002.

economics including gross revenues, operational expenses, fixed cost, excluding land costs, and cost impact on private and public sectors.

The above factors, where applicable, were extrapolated for the project site for methodology consistency with other jurisdictions, even though no agricultural production has occurred on the property since 1988 and thus no agricultural revenues were generated. The above cost analysis provides a reasonable approximation in the absence of actual site-specific production data. Urban services and access infrastructure was established across the property for existing University-related and other land uses.

The above generic cost analysis data (excluding water) provides a reasonable regional extrapolation for the area (note that the actual production and cost figures for the Younger Ranch and the Wilder Ranch were unavailable due to the privacy rights of the farmers on those properties). However, agricultural lands at the Younger and Wilder Ranches are classified as both Prime and of Statewide Importance, which is superior to the Unique classification of the soils on the project site. It is apparent from the public record and from state park lease arrangements that both the Younger Ranch and Wilder Ranch properties are committed to long-term, viable agricultural production and therefore constitute significant agricultural resources. (It is noted that the Younger Ranch is not under Land Conservation Act contract at this time and the Wilder Ranch is owned by the State of California.) Based on 2001 crop reporting records, together these two ranches constitute about 80 percent of the Brussels sprouts acreage in Santa Cruz County.

## SCENARIO #1 - TERRACE POINT NO CONSTRAINTS LESA WORKSHEET SOILS: PAGE 1

AND EVALUATION WORKSHEET

Land Capability Classification

Storie Index Scores

SITE ASSESSMENT WORKSHEET

Project Size Score

| SOIL MAP UNIT | PROJECT ACRES | PROPORTION PROJECT AREA | LCC | LCC POINTS | LCC SCORE | STORIE INDEX | STORIE SCORE | LCC I-II | LCC III | LCC IV-VIII |
|---|---|---|---|---|---|---|---|---|---|---|
| #132 | 23 acres | 0.43 | I* | 100 | 43 | 73 | 31.4 | 23 acres | | |
| #133 | 7 acres | 0.13 | IIIe | 70 | 9.1 | 66 | 8.6 | | 7 acres | |
| #178 | 24 acres | 0.44 | IIIw | 60 | 26.4 | 50 | 22 | | 24 acres | |

* only if irrigated

| TOTALS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 54 acres | 1 | | 78.5 | | 62 | 23 acres | 31 acres |
| | | | | | | | 50 points | 30 points |
| | | | | | HIGHEST PROJECT SIZE SCORE | | 50 points | |

**Project Size Scoring Table:**

| Class I or II | | Class III | | Class IV-VIII | |
|---|---|---|---|---|---|
| Acreage | Points | Acreage | Points | Acreage | Points |
| >80 | 100 | >160 | 100 | >320 | 100 |
| 60 to 79 | 90 | 120 to 159 | 90 | 240 to 319 | 80 |
| 40 to 59 | 80 | 80 to 119 | 80 | 160 to 239 | 60 |
| 20 to 39 | 50 | 60 to 79 | 70 | 100 to 159 | 40 |
| 10 to 19 | 30 | 40 to 59 | 60 | 40 to 99 | 20 |
| <10 | 0 | 20 to 39 | 30 | <40 | 0 |
| | | 10 to 19 | 10 | | |
| | | <10 | 0 | | |

LCC Scoring: I = 100pts. IIe = 90pts. IIs,w = 80 pts. IIIe = 70pts. IIIs,w = 60pts. IVe = 50pts. IVs,w = 40pts. V = 30pts. VIe,s,w = 20pts. VIIe,s,w = 10pts. VIII = 0pts.

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey and SAGE Associates field assessments, 2002.*

## SCENARIO #1 - TERRACE POINT NO CONSTRAINTS LESA WORKSHEET WATER RESOURCES: PAGE 2

**SITE ASSESSMENT WORKSHEET**
**Water Resources Availability**

| IRRIGATED CROPS | PORTION ACRES | DRYLAND CROPS | PORTION ACRES | WATER SOURCES | PROPORTION PROJECT AREA | WATER AVAILABILITY SCORE | WEIGHTED AVAILABILITY SCORE |
|---|---|---|---|---|---|---|---|
| None | 0 acres | None | 0 acres | City water at $1,500/acre/year plus $30,400 hook-up fee plus $1,238 yearly readiness fee | 1 | 0 to 30 | 0 to 30 |

| | | | |
|---|---|---|---|
| TOTALS | 1 | WATER RESOURCE SCORE | 0 to 30 |

| | Non-Drought Year Restrictions | | | | Drought Year Restrictions | | | Water Resource Score |
|---|---|---|---|---|---|---|---|---|
| | Irrigation Feasible | Physical Restrictions | Economic Restrictions | | Irrigation Feasible | Physical Restrictions | Economic Restrictions | |
| OPTIONS | | | | | | | | |
| 1 | YES | NO | NO | | YES | NO | NO | 100 |
| 2 | YES | NO | NO | | YES | NO | YES | 95 |
| 3 | YES | NO | YES | | YES | NO | YES | 90 |
| 4 | YES | NO | NO | | YES | YES | NO | 85 |
| 5 | YES | YES | NO | | YES | YES | YES | 80 |
| 6 | YES | YES | NO | | YES | YES | NO | 75 |
| 7 | YES | NO | YES | | YES | YES | YES | 65 |
| 8 | YES | NO | NO | | NO | | | 50 |
| 9 | YES | YES | YES | | NO | | | 45 |
| 10 | YES | YES | NO | | NO | | | 35 |
| 11 | YES | YES | YES | | NO | | | 30 |
| 12 | NO | | | rainfall adequate for dryland crops | | | | 25 |
| 13 | NO | | | rainfall inadequate in drought years | | | | 20 |
| 14 | NO | | | crop production not feasible | | | | 0 |

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

TE ASSESSMENT WORKSHEET

rrounding Agricultural Land and Surrounding Protected Resource Land

| TOTAL ZOI ACRES | AGRICULTURE ACRES | PROTECTED RESOURCE ACRES | PERCENT IN AGRICULTURE | PERCENT IN PROTECTED RESOURCES | SURROUNDING AGRICULTURE LAND SCORE | SURROUNDING PROTECTED RESOURCE LAND SCORE |
|---|---|---|---|---|---|---|
| 434 acres | 118 acres | 214 acres | 28% | 51% | 10 | 60 |

Surrounding Agricultural Land Scoring Table

| Percent of ZOI in Agriculture | Surrounding Agricultural Land Score |
|---|---|
| 90-100 | 100 |
| 80-89 | 95 |
| 70-79 | 90 |
| 65-69 | 85 |
| 60-64 | 80 |
| 55-59 | 70 |
| 50-54 | 60 |
| 45-49 | 50 |
| 40-44 | 40 |
| 35-39 | 30 |
| 30-34 | 20 |
| 20-29 | 10 |
| <19 | 0 |

Surrounding Protected Resource Land Scoring Table

| Percent of ZOI Protected | Protected Resource Land Score |
|---|---|
| 90-100 | 100 |
| 80-89 | 95 |
| 70-79 | 90 |
| 65-69 | 85 |
| 60-64 | 80 |
| 55-59 | 70 |
| 50-54 | 60 |
| 45-49 | 50 |
| 40-44 | 40 |
| 35-39 | 30 |
| 30-34 | 20 |
| 20-29 | 10 |
| <20 | 0 |

*URCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and GE Associates field assessments, 2002.*

**FINAL LESA SCORESHEET**
**Land Evaluation and Site Assessment Factors**

| FACTORS | FACTOR SCORES | FACTOR WEIGHT | WEIGHTED FACTOR SCORES |
|---|---|---|---|
| **LAND EVALUATION FACTORS** | | | |
| Land Capability Classification | 78.5 | 0.25 | 19.6 |
| Storie Index | 62 | 0.25 | 15.5 |
| *Land Evaluation Subtotal* | | *0.5* | *35.1* |
| **SITE ASSESSMENT FACTORS** | | | |
| *Project Size* | *50* | *0.15* | *7.5* |
| Water Resource Availability | 0 to 30 | 0.15 | 0 to 4.5 |
| Surrounding Agricultural Land | 10 | 0.15 | 1.5 |
| Protected Resource Land | 60 | 0.05 | 3 |
| *Site Assessment Subtotal* | | *0.5* | *12 to 16.5* |
| *FINAL LESA SCORE* | | | *46.1 to 51.6* |

Note: Not considered a significant agricultural resource since SA subscore is less than 20 points.

California LESA Model Scoring Thresholds

| Total LESA Score | Scoring Decision |
|---|---|
| 0 to 39 Points | Not Considered Significant. |
| 40 to 59 Points | Considered Significant only if LE and SA subscores are each greater than or equal to 20 points. |
| 60 to 79 Points | Considered Significant unless either LE or SA subscore is less than 20 points. |
| 80 to 100 Points | Considered Significant. |

Note: LESA Model is designed to make determinations of the potential significance of a project's conversion of agricultural lands during the Initial Study phase of the CEQA review process.

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

## SCENARIO #2 - TERRACE POINT ESHA WETLANDS SETBACK LESA WORKSHEET SOILS: PAGE 1

ND EVALUATION WORKSHEET
id Capability Classification

SITE ASSESSMENT WORKSHEET
Project Size Score

| SOIL MAP UNIT | PROJECT ACRES | PROPORTION PROJECT AREA | LCC | LCC POINTS | LCC SCORE | Storie Index Scores STORIE INDEX | STORIE SCORE | LCC I-II | LCC III | LCC IV-VIII |
|---|---|---|---|---|---|---|---|---|---|---|
| #132 | 11.4 acres | 0.32 | I* | 100 | 32 | 73 | 23.4 | 11.4 acres | | |
| #133 | 5.3 acres | 0.15 | IIIe | 70 | 10.5 | 66 | 9.9 | | 5.3 acres | |
| #178 | 19.3 acres | 0.53 | IIIw | 60 | 31.8 | 50 | 26.5 | | 19.3 acres | |

* only if irrigated

| TOTALS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 36 acres | 1 | | 74.3 | | 59.8 | 11.4 acres | 24.6 acres |
| | | | | | | | 30 points | 30 points |
| | | | | HIGHEST PROJECT SIZE SCORE | | | 30 points | |

**Project Size Scoring Table:**

| Class I or II | | Class III | | Class IV-VIII | |
|---|---|---|---|---|---|
| Acreage | Points | Acreage | Points | Acreage | Points |
| >80 | 100 | >160 | 100 | >320 | 100 |
| 60 to 79 | 90 | 120 to 159 | 90 | 240 to 319 | 80 |
| 40 to 59 | 80 | 80 to 119 | 80 | 160 to 239 | 60 |
| 20 to 39 | 50 | 60 to 79 | 70 | 100 to 159 | 40 |
| 10 to 19 | 30 | 40 to 59 | 60 | 40 to 99 | 20 |
| <10 | 0 | 20 to 39 | 30 | <40 | 0 |
| | | 10 to 19 | 10 | | |
| | | <10 | 0 | | |

LCC Scoring: I = 100pts. IIe = 90pts. IIs,w = 80 pts. IIIe = 70pts. IIIs,w = 60pts. IVe = 50pts. IVs,w = 40pts. V = 30pts. VIe,s,w = 20pts. VIIe,s,w = 10pts. VIII = 0pts.

*URCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey and GE Associates field assessments, 2002.*

**SITE ASSESSMENT WORKSHEET**
**Water Resources Availability**

| IRRIGATED CROPS | PORTION ACRES | DRYLAND CROPS | PORTION ACRES | WATER SOURCES | PROPORTION PROJECT AREA | WATER AVAILABILITY SCORE | WEIGHTED AVAILABILITY SCORE |
|---|---|---|---|---|---|---|---|
| None | 0 acres | None | 0 acres | City water at $1,500/acre/year plus $30,400 hook-up fee plus $1,238 yearly readiness fee | 1 | 0 to 30 | 0 to 30 |

| TOTALS | 1 | WATER RESOURCE SCORE | 0 to 30 |
|---|---|---|---|

| OPTIONS | Non-Drought Year Restrictions: Irrigation Feasible | Physical Restrictions | Economic Restrictions | | Drought Year Restrictions: Irrigation Feasible | Physical Restrictions | Economic Restrictions | Water Resource Score |
|---|---|---|---|---|---|---|---|---|
| 1 | YES | NO | NO | | YES | NO | NO | 100 |
| 2 | YES | NO | NO | | YES | NO | YES | 95 |
| 3 | YES | NO | YES | | YES | NO | YES | 90 |
| 4 | YES | NO | NO | | YES | YES | NO | 85 |
| 5 | YES | YES | NO | | YES | YES | YES | 80 |
| 6 | YES | YES | NO | | YES | YES | NO | 75 |
| 7 | YES | NO | YES | | YES | YES | YES | 65 |
| 8 | YES | NO | NO | | NO | | | 50 |
| 9 | YES | YES | YES | | NO | | | 45 |
| 10 | YES | YES | NO | | NO | | | 35 |
| 11 | YES | YES | YES | | NO | | | 30 |
| 12 | NO | | | rainfall adequate for dryland crops | | | | 25 |
| 13 | NO | | | rainfall inadequate in drought years | | | | 20 |
| 14 | NO | | | crop production not feasible | | | | 0 |

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

TE ASSESSMENT WORKSHEET

Surrounding Agricultural Land and Surrounding Protected Resource Land

| TOTAL ZOI ACRES | AGRICULTURE ACRES | PROTECTED RESOURCE ACRES | PERCENT IN AGRICULTURE | PERCENT IN PROTECTED RESOURCES | SURROUNDING AGRICULTURE LAND SCORE | SURROUNDING PROTECTED RESOURCE LAND SCORE |
|---|---|---|---|---|---|---|
| 434 acres | 118 acres | 214 acres | 28% | 51% | 10 | 60 |

Surrounding Agricultural Land Scoring Table

| Percent of ZOI in Agriculture | Surrounding Agricultural Land Score |
|---|---|
| 90-100 | 100 |
| 80-89 | 95 |
| 70-79 | 90 |
| 65-69 | 85 |
| 60-64 | 80 |
| 55-59 | 70 |
| 50-54 | 60 |
| 45-49 | 50 |
| 40-44 | 40 |
| 35-39 | 30 |
| 30-34 | 20 |
| 20-29 | 10 |
| <19 | 0 |

Surrounding Protected Resource Land Scoring Table

| Percent of ZOI Protected | Protected Resource Land Score |
|---|---|
| 90-100 | 100 |
| 80-89 | 95 |
| 70-79 | 90 |
| 65-69 | 85 |
| 60-64 | 80 |
| 55-59 | 70 |
| 50-54 | 60 |
| 45-49 | 50 |
| 40-44 | 40 |
| 35-39 | 30 |
| 30-34 | 20 |
| 20-29 | 10 |
| <20 | 0 |

*OURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

**FINAL LESA SCORESHEET**
**Land Evaluation and Site Assessment Factors**

| FACTORS | FACTOR SCORES | FACTOR WEIGHT | WEIGHTED FACTOR SCORES |
|---|---|---|---|
| **LAND EVALUATION FACTORS** | | | |
| Land Capability Classification | 74.3 | 0.25 | 18.6 |
| Storie Index | 59.8 | 0.25 | 15 |
| *Land Evaluation Subtotal* | | *0.5* | *33.6* |
| **SITE ASSESSMENT FACTORS** | | | |
| *Project Size* | 30 | 0.15 | 4.5 |
| Water Resource Availability | 0 to 30 | 0.15 | 0 to 4.5 |
| Surrounding Agricultural Land | 10 | 0.15 | 1.5 |
| Protected Resource Land | 60 | 0.05 | 3 |
| *Site Assessment Subtotal* | | *0.5* | *9 to 13.5* |
| *FINAL LESA SCORE* | | | *42.6 to 47.1* |

Note: Not considered a significant agricultural resource since SA subscore is less than 20 points.

**California LESA Model Scoring Thresholds**

| Total LESA Score | Scoring Decision |
|---|---|
| 0 to 39 Points | Not Considered Significant. |
| 40 to 59 Points | Considered Significant only if LE and SA subscores are each greater than or equal to 20 points. |
| 60 to 79 Points | Considered Significant unless either LE or SA subscore is less than 20 points. |
| 80 to 100 Points | Considered Significant. |

Note: LESA Model is designed to make determinations of the potential significance of a project's conversion of agricultural lands during the Initial Study phase of the CEQA review process.

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

## SCENARIO #3 - TERRACE POINT 1995 AGRICULTURAL SUITABILITY STUDY LESA WORKSHEET SOILS: PAGE 1

**AND EVALUATION WORKSHEET**
**and Capability Classification**

| SOIL MAP UNIT | PROJECT ACRES | PROPORTION PROJECT AREA | LCC | LCC POINTS | LCC SCORE | Storie Index Scores STORIE INDEX | STORIE SCORE | SITE ASSESSMENT WORKSHEET Project Size Score LCC I-II | LCC III | LCC IV-VIII |
|---|---|---|---|---|---|---|---|---|---|---|
| #132 | 6 acres | 0.26 | I* | 100 | 26 | 73 | 19 | 6 acres | | |
| #133 | 5 acres | 0.22 | IIIe | 70 | 15.4 | 66 | 14.5 | | 5 acres | |
| #178 | 12 acres | 0.52 | IIIw | 60 | 31.2 | 50 | 26 | | 12 acres | |
| TOTALS | 23 acres | 1 | | | 72.6 | | 59.5 | 6 acres | 17 acres | |
| | | | | | | | | 0 points | 10 points | |
| | | | | | | HIGHEST PROJECT SIZE SCORE | | | 10 points | |

*only if irrigated

**Project Size Scoring Table:**

| Class I or II | | Class III | | Class IV-VIII | |
|---|---|---|---|---|---|
| Acreage | Points | Acreage | Points | Acreage | Points |
| >80 | 100 | >160 | 100 | >320 | 100 |
| 60 to 79 | 90 | 120 to 159 | 90 | 240 to 319 | 80 |
| 40 to 59 | 80 | 80 to 119 | 80 | 160 to 239 | 60 |
| 20 to 39 | 50 | 60 to 79 | 70 | 100 to 159 | 40 |
| 10 to 19 | 30 | 40 to 59 | 60 | 40 to 99 | 20 |
| <10 | 0 | 20 to 39 | 30 | <40 | 0 |
| | | 10 to 19 | 10 | | |
| | | <10 | 0 | | |

LCC Scoring: I = 100pts. IIe = 90pts. IIs,w = 80 pts. IIIe = 70pts. IIIs,w = 60pts. IVe = 50pts. IVs,w = 40pts. V = 30pts. VIe,s,w = 20pts. VIIe,s,w = 10pts. VIII = 0pts.

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey and SAGE Associates field assessments, 2002.*

SITE ASSESSMENT WORKSHEET
Water Resources Availability

| IRRIGATED CROPS | PORTION ACRES | DRYLAND CROPS | PORTION ACRES | WATER SOURCES | PROPORTION PROJECT AREA | WATER AVAILABILITY SCORE | WEIGHTED AVAILABILITY SCORE |
|---|---|---|---|---|---|---|---|
| None | 0 acres | None | 0 acres | City water at $1,500/acre/year plus $30,400 hook-up fee plus $1,238 yearly readiness fee. | 1 | 0 to 30 | 0 to 30 |

| TOTALS | 1 | WATER RESOURCE SCORE | 0 to 30 |
|---|---|---|---|

| OPTIONS | Non-Drought Year Restrictions: Irrigation Feasible | Physical Restrictions | Economic Restrictions | | Drought Year Restrictions: Irrigation Feasible | Physical Restrictions | Economic Restrictions | Water Resource Score |
|---|---|---|---|---|---|---|---|---|
| 1 | YES | NO | NO | | YES | NO | NO | 100 |
| 2 | YES | NO | NO | | YES | NO | YES | 95 |
| 3 | YES | NO | YES | | YES | NO | YES | 90 |
| 4 | YES | NO | NO | | YES | YES | NO | 85 |
| 5 | YES | YES | NO | | YES | YES | YES | 80 |
| 6 | YES | YES | NO | | YES | YES | NO | 75 |
| 7 | YES | NO | YES | | YES | YES | YES | 65 |
| 8 | YES | NO | NO | | NO | | | 50 |
| 9 | YES | YES | YES | | NO | | | 45 |
| 10 | YES | YES | NO | | NO | | | 35 |
| 11 | YES | YES | YES | | NO | | | 30 |
| 12 | NO | | | rainfall adequate for dryland crops | | | | 25 |
| 13 | NO | | | rainfall inadequate in drought years | | | | 20 |
| 14 | NO | | | crop production not feasible | | | | 0 |

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

SCENARIO #3 - TERRACE POINT 1995 AGRICULTURAL SUITABILITY STUDY LESA WORKSHEET SURROUNDING LAND USES: PAGE 3

LESA ASSESSMENT WORKSHEET

Surrounding Agricultural Land and Surrounding Protected Resource Land

| TOTAL ZOI ACRES | AGRICULTURE ACRES | PROTECTED RESOURCE ACRES | PERCENT IN AGRICULTURE | PERCENT IN PROTECTED RESOURCES | SURROUNDING AGRICULTURE LAND SCORE | SURROUNDING PROTECTED RESOURCE LAND SCORE |
|---|---|---|---|---|---|---|
| 434 acres | 118 acres | 214 acres | 28% | 51% | 10 | 60 |

**Surrounding Agricultural Land Scoring Table**

| Percent of ZOI in Agriculture | Surrounding Agricultural Land Score |
|---|---|
| 90-100 | 100 |
| 80-89 | 95 |
| 70-79 | 90 |
| 65-69 | 85 |
| 60-64 | 80 |
| 55-59 | 70 |
| 50-54 | 60 |
| 45-49 | 50 |
| 40-44 | 40 |
| 35-39 | 30 |
| 30-34 | 20 |
| 20-29 | 10 |
| | 0 |

**Surrounding Protected Resource Land Scoring Table**

| Percent of ZOI Protected | Protected Resource Land Score |
|---|---|
| 90-100 | 100 |
| 80-89 | 95 |
| 70-79 | 90 |
| 65-69 | 85 |
| 60-64 | 80 |
| 55-59 | 70 |
| 50-54 | 60 |
| 45-49 | 50 |
| 40-44 | 40 |
| 35-39 | 30 |
| 30-34 | 20 |
| 20-29 | 10 |
| <20 | 0 |

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

**FINAL LESA SCORESHEET**
**Land Evaluation and Site Assessment Factors**

| FACTORS | | FACTOR SCORES | FACTOR WEIGHT | WEIGHTED FACTOR SCORES |
|---|---|---|---|---|
| **LAND EVALUATION FACTORS** | | | | |
| Land Capability Classification | | 72.6 | 0.25 | 18.2 |
| Storie Index | | 59.5 | 0.25 | 14.9 |
| | *Land Evaluation Subtotal* | | *0.5* | *33.1* |
| **SITE ASSESSMENT FACTORS** | | | | |
| *Project Size* | | 30 | 0.15 | 4.5 |
| Water Resource Availability | | 0 to 30 | 0.15 | 0 to 4.5 |
| Surrounding Agricultural Land | | 10 | 0.15 | 1.5 |
| Protected Resource Land | | 60 | 0.05 | 3 |
| | *Site Assessment Subtotal* | | *0.5* | *9 to 13.5* |
| | *FINAL LESA SCORE* | | | *42.1 to 46.6* |

Note: Not considered a significant agricultural resource since SA subscore is less than 20 points.

**California LESA Model Scoring Thresholds**

| Total LESA Score | Scoring Decision |
|---|---|
| 0 to 39 Points | Not Considered Significant. |
| 40 to 59 Points | Considered Significant only if LE and SA subscores are each greater than or equal to 20 points. |
| 60 to 79 Points | Considered Significant unless either LE or SA subscore is less than 20 points. |
| 80 to 100 Points | Considered Significant. |

Note: LESA Model is designed to make determinations of the potential significance of a project's conversion of agricultural lands during the Initial Study phase of the CEQA review process.

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

| LAND EVALUATION WORKSHEET<br>Land Capability Classification | | | | | | Storie Index Scores | | SITE ASSESSMENT WORKSHEET<br>Project Size Score | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SOIL MAP UNIT | PROJECT ACRES | PROPORTION PROJECT AREA | LCC | LCC POINTS | LCC SCORE | STORIE INDEX | STORIE SCORE | LCC I-II | LCC III | LCC IV-VIII |
| #132 | 7.1 acres | 0.41 | I* | 100 | 41 | 73 | 30 | 7.1 acres | | |
| #133 | 3.7 acres | 0.21 | IIIe | 70 | 15 | 66 | 14 | | 3.7 acres | |
| #178 | 6.5 acres | 0.38 | IIIw | 60 | 23 | 50 | 19 | | 6.5 acres | |
| TOTALS | 17.3 acres | 1 | | | 79 | | 63 | 7.1 acres<br>0 points | 10.2 acres<br>10 points | |
| | | | | | | HIGHEST PROJECT SIZE SCORE | | | 10 points | |

*only if irrigated

Project Size Scoring Table:

| Class I or II | | Class III | | Class IV-VIII | |
|---|---|---|---|---|---|
| Acreage | Points | Acreage | Points | Acreage | Points |
| >80 | 100 | >160 | 100 | >320 | 100 |
| 60 to 79 | 90 | 120 to 159 | 90 | 240 to 319 | 80 |
| 40 to 59 | 80 | 80 to 119 | 80 | 160 to 239 | 60 |
| 20 to 39 | 50 | 60 to 79 | 70 | 100 to 159 | 40 |
| 10 to 19 | 30 | 40 to 59 | 60 | 40 to 99 | 20 |
| <10 | 6 | 20 to 39 | 30 | <40 | 0 |
| | | 10 to 19 | 10 | | |
| | | <10 | 0 | | |

LCC Scoring: I = 100pts. IIe = 90pts. IIs,w = 80 pts. IIIe = 70pts. IIIs,w = 60pts. IVe = 50pts. IVs,w = 40pts. V = 30pts. VIe,s,w = 20pts. VIIe,s,w = 10pts. VIII = 0pts.

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey and SAGE Associates field assessments, 2002.*

SITE ASSESSMENT WORKSHEET

Water Resources Availability

| IRRIGATED CROPS | PORTION ACRES | DRYLAND CROPS | PORTION ACRES | WATER SOURCES | PROPORTION PROJECT AREA | WATER AVAILABILITY SCORE | WEIGHTED AVAILABILITY SCORE |
|---|---|---|---|---|---|---|---|
| None | 0 acres | None | 0 acres | City water at $1,500/acre/year plus $30,400 hook-up fee plus $1,238 yearly readiness fee | 1 | 0 to 30 | 0 to 30 |

| TOTALS | 1 | WATER RESOURCE SCORE | 0 to 30 |
|---|---|---|---|

| OPTIONS | Non-Drought Year Restrictions: Irrigation Feasible | Physical Restrictions | Economic Restrictions | | Drought Year Restrictions: Irrigation Feasible | Physical Restrictions | Economic Restrictions | Water Resource Score |
|---|---|---|---|---|---|---|---|---|
| 1 | YES | NO | NO | | YES | NO | NO | 100 |
| 2 | YES | NO | NO | | YES | NO | YES | 95 |
| 3 | YES | NO | YES | | YES | NO | YES | 90 |
| 4 | YES | NO | NO | | YES | YES | NO | 85 |
| 5 | YES | YES | NO | | YES | YES | YES | 80 |
| 6 | YES | YES | NO | | YES | YES | NO | 75 |
| 7 | YES | NO | YES | | YES | YES | YES | 65 |
| 8 | YES | NO | NO | | NO | | | 50 |
| 9 | YES | YES | YES | | NO | | | 45 |
| 10 | YES | YES | NO | | NO | | | 35 |
| 11 | YES | YES | YES | | NO | | | 30 |
| 12 | NO | | | rainfall adequate for dryland crops | | | | 25 |
| 13 | NO | | | rainfall inadequate in drought years | | | | 20 |
| 14 | NO | | | crop production not feasible | | | | 0 |

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

E ASSESSMENT WORKSHEET

rounding Agricultural Land and Surrounding Protected Resource Land

| TOTAL ZOI ACRES | AGRICULTURE ACRES | PROTECTED RESOURCE ACRES | PERCENT IN AGRICULTURE | PERCENT IN PROTECTED RESOURCES | SURROUNDING AGRICULTURE LAND SCORE | SURROUNDING PROTECTED RESOURCE LAND SCORE |
|---|---|---|---|---|---|---|
| 434 acres | 118 acres | 214 acres | 28% | 51% | 10 | 60 |

**Surrounding Agricultural Land Scoring Table**

| Percent of ZOI in Agriculture | Surrounding Agricultural Land Score |
|---|---|
| 90-100 | 100 |
| 80-89 | 95 |
| 70-79 | 90 |
| 65-69 | 85 |
| 60-64 | 80 |
| 55-59 | 70 |
| 50-54 | 60 |
| 45-49 | 50 |
| 40-44 | 40 |
| 35-39 | 30 |
| 30-34 | 20 |
| 20-29 | 10 |
| <20 | 0 |

**Surrounding Protected Resource Land Scoring Table**

| Percent of ZOI Protected | Protected Resource Land Score |
|---|---|
| 90-100 | 100 |
| 80-89 | 95 |
| 70-79 | 90 |
| 65-69 | 85 |
| 60-64 | 80 |
| 55-59 | 70 |
| 50-54 | 60 |
| 45-49 | 50 |
| 40-44 | 40 |
| 35-39 | 30 |
| 30-34 | 20 |
| 20-29 | 10 |
| <20 | 0 |

*RCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and GE Associates field assessments, 2002.*

**FINAL LESA SCORESHEET**
**Land Evaluation and Site Assessment Factors**

| FACTORS | FACTOR SCORES | FACTOR WEIGHT | WEIGHTED FACTOR SCORES |
|---|---|---|---|
| **LAND EVALUATION FACTORS** | | | |
| Land Capability Classification | 79 | 0.25 | 19.75 |
| Storie Index | 63 | 0.25 | 15.75 |
| *Land Evaluation Subtotal* | | *0.5* | *35.5* |
| **SITE ASSESSMENT FACTORS** | | | |
| *Project Size* | *10* | *0.15* | *1.5* |
| Water Resource Availability | 0 to 30 | 0.15 | 0 to 4.5 |
| Surrounding Agricultural Land | 10 | 0.15 | 1.5 |
| Protected Resource Land | 60 | 0.05 | 3 |
| *Site Assessment Subtotal* | | *0.5* | *6 to 10.5* |
| *FINAL LESA SCORE* | | | *41.5 to 46* |

Note: Not considered a significant agricultural resource since SA subscore is less than 20 points.

California LESA Model Scoring Thresholds

| Total LESA Score | Scoring Decision |
|---|---|
| *0 to 39 Points* | *Not Considered Significant.* |
| 40 to 59 Points | Considered Significant only if LE and SA subscores are each greater than or equal to 20 points. |
| 60 to 79 Points | Considered Significant unless either LE or SA subscore is less than 20 points. |
| 80 to 100 Points | Considered Significant. |

Note: LESA Model is designed to make determinations of the potential significance of a project's conversion of agricultural lands during the Initial Study phase of the CEQA review process.

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

ND EVALUATION WORKSHEET

Land Capability Classification

| SOIL MAP UNIT | PROJECT ACRES | PROPORTION PROJECT AREA | LCC | LCC POINTS | LCC SCORE | Storie Index Scores STORIE INDEX | STORIE SCORE | SITE ASSESSMENT WORKSHEET Project Size Score LCC I-II | LCC III | LCC IV-VIII |
|---|---|---|---|---|---|---|---|---|---|---|
| #132 | 3.1 acres | 0.55 | I* | 100 | 55 | 73 | 40.2 | 3.1 acres | | |
| #178 | 2.5 acres | 0.45 | IIIw | 60 | 27 | 50 | 22.5 | | 2.5 acres | |

*only if irrigated

| TOTALS | | | | | | | 3.1 acres | 2.5 acres | |
|---|---|---|---|---|---|---|---|---|---|
| | 5.6 acres | 1 | | 82 | | 62.7 | 0 points | 0 points | |
| | | | | | HIGHEST PROJECT SIZE SCORE | | 0 points | | |

Project Size Scoring Table:

| Class I or II | | Class III | | Class IV-VIII | |
|---|---|---|---|---|---|
| Acreage | Points | Acreage | Points | Acreage | Points |
| >80 | 100 | >160 | 100 | >320 | 100 |
| 60 to 79 | 90 | 120 to 159 | 90 | 240 to 319 | 80 |
| 40 to 59 | 80 | 80 to 119 | 80 | 160 to 239 | 60 |
| 20 to 39 | 50 | 60 to 79 | 70 | 100 to 159 | 40 |
| 10 to 19 | 30 | 40 to 59 | 60 | 40 to 99 | 20 |
| <10 | 0 | 20 to 39 | 30 | <40 | 0 |
| | | 10 to 19 | 10 | | |
| | | <10 | 0 | | |

LCC Scoring: I = 100pts. IIe = 90pts. IIs,w = 80 pts. IIIe = 70pts. IIIs,w = 60pts. IVe = 50pts. IVs,w = 40pts. V = 30pts. VIe,s,w = 20pts. VIIe,s,w = 10pts. VIII = 0pts.

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey and SAGE Associates field assessments, 2002.*

## SCENARIO #5 - TERRACE POINT 500-FOOT COMPATIBILITY SETBACK LESA WORKSHEET WATER RESOURCES: PAGE 2

**SITE ASSESSMENT WORKSHEET**
**Water Resources Availability**

| IRRIGATED CROPS | PORTION ACRES | DRYLAND CROPS | PORTION ACRES | WATER SOURCES | PROPORTION PROJECT AREA | WATER AVAILABILITY SCORE | WEIGHTED AVAILABILITY SCORE |
|---|---|---|---|---|---|---|---|
| None | 0 acres | None | 0 acres | City water at $1,500/acre/year plus $30,400 hook-up fee plus $1,238 yearly readiness fee. | 1 | 0 to 30 | 0 to 30 |
| TOTALS | | | | | 1 | WATER RESOURCE SCORE | 0 to 30 |

| | Non-Drought Year Restrictions | | | | Drought Year Restrictions | | | Water Resource Score |
|---|---|---|---|---|---|---|---|---|
| | Irrigation Feasible | Physical Restrictions | Economic Restrictions | | Irrigation Feasible | Physical Restrictions | Economic Restrictions | |
| OPTIONS | | | | | | | | |
| 1 | YES | NO | NO | | YES | NO | NO | 100 |
| 2 | YES | NO | NO | | YES | NO | YES | 95 |
| 3 | YES | NO | YES | | YES | NO | YES | 90 |
| 4 | YES | NO | NO | | YES | YES | NO | 85 |
| 5 | YES | YES | NO | | YES | YES | YES | 80 |
| 6 | YES | YES | NO | | YES | YES | NO | 75 |
| 7 | YES | NO | YES | | YES | YES | YES | 65 |
| 8 | YES | NO | NO | | NO | | | 50 |
| 9 | YES | YES | YES | | NO | | | 45 |
| 10 | YES | YES | NO | | NO | | | 35 |
| 11 | YES | YES | YES | | NO | | | 30 |
| 12 | NO | | | rainfall adequate for dryland crops | | | | 25 |
| 13 | NO | | | rainfall inadequate in drought years | | | | 20 |
| 14 | NO | | | crop production not feasible | | | | 0 |

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

SITE ASSESSMENT WORKSHEET

Surrounding Agricultural Land and Surrounding Protected Resource Land

| TOTAL ZOI ACRES | AGRICULTURE ACRES | PROTECTED RESOURCE ACRES | PERCENT IN AGRICULTURE | PERCENT IN PROTECTED RESOURCES | SURROUNDING AGRICULTURE LAND SCORE | SURROUNDING PROTECTED RESOURCE LAND SCORE |
|---|---|---|---|---|---|---|
| 434 acres | 118 acres | 214 acres | 28% | 51% | 10 | 60 |

Surrounding Agricultural Land Scoring Table

| Percent of ZOI in Agriculture | Surrounding Agricultural Land Score |
|---|---|
| 90-100 | 100 |
| 80-89 | 95 |
| 70-79 | 90 |
| 65-69 | 85 |
| 60-64 | 80 |
| 55-59 | 70 |
| 50-54 | 60 |
| 45-49 | 50 |
| 40-44 | 40 |
| 35-39 | 30 |
| 30-34 | 20 |
| 20-29 | 10 |
| <19 | 0 |

Surrounding Protected Resource Land Scoring Table

| Percent of ZOI Protected | Protected Resource Land Score |
|---|---|
| 90-100 | 100 |
| 80-89 | 95 |
| 70-79 | 90 |
| 65-69 | 85 |
| 60-64 | 80 |
| 55-59 | 70 |
| 50-54 | 60 |
| 45-49 | 50 |
| 40-44 | 40 |
| 35-39 | 30 |
| 30-34 | 20 |
| 20-29 | 10 |
| <20 | 0 |

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

**FINAL LESA SCORESHEET**
**Land Evaluation and Site Assessment Factors**

| FACTORS | FACTOR SCORES | FACTOR WEIGHT | WEIGHTED FACTOR SCORES |
|---|---|---|---|
| **LAND EVALUATION FACTORS** | | | |
| Land Capability Classification | 82 | 0.25 | 20.5 |
| Storie Index | 62.7 | 0.25 | 15.7 |
| *Land Evaluation Subtotal* | | *0.5* | *36.2* |
| **SITE ASSESSMENT FACTORS** | | | |
| *Project Size* | *0* | *0.15* | *0* |
| Water Resource Availability | 0 to 30 | 0.15 | 0 to 4.5 |
| Surrounding Agricultural Land | 10 | 0.15 | 1.5 |
| Protected Resource Land | 60 | 0.05 | 3 |
| *Site Assessment Subtotal* | | *0.5* | *4.5 to 9* |
| *FINAL LESA SCORE* | | | *40.7 to 45.2* |

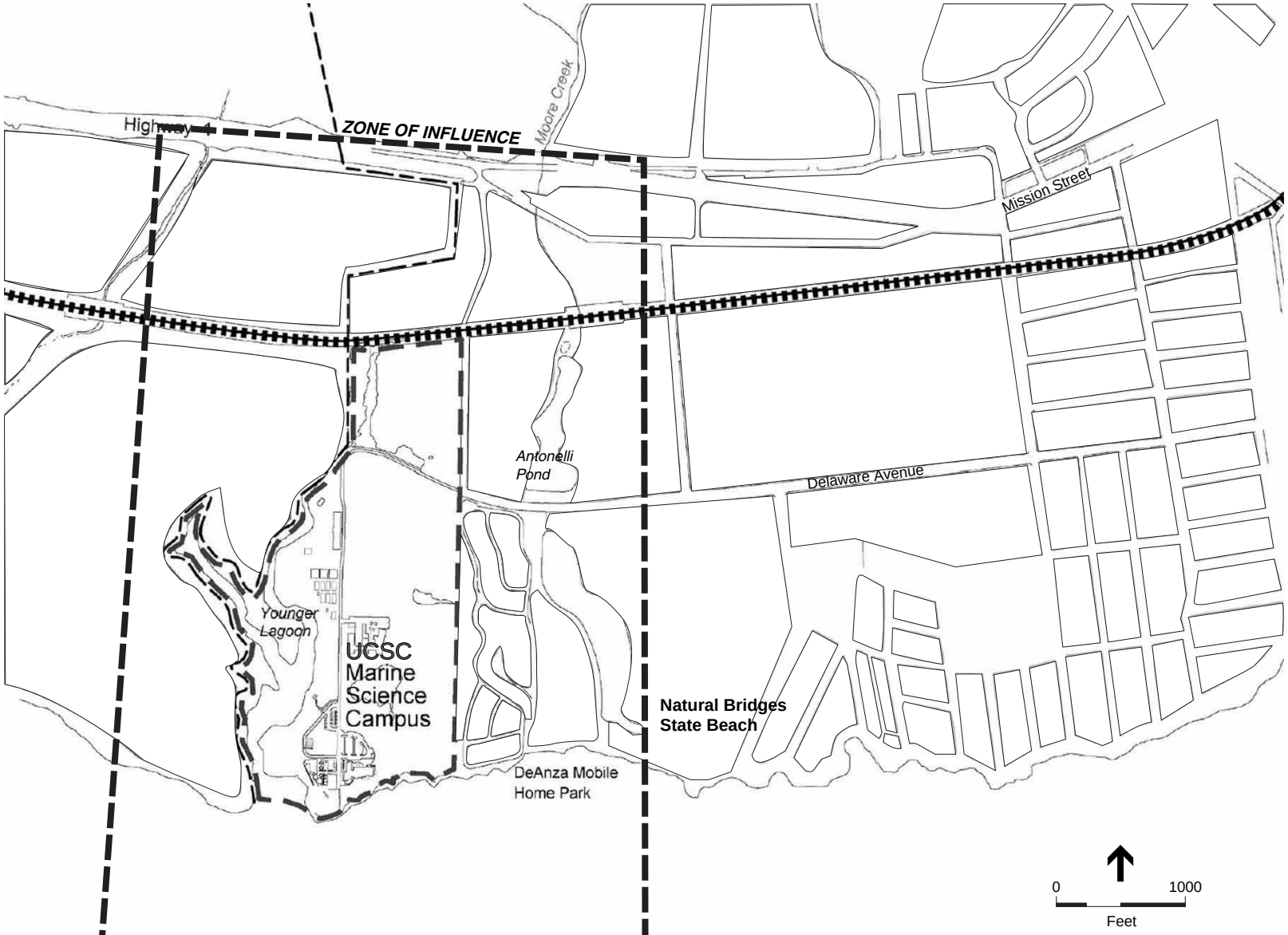
Note: Not considered a significant agricultural resource since SA subscore is less than 20 points.

California LESA Model Scoring Thresholds

| Total LESA Score | Scoring Decision |
|---|---|
| 0 to 39 Points | Not Considered Significant. |
| 40 to 59 Points | Considered Significant only if LE and SA subscores are each greater than or equal to 20 points. |
| 60 to 79 Points | Considered Significant unless either LE or SA subscore is less than 20 points. |
| 80 to 100 Points | Considered Significant. |

Note: LESA Model is designed to make determinations of the potential significance of a project's conversion of agricultural lands during the Initial Study phase of the CEQA review process.

*SOURCES: California Agricultural Land Evaluation and Site Assessment Model - California Department of Conservation, 1997; USDA Soil Survey; and SAGE Associates field assessments, 2002.*

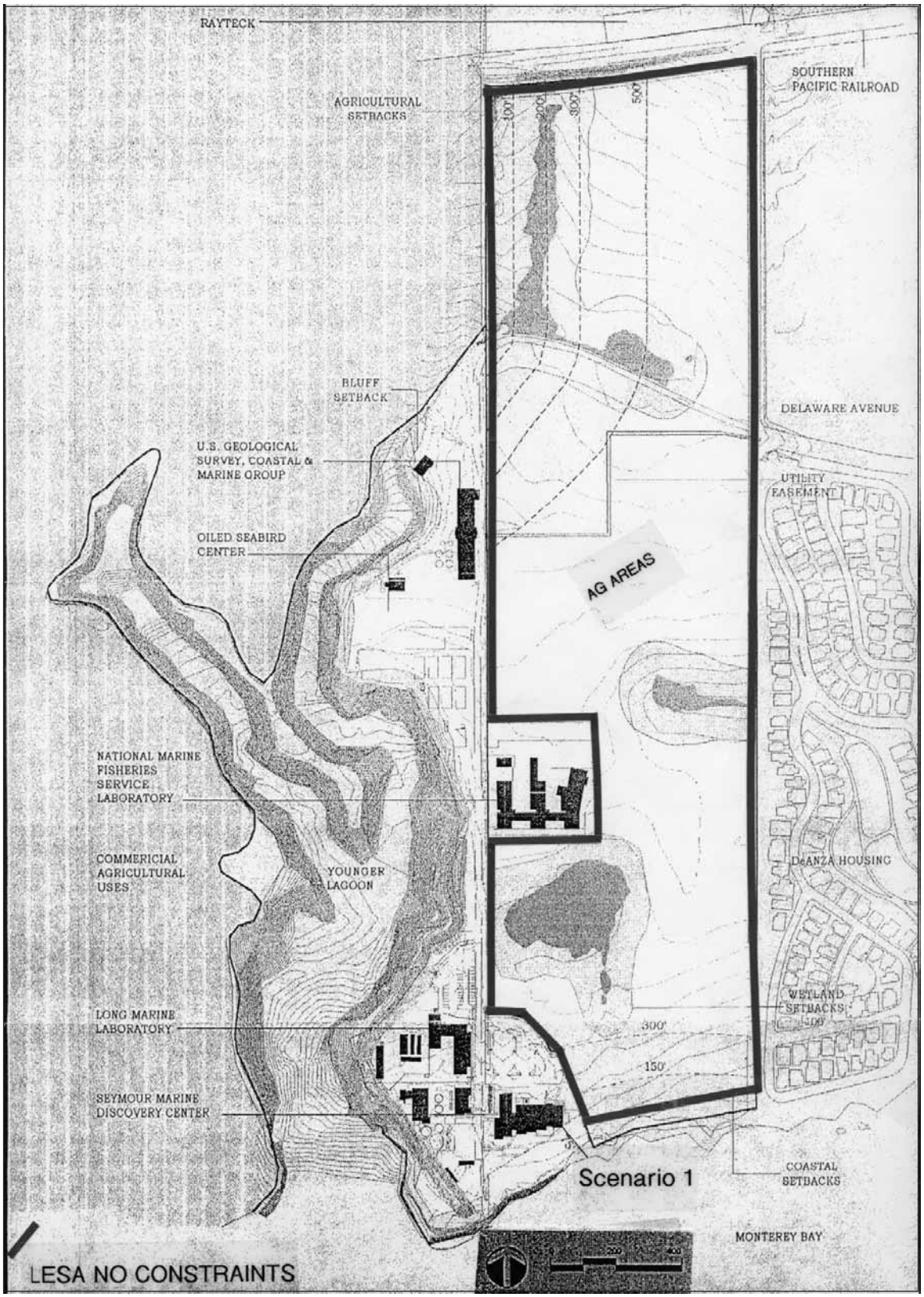



SOURCE: Draft CLRDP

*UCSC Marine Science Campus CLRDP Draft EIR / 200385* ■

**Figure B-1**

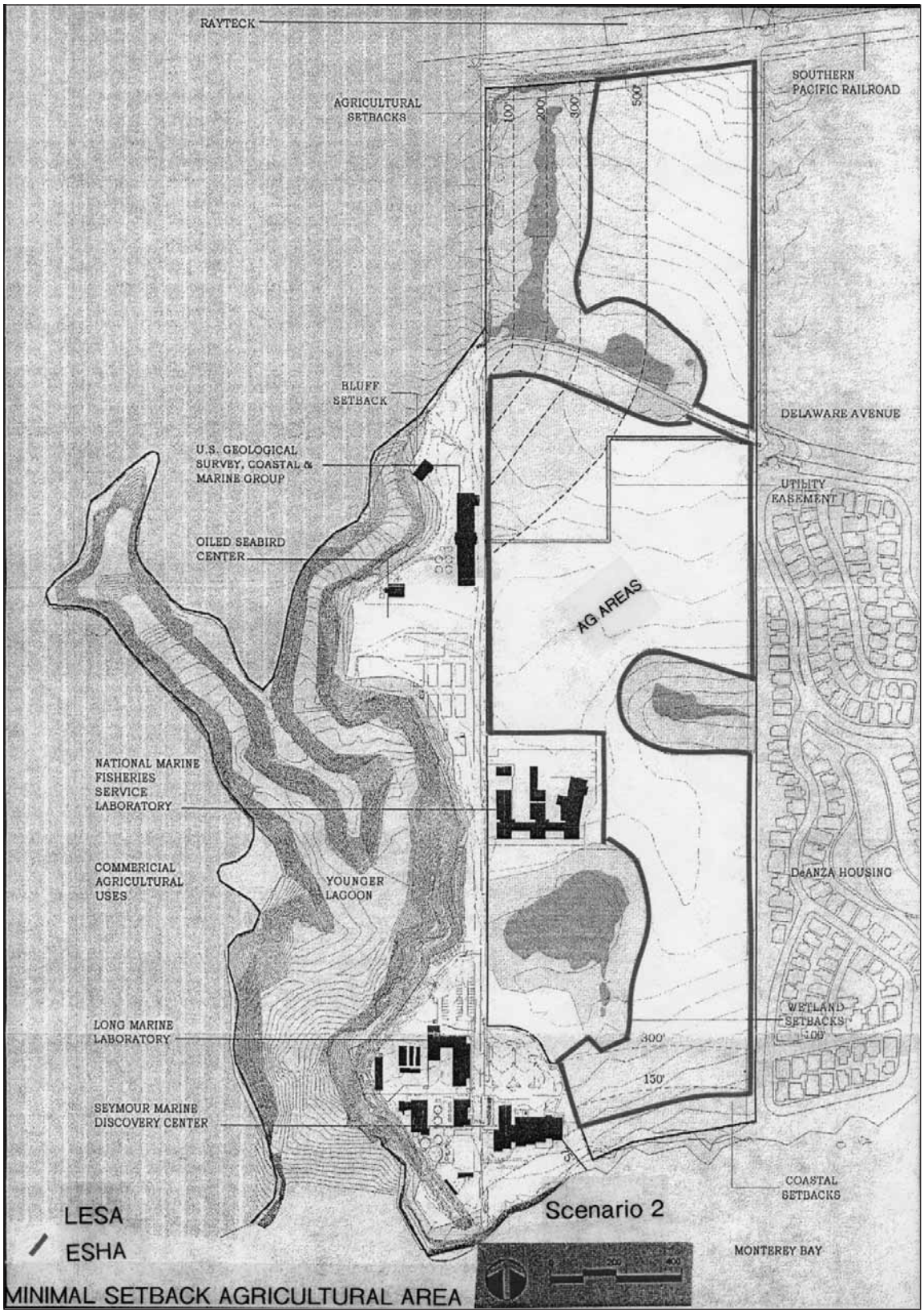
LESA Zone of Influence Boundary




SOURCE: Sage Associates



**Figure B-2**
LESA Scenario 1: No Constraints

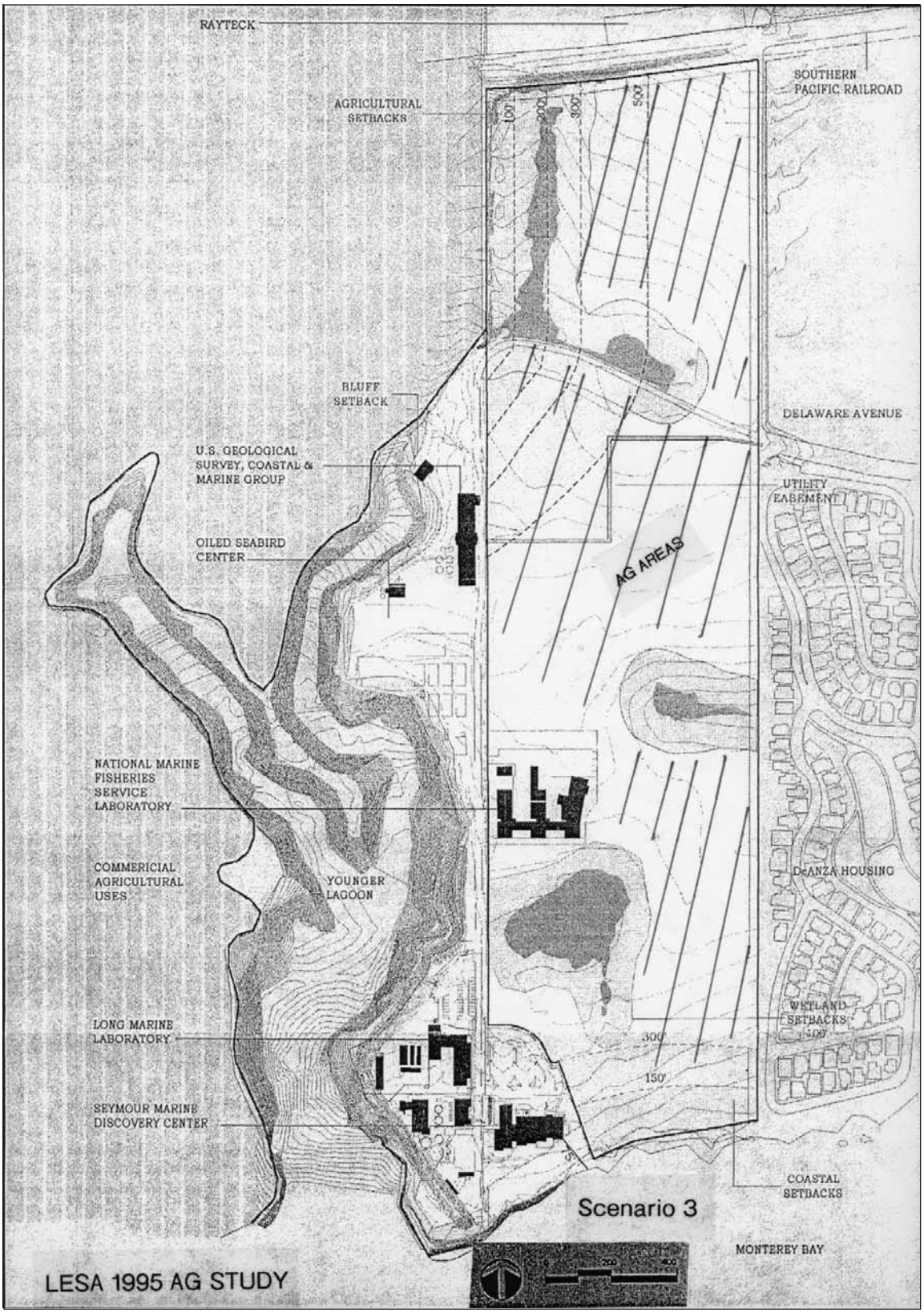



SOURCE: Sage Associates



**Figure B-3**

LESA Scenario 2: 100-Foot Wetland ESHA Setback

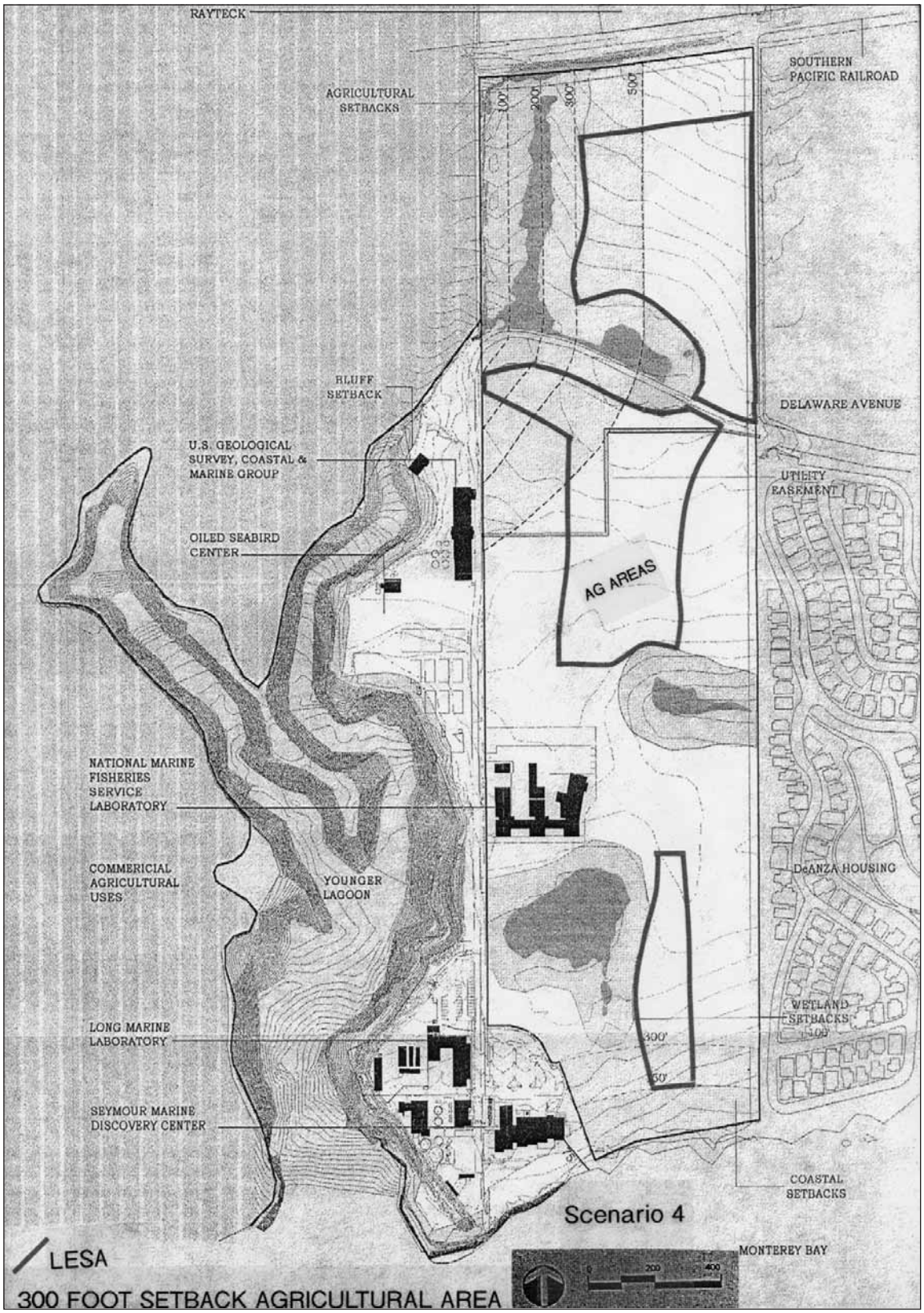





SOURCE: Sage Associates

**Figure B-4**

LESA Scenario 3: 1995 Agricultural Suitability Study

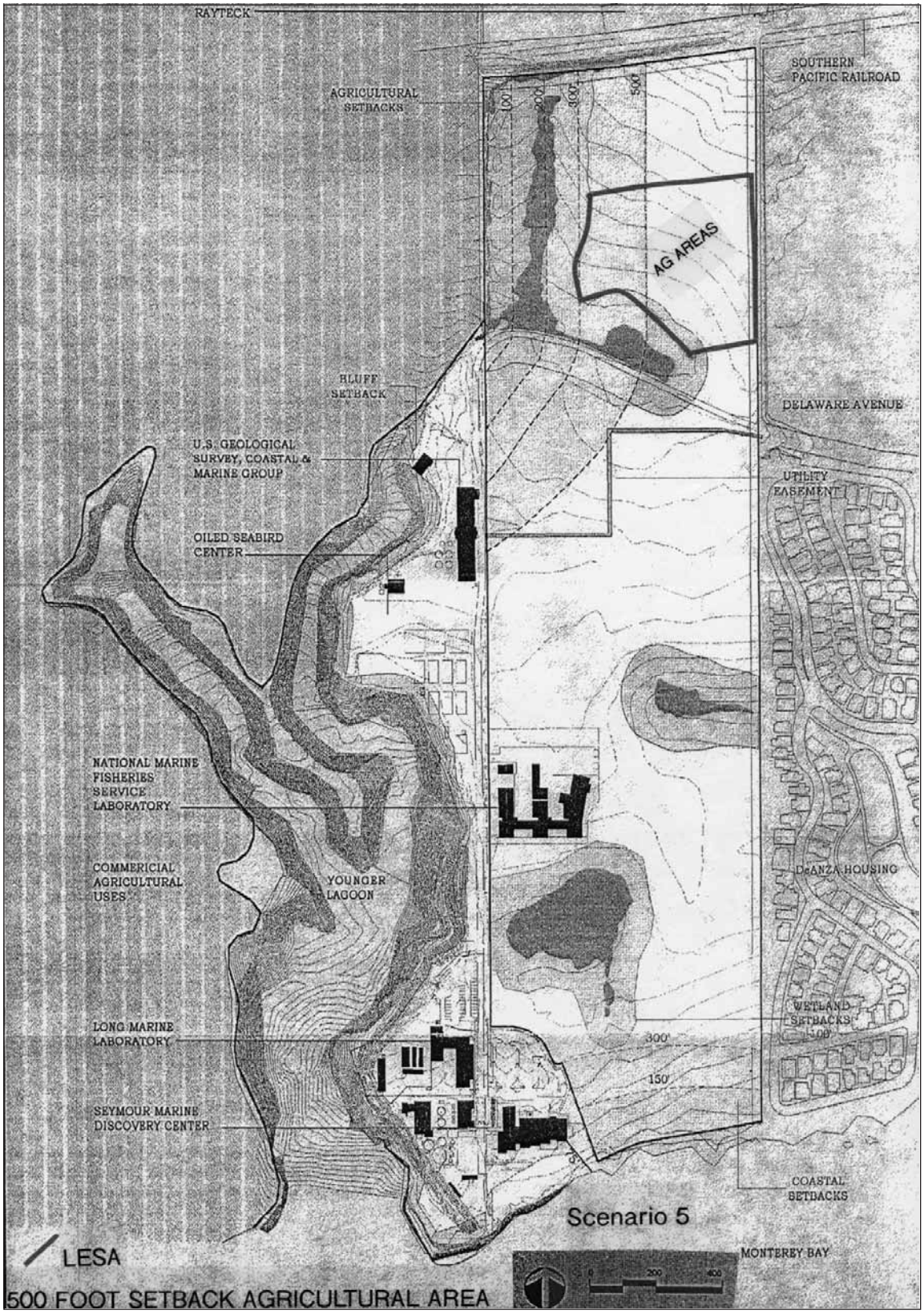





SOURCE: Sage Associates

**Figure B-5**

LESA Scenario 5: 300-Foot Pesticide Use Setback






SOURCE: Sage Associates

**Figure B-6**

LESA Scenario 5: 500-Foot Land Use Compatibility Setback

# APPENDIX C

## MODELING OF TAC EMISSIONS FROM DEVELOPMENT UNDER THE CLRDP

# APPENDIX C

MODELING OF TAC EMISSIONS FROM DEVELOPMENT UNDER THE CLRDP

## INTRODUCTION

The incremental health risks from the project would be due to increased toxic air contaminant (TAC) emissions from the various project components. This includes TAC emissions during construction and emissions during operations. With regard to construction, emissions of TAC emissions would be released from diesel engines on construction equipment and from fugitive emissions of contaminated soil during clearing and grading activities. During operations, TAC emissions would occur from diesel vehicles servicing the site (buses and delivery trucks), from laboratory fume hoods, and from back-up diesel generators. Impacts from construction and operations were determined by conducting dispersion modeling of TAC emissions from sources related to the CLRDP and estimating the health risks at offsite receptors from the predicted TAC concentrations.

Health risks from the CLRDP were determined by conducting dispersion modeling of the TAC emissions to determine exposure levels at offsite receptors. Local meteorological data that are representative of the area were used in the dispersion modeling. The health risks for carcinogens were then estimated by multiplying the exposure concentrations by unit risk values for the toxic species of concern. These unit risk values are expressed as the probability of contracting cancer if the exposure level is one microgram per cubic meter over 24 hours per day, 365 days per year, and 70 years. The unit risk values that are used in the study were established by California Office of Environmental Health Hazard Assessment (OEHHA). This appendix presents the methodology and assumptions used to estimate exposure concentrations of TACs.

## METEOROLOGICAL DATA FOR THE DISPERSION MODELING

The project site is located within the North Central Coast Air Basin, which is comprised of Santa Cruz, Monterey, and San Benito Counties. The site is situated in the northwest sector of the Basin, in an area topographically dominated by the Santa Cruz Mountains.

The topography and climate of the Basin combine to make it an area of smog potential. During summer and fall months, onshore air currents push a marine layer of fog and relatively cool air into the coastal valleys. A warm air mass -- known as an inversion layer -- will frequently descend over the lower marine air layer, acting as a cap and inhibiting air pollutants generated near the ground from dispersing upward. Light summer and fall winds and surrounding mountains further limit the horizontal disbursement of the pollutants. Concentrating volumes of pollutants in this manner allows the summer and fall sunlight to generate high levels of smog. In the winter and spring, the general absence of deep, persistent inversion layers and occasional storms usually result in good air quality for the Basin.

The primary factors that determine air quality are the locations of air pollutant sources and the amounts of pollutants emitted. Meteorological and topographical conditions are also important factors. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The Monterey Bay Area climate is Mediterranean in character, with mild, rainy winter weather from November through March, variable weather from April to June, and warm, dry weather from June through October. A high percentage of sunshine prevails away from the immediate coast, particularly in the summer. Movements of marine air, which in large part determine the temperature, humidity, wind, and precipitation throughout the year, depend upon the location and strength of the dominant Pacific high-pressure system and the coastal temperature gradient. Within the Monterey Bay Area, average air temperature tends to increase as distance from the coast increases. Coastal fog is common to the project area.

In the summer, the Pacific high-pressure system typically remains near the coast of California, diverting storms to the north. Subsidence of warm air associated with the Pacific high creates frequent summer atmospheric temperature inversions. Subsidence inversions may be several hundred to several thousand feet deep, effectively trapping pollutants in a small volume of air near the ground. In the winter, the Pacific high-pressure system moves southward, allowing ocean-formed storms to move through the region. Stagnant atmospheric conditions can exist for several days between storms. During this time, frequent storms and infrequent periods of sustained sunny weather are not conducive to smog formation. Radiation cooling during the winter evenings, however, sometimes creates thin inversion layers and concentrates air pollutant emissions near the ground.

UCSC operates a meteorological tower (**Figure 1**), collecting wind and temperature data. The station is located within the southwest portion of the UCSC Marine Science Campus. Three years of meteorological data from this location were processed for use by dispersion models. Data from 1999 through 2001 were used. The average temperature was approximately 52.4ºF with an average wind speed of 7.38 miles per hour and hourly maximum wind speeds of 40 miles per hour. The windiest period is during April and May. Temperatures ranged from a maximum of 75ºF during August and a minimum of 36ºF during December. Approximately 30 inches of precipitation occurs at this location, primarily during the months of November through March, and relative humidity tends to be greater than 60 percent.

**Figure 1. Meteorological Tower**

## METEOROLOGICAL DATA PROCESSING

The UCSC meteorological monitoring station provides information including:

- Wind speed
- Wind direction
- Ambient temperature
- Sigma theta ($\delta_\theta$) or standard deviation of the horizontal wind direction (degrees), which was used to compute atmospheric stability

The meteorological data required by the dispersion model includes hourly, sequential values of wind speed, flow vector (direction toward which the wind is blowing), ambient temperature, atmospheric stability, and mixing height. The data processing was based on the procedures within *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*. To process onsite meteorological data, the following general steps were conducted:

1. Substitution of missing data in durations of one or two hours.
2. Identification of calm wind speed hours.
3. Calculation of atmospheric stability.
4. Determination of the mixing height.

**Missing Data.** Periods of one or two consecutive hours of a missing parameter were replaced by linear interpolation. There were several periods of large blocks of missing data, most notably November and December of 2001, and these periods were left as missing. The missing program (MSGPRO) control option was set to perform dispersion modeling to account for some missing data after processing. Predicted concentrations during missing hours were set to zero by the model per EPA guidance.

**Calm Wind Speeds.** Identification of calm hours for modeling purposes was done considering the characteristics of the meteorological instrumentation. Winds were considered calm if the reported speeds were less than the instrument starting-threshold (e.g., 0.5 meters per second). The dispersion model does not calculate a concentration for hours with calm wind speeds. For any hour in which the wind speed was between the sensor starting threshold and 1 meter per second, the wind speed was set to one meter per second. Less than 3 percent of the period was reported as calm wind conditions.

**Atmospheric Stability.** A turbulence-based method was used for determining atmospheric stability. Sigma theta (the deviation in the horizontal wind direction) and wind speed measurements from the 20-meter level tower were used as the stability classification technique. Classification was based on EPA guidelines, including day, night, and wind speed correction factors. In accordance with EPA guidelines, hourly stability classes were smoothed so that the stability does not change by more than one category from one hour to the next.

**Mixing Height.** The depth of the mixed layer, or mixing height, is an important variable in dispersion models. The mixing height determines the vertical extent of the dispersion process for releases below the mixing height, while releases above the mixing height are assumed to have no ground-level impacts. Nocturnal inversions generally form at approximately sunset and dissipate about one to two hours after sunrise. Generally, the height of the mixed layer rises and falls in a diurnal cycle (highest during the early afternoon and lowest before sunrise). The mixing heights are generally lower during the fall and winter which usually results in higher impacts of constituents due to less dilution and dispersion. Estimates for morning and afternoon mixing heights (**Table 1**) are based on Holzworth's method, which interpolates mixing heights using the afternoon mixing heights from the preceding day and the morning and afternoon mixing heights from the following day (Holzworth, 1972).

**TABLE 1**
**AVERAGE SEASONAL MIXING HEIGHTS**

| | Winter | Spring | Summer | Fall | Annual |
|---|---|---|---|---|---|
| Morning | 453 | 763 | 527 | 508 | 563 |
| Afternoon | 709 | 1121 | 644 | 770 | 811 |

Additional assumptions in order to process the meteorological data include:

- Station Latitude of 36.95
- Station Longitude of 122.06
- Station Time Zone of 10
- Station Height of 20 meters
- Roughness Length of 0.0001 meters, based on a water surface environment

## METEOROLOGICAL DATA SUMMARY

A wind rose is a graphical presentation of wind speed and direction frequency distribution. Wind direction is the true bearing when facing the wind (the direction from which the wind is blowing). As seen in **Figure 2**, wind directions are predominately from the west (off the Pacific Ocean). This figure is a three-year (1999 through 2001) composite windrose for the station. The winds from the easterly direction tend to be during the nighttime.

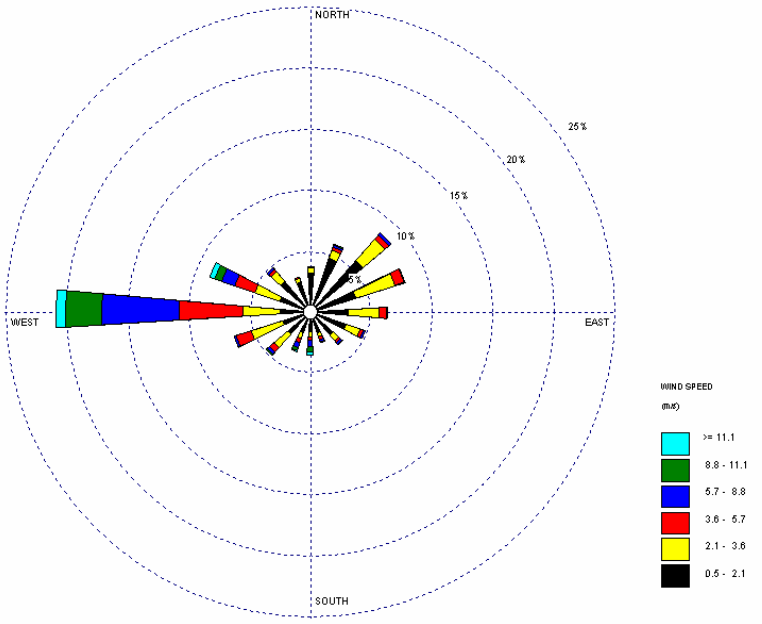



**Figure 2. Windrose for UCSC during 1999 through 2001**

The rate at which emissions are dispersed in the atmosphere depends upon the intensity of the ambient turbulence, the velocity of the wind, the position relative to obstacles in the flow field, and any dilutions attributable to the source itself. The most important factor leading to plume spread in the atmosphere is the amount of ambient turbulence. In a stable atmosphere, the horizontal and vertical turbulence is very limited. The plume remains near its emission height and undergoes minimal mixing. This situation is common during the nighttime and early morning hours. If the layer below the plume height becomes neutral to unstable, the plume mixes rapidly to the surface. This is known as a fumigation condition and can cause high concentrations. This occurs for short duration during the early morning. As heating of the surface persists, a fully unstable mixing layer develops, and the plume loops up and down in response to large-scale convective eddies. A neutral stability atmosphere yields moderate amounts of turbulence and results in a cone-shaped plume. Finally, if an inversion is present below the emission height, a lofting condition exists and the plume is cut off from ground level impacts.

Stability class frequencies were calculated from the deviation of the horizontal wind direction (sigma theta). The Sigma Theta method was used to categorize stability class as a function of wind speed and time of day. Stability classes range from extremely unstable (A) to moderately stable (F). These classes are used in dispersion models to estimate how much a plume will spread over time and space. In general, the more stable the atmosphere is, the less potential for plume spread, creating higher plume concentrations.

When wind speeds exceed 6.0 meters per second, the stability class defaults to D, E, and F stabilities occur only during the night. A majority of the hours involve neutral stability (D) with a predominance of stable conditions. The station shows greater frequency (**Figure 3**) of moderately stable conditions and extremely unstable conditions due to its ocean location and shallower surface roughness.

## *DISPERSION MODELING*

Dispersion is the process by which atmospheric pollutants disseminate due to wind and vertical stability. The results of a dispersion analysis are used to access pollutant concentrations at or near an emission source. The results of an analysis allow a direct comparison of predicted concentrations of pollutants to air quality standards.

A rising pollutant plume reacts with the environment in several ways before it levels off. First, the plume's own turbulence interacts with atmospheric turbulence to entrain ambient air. This mixing process reduces and eventually eliminates the density and momentum differences that cause the plume to rise. Second, the wind transports the plume during its rise and entrainment process. Higher winds mix the plume more rapidly, resulting in a lower final rise. Third, the plume interacts with the vertical temperature stratification of the atmosphere, rising as a result of buoyancy in the unstable-to-neutrally stratified mixed layer. However, after the plume encounters the mixing lid and the stably stratified air above, its vertical motion is dampened.

Dispersion modeling uses hourly averaged meteorological data, terrain elevation data, and emissions and source release data to compute downwind pollutant concentrations over averaging periods ranging from one hour to one year. This section presents the methodology used for the dispersion modeling analysis. The methodology is consistent with procedures documented in the EPA *Guideline on Air Quality Models (Revised, 1993)*.

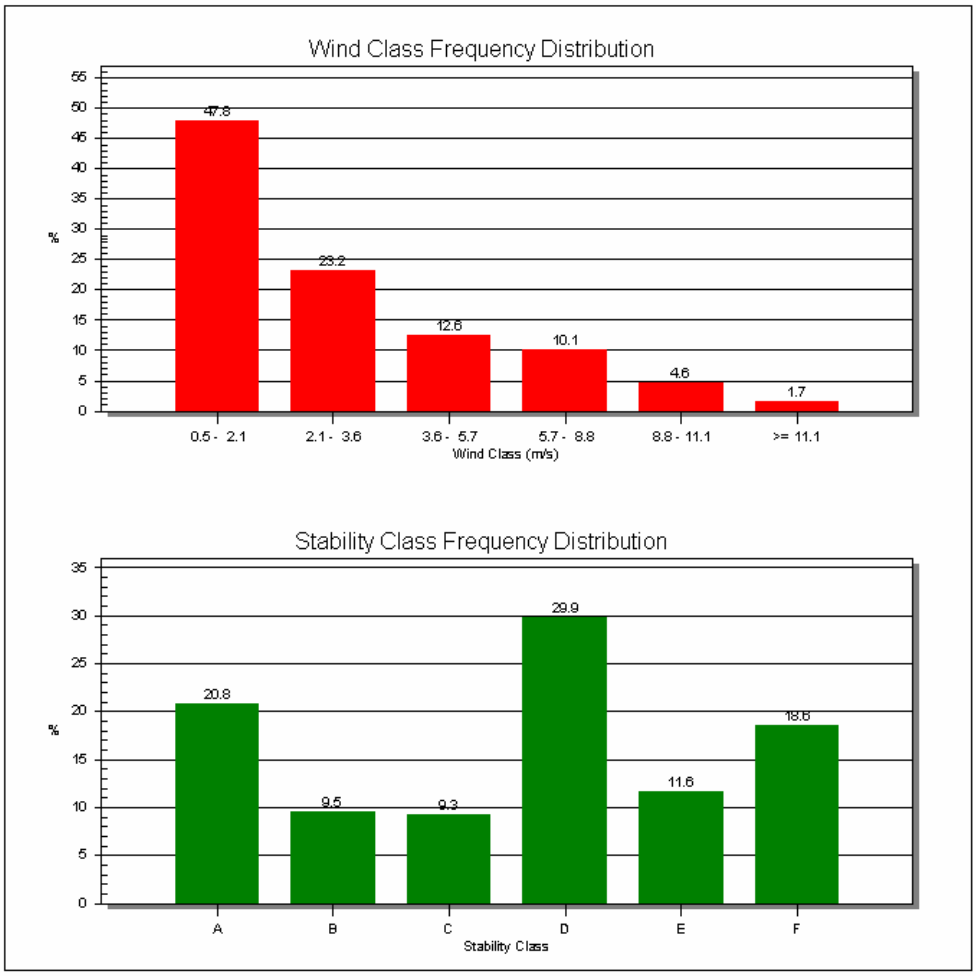



**Figure 3. Wind Speed and Stability Class Frequency Distribution**

Molecules of gas or small particles injected into the atmosphere will separate from each other as they are acted on by turbulent eddies. The Gaussian mathematical model simulates the dispersion of the gas or particles within the atmosphere. The formulation of the Gaussian model is based on the following assumptions:

- The predictions are not time dependent (all conditions remain unchanging with time);
- The wind speed and direction are uniform, both horizontally and vertically throughout the region of concern;
- The rate of diffusion is not a function of position; and
- Diffusion in the direction of the transporting wind is negligible when compared to the transport flow.

The Gaussian dispersion model algorithm provides a simple analytical method of estimating downwind concentrations, where concentration is a function of several basic elements:

- Initial plume height (sum of the physical stack height and the plume rise);
- The source emission rate;

- The horizontal and vertical plume distribution (based on atmospheric stability);
- The wind speed at source height;
- The height of the receptor;
- The off-centerline of the receptor; and
- The downwind distance from the source to the receptor.

This section addresses all of the fundamental components of an air dispersion modeling analysis including:

- Model selection and options;
- Receptor spacing and location;
- Building wake effects; and
- Source release characteristics.

**Model Selection and Options**

The Industrial Source Complex-3 (ISC3) model was used for the modeling analysis. The ISC3 model is an appropriate model for this analysis based on the coverage of simple, intermediate, and complex terrain. It also predicts both short-term and long-term (annual) average concentrations. The model was executed using the regulatory default options (stack-tip downwash, buoyancy induced dispersion, final plume rise), default wind speed profile categories, default potential temperature gradients, no deposition/depletion of particulate matter, and no pollutant decay. Building wake effects were also addressed.

The selection of the appropriate dispersion coefficients used in the modeling depends on the land use within three kilometers (km) of the project. The land use typing was based on the classification method defined by Auer (1978); using pertinent United States Geological Survey (USGS) 1:24,000 scale (7.5 minute) topographic maps of the area. If the Auer land use types of heavy industrial, light-to-moderate industrial, commercial, and compact residential account for 50% or more of the total area, the *Guideline on Air Quality Models* recommends using urban dispersion coefficients; otherwise, the appropriate rural coefficients were used. Based on visual observation of the area, rural dispersion coefficients were applied in the analysis.

## *RECEPTOR SPACING AND LOCATION*

A Cartesian receptor grid was used in the analysis. Receptors were placed at 50-meter intervals along the UCSC fence line. Outside the fence line, additional receptors were placed at distances from the fence line out to a distance of 10 kilometers in all directions from the facility. This receptor grid is adequate to determine the maximum impact location and to account for the sensitive receptors at such locations as churches, schools, and residences including the De Anza Santa Cruz residential community neighboring the campus. This receptor grid provides more than 950 receptor points within the modeling analysis.

## *BUILDING WAKE EFFECTS*

Obstructions in the flow, either upwind or downwind of the emission point, can affect both plume trajectory and dispersion rates. For an obstacle to significantly influence a plume, it must be within five to ten "obstruction heights" upwind of the emission point. For example, a building 50 feet tall could be expected to influence the flow for distances of 250 to 500 feet. Generally, the effect of the obstacle in the flow is to create an aerodynamic downwash in its wake, bringing the

plume rapidly to the surface. As the flow approaches an obstruction, the air is initially displaced upwards and those layers nearest the obstruction become caught in the aerodynamic cavity zone with high turbulence and recirculating flow pattern.

Emissions into the cavity zone tend to become rapidly mixed throughout the zone and remain trapped, creating high concentrations within the cavity zone. Above the cavity zone, in the wake zone, dispersion is characterized by increased turbulence without the recirculation characteristics of the cavity zone. A plume emitted into either of the obstacle influenced zones will have a trajectory that brings it rapidly to the surface. To escape the downwash influences of a flow obstacle, a plume should be emitted or should rise due to momentum to a height of at least the obstacle height plus 1.5 times the height or width of the obstacle, whichever is less. This is known as the "good engineering practice" stack height.

To determine the potential for building wake effects, a good engineering practice (GEP) stack height evaluation was conducted. The procedures used in this analysis were according to those described in EPA's *Good Engineering Practice Stack Height (Technical Support Documentation for the Stack Height Regulations—Revised, 1985)*.

Building wake effects influence emissions from stacks with heights less than GEP. The model required input of building heights and projected building widths for 36 wind directions. The EPA Building Profile Input Program was used to determine the direction-specific building dimensions. Buildings or other structures located within a distance of 5 times the building height from each emission source were considered. Building heights within the UCSC campus were estimated as high as 11 meters with lateral dimensions based on facility drawings.

## *SOURCE RELEASE CHARACTERISTICS*

The dispersion modeling was completed to assess pollutant impacts from three conditions: construction, diesel emitting equipment during operations, and laboratory operations. Construction included the operation of grading and surface preparation equipment and the release of fugitive dust from the soil during preparation. The second condition represents the operation of diesel emitting equipment during facility operations, such as emergency generators and delivery/bus traffic. Lastly, the operation of laboratory facility and the emission of toxic air pollutants were analyzed.

Construction emissions are due to the use of grading equipment (producing diesel particulate matter) and fugitive emissions from the disturbance area (producing particulate matter only). **Table 2** displays the disturbance areas included in the analysis. The construction equipment emission factor is based on EPA Compilation of Air Pollutant Emission Factors (AP-42). Emissions assume the use of a wheeled loader (0.17 pounds per hour) for duration of eight hours per day.

In addition to construction vehicle emissions, fugitive dust would also be generated during grading and construction activities. Dust is generated when grading equipment breaks down surface materials. The resulting dust is entrained into the air by wind and vehicle tires. While much of this airborne dust would settle out on, or near, the project site, smaller particles would remain in the atmosphere, increasing existing particulate levels.

**TABLE 2**
**MODELING EMISSION PARAMETERS (CONSTRUCTION CONDITION)**

| Year | Terrace | Area of Disturbance | Size (acre) | Diesel PM (lbs/day) | PM (lbs/day) | UTM-X (m) | UTM-Y (m) |
|---|---|---|---|---|---|---|---|
| 2010 | Upper | Laydown | 1.96 | 1.36 | 0.98 | 583,327 | 4,089,969 |
| | Middle | USGS | 4.16 | 1.36 | 2.08 | 583,260 | 4,089,678 |
| | Lower | Ocean Health | 0.20 | 1.36 | 0.10 | 583,201 | 4,089,438 |
| 2020 | Upper | Housing | 1.37 | 1.36 | 0.69 | 583,363 | 4,089,930 |
| | Middle | Marine Research | 3.59 | 1.36 | 1.80 | 583,266 | 4,089,765 |
| | Lower | Marine Research | 0.51 | 1.36 | 0.26 | 583,248 | 4,089,432 |

PM = particulate matter
lbs = pounds
m = meters

The acreage of disturbance is assumed to be equal to twice the size of each building's square footage, but only 25 percent of the total acreage to be disturbed will actually be disturbed on the worst-case day. Fugitive emissions are based on an emission factor of 220 pounds per acre-month. The acres graded per day are based on the same acreage estimates generated for the grading equipment exhaust. Fugitive particulate emissions account for a control efficiency of 80% due to watering and dust suppression applications. Construction is expected to be completed within two periods, 2010 (short-term) and 2020 (long-term).

During facility operations, diesel emissions would be produced through the emergency generators and delivery/bus traffic. Diesel emissions from the generators were based on an equipment size of 388 hp-hr and an emission factor of 0.08 grams/hp-hr. Generators were located near the Marine Research within the middle terrace, the USGS Labs within the middle terrace, and the Marine Research within the lower terrace. The emission exhaust parameters for the generators are shown in **Table 3**. Delivery and bus traffic used an emission rate of 0.134 grams per mile based on URBEMIS2001, urban diesel buses, and a baseline year of 2010. Traffic was simulated as five area sources from the northeast portion of campus (Shaffer Road), along the middle terrace, to the southwest portion of campus (along McAllister Way).

Toxic air pollutants would be released during operations of several research laboratories. A series of emission points were developed to simulate laboratory emissions. These emission points included the Marine Research, USGS, and Ocean Health Laboratories. The Marine Research and USGS Laboratories were further portioned into large and small complexes. **Table 4** displays the source exhaust parameters for laboratory operations. Impacts also include the cumulative effect of the Texas Instruments facility, located approximately 1 kilometer to the east of UCSC. Building dimensions of each laboratory structure were included to account for potential downwash effects.

**TABLE 3**
**MODELING EMISSION PARAMETERS (OPERATION CONDITION)**

| Generator | Height (m) | Diameter (m) | Velocity (m/s) | Temperature (K) | UTM-X (m) | UTM-Y (m) |
|---|---|---|---|---|---|---|
| Middle Terrace Marine Research | 3.35 | 0.076 | 150 | 763 | 583,328 | 4,089,785 |
| Middle Terrace USGS Labs | 3.35 | 0.076 | 150 | 763 | 583,328 | 4,089,701 |
| Lower Terrace Marine Research | 3.35 | 0.076 | 150 | 763 | 583,286 | 4,089,451 |

m = meters
m/s = meters per second
K = Kelvin

**TABLE 4**
**MODELING EMISSION PARAMETERS (LABORATORY OPERATION)**

| Laboratory | Height (m) | Diameter (m) | Velocity (m/s) | Temperature (K) |
|---|---|---|---|---|
| Marine Research (Large) | 12.0 | 1.0 | 15.0 | 293 |
| Marine Research (Small) | 12.0 | 1.0 | 12.0 | 293 |
| USGS (Large) | 12.0 | 1.0 | 12.0 | 293 |
| USGS (Small) | 12.0 | 1.0 | 12.0 | 293 |
| Ocean Health | 12.0 | 1.0 | 12.0 | 293 |
| Texas Instruments | 7.0 | 1.0 | 15.0 | 293 |

m = meters
m/s = meters per second
K = Kelvin

## Modeling Results

The objective of the dispersion modeling analysis was to determine the particulate matter, diesel particulate, and toxic air pollutant impacts at nearby receptors. All dispersion modeling was performed using the ISC3 model. Three conditions were analyzed: construction, diesel emitting equipment during operations, and laboratory operations. Cumulative impacts included the operations of the Texas Instruments facility, located approximately 1 kilometer to the northeast of UCSC, on Delaware and Natural Bridges roads. Given the prevailing winds, maximum impacts occur due east of the Marine Science Campus.

**Table 5** presents the predicted concentrations due to construction scenario. Impacts were adjusted based on anticipated construction schedules (12 hours per day, 6 days per week) and duration (2 months per year) for each construction area. Maximum impacts occur along the eastern fence line.

**TABLE 5**
**DISPERSION MODELING RESULTS (CONSTRUCTION CONDITION)**

| Pollutant | Averaging Period | Impact ($\mu g/m^3$) |
|---|---|---|
| Respirable Particulate Matter | 24 hour | 26.3 |
| | Annual | 1.04 |
| Diesel Particulate Matter | Max. Lifetime Avg. | 0.007 |

$\mu g/m^3$ = micrograms per cubic meter

**Table 6** presents the predicted concentration due to the operation of emergency generators and delivery/bus traffic along campus roads. It was assumed that there would be three emergency generators, with a total of 30 hrs. per year of testing. A majority of the impacts are due to the diesel buses and delivery trucks related to the project.

**TABLE 6**
**DISPERSION MODELING RESULTS (OPERATION CONDITION)**

| Pollutant | Source | Annual Avg. ($\mu g/m^3$) |
|---|---|---|
| Diesel Particulate Matter | Emergency Gen. Tests | 0.0011 |
| | Buses and Trucks | 0.017 |
| | **Total** | **0.0181** |

$\mu g/m^3$ = micrograms per cubic meter

Concentration impacts were predicted due to laboratory operations. These results are based on a unit emission rate for each of the emission points. Actual impacts were determined for each pollutant of concern based on their actual emission rate. The impacts include operation of the Texas Instruments facility.

# APPENDIX D

TRANSPORTATION TECHNICAL DOCUMENTATION

# APPENDIX D-1

## INTERSECTION COUNTS AND ROADWAY SEGMENT COUNTS

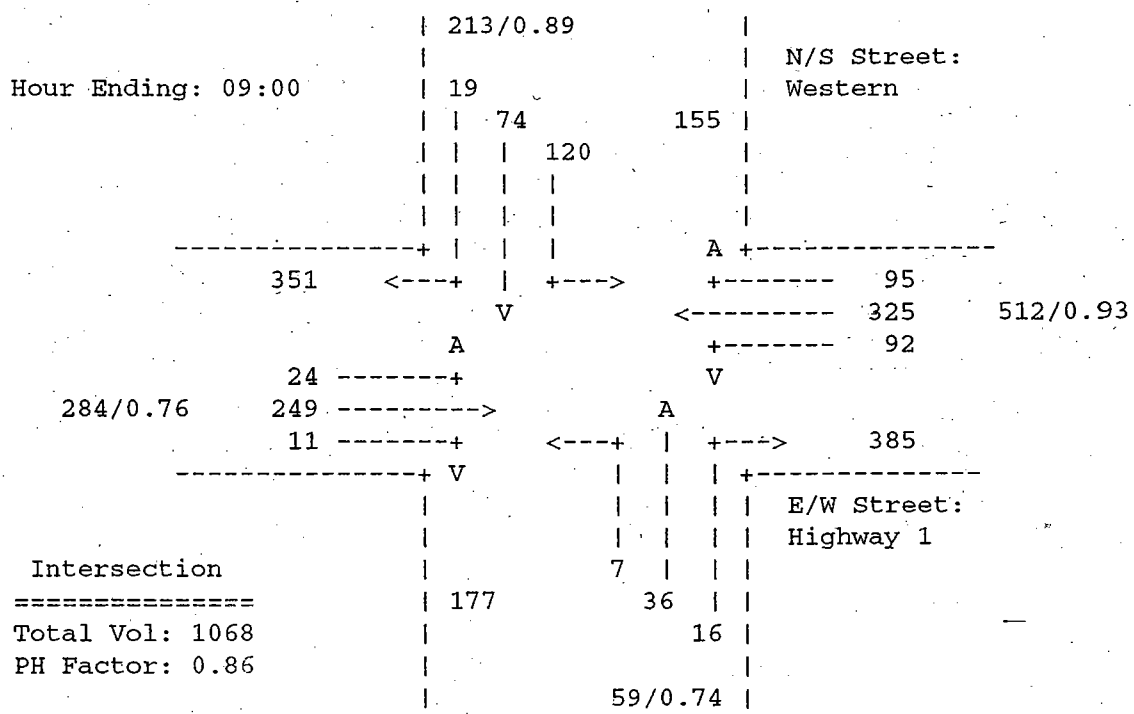
1 - Western and Highway 1 HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 2 | 8 | 17 | 4 | 76 | 18 | 5 | 8 | 1 | 0 | 40 | 2 | 181* |
| 07:30 | 5 | 15 | 41 | 9 | 161 | 30 | 6 | 9 | 1 | 0 | 88 | 4 | 369* |
| 07:45 | 6 | 20 | 69 | 20 | 225 | 43 | 11 | 13 | 4 | 4 | 163 | 7 | 585* |
| 08:00 | 7 | 32 | 94 | 33 | 308 | 65 | 11 | 20 | 8 | 8 | 232 | 11 | 829 |
| 08:15 | 10 | 47 | 107 | 48 | 325 | 72 | 9 | 20 | 10 | 9 | 248 | 14 | 919 |
| 08:30 | 11 | 54 | 118 | 67 | 325 | 83 | 11 | 28 | 10 | 10 | 259 | 17 | 993 |
| 08:45 | 16 | 61 | 114 | 79 | 326 | 87 | 9 | 32 | 9 | 10 | 239 | 19 | 1001 |
| 09:00 | 19 | 74 | 120 | 95 | 325 | 92 | 16 | 36 | 7 | 11 | 249 | 24 | 1068 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #5 SUM-IT
Thursday COUNT DATE
05/24/01

1 - Western and Highway 1 MORNING PEAK



1 - Western Drive and Highway 1 HOURLY SUMMARY

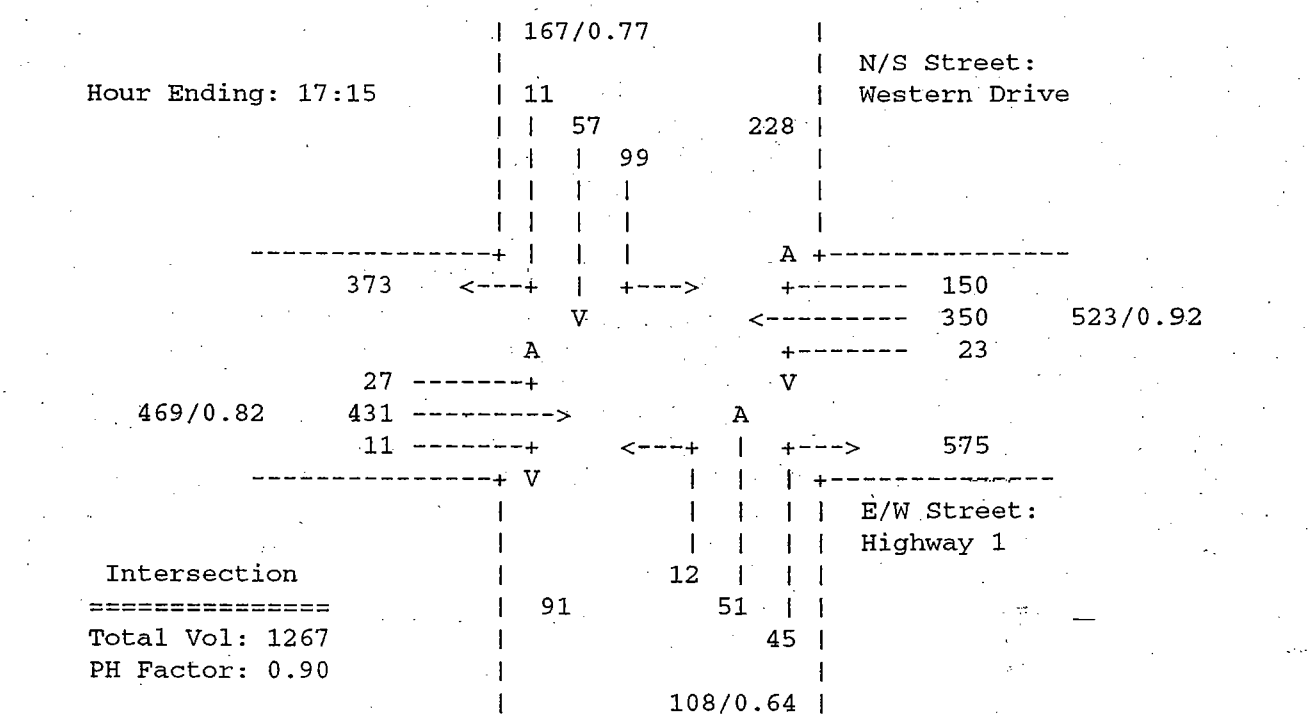
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 3 | 12 | 25 | 28 | 78 | 9 | 10 | 11 | 4 | 5 | 128 | 4 | 317* |
| 16:30 | 6 | 28 | 60 | 59 | 172 | 16 | 21 | 22 | 4 | 9 | 261 | 10 | 668* |
| 16:45 | 8 | 40 | 89 | 89 | 254 | 17 | 27 | 30 | 9 | 11 | 365 | 18 | 957* |
| 17:00 | 12 | 53 | 99 | 129 | 344 | 23 | 37 | 43 | 11 | 14 | 459 | 26 | 1250 |
| 17:15 | 11 | 57 | 99 | 150 | 350 | 23 | 45 | 51 | 12 | 11 | 431 | 27 | 1267 |
| 17:30 | 12 | 54 | 95 | 159 | 307 | 26 | 47 | 53 | 14 | 14 | 385 | 26 | 1192 |
| 17:45 | 16 | 54 | 104 | 176 | 314 | 34 | 58 | 59 | 14 | 16 | 390 | 24 | 1259 |
| 18:00 | 16 | 53 | 113 | 169 | 301 | 36 | 54 | 57 | 13 | 19 | 367 | 21 | 1219 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #5 SUM-IT

Thursday COUNT DATE 05/17/01

1 - Western Drive and Highway 1 EVENING PEAK



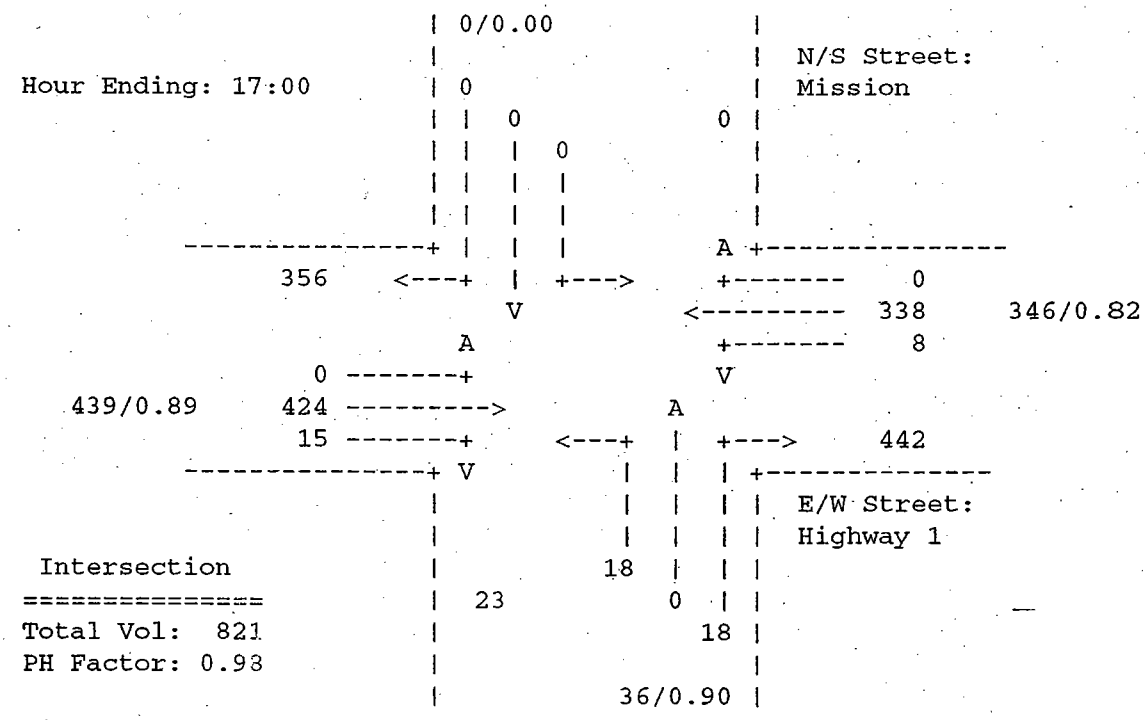
1 - Mission and Highway 1 HOURLY SUMMARY

| Hour | North | | | East | | | South | | | West | | | Int. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ending | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| 16:15 | 0 | 0 | 0 | 0 | 73 | 3 | 5 | 0 | 4 | 6 | 118 | 0 | 209* |
| 16:30 | 0 | 0 | 0 | 0 | 152 | 4 | 9 | 0 | 9 | 7 | 224 | 0 | 405* |
| 16:45 | 0 | 0 | 0 | 0 | 235 | 6 | 14 | 0 | 12 | 9 | 338 | 0 | 614* |
| 17:00 | 0 | 0 | 0 | 0 | 338 | 8 | 18 | 0 | 18 | 15 | 424 | 0 | 821 |
| 17:15 | 0 | 0 | 0 | 0 | 345 | 8 | 15 | 0 | 19 | 13 | 402 | 0 | 802 |
| 17:30 | 0 | 0 | 0 | 0 | 328 | 9 | 15 | 0 | 19 | 17 | 371 | 0 | 759 |
| 17:45 | 0 | 0 | 0 | 0 | 339 | 7 | 16 | 0 | 20 | 22 | 348 | 0 | 752 |
| 18:00 | 0 | 0 | 0 | 0 | 339 | 8 | 15 | 0 | 17 | 26 | 352 | 0 | 757 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #6b SUM-IT
Tuesday COUNT DATE
Sunny, clear, WARM 05/15/01

1 - Mission and Highway 1 EVENING PEAK



1 - Grandview/Swift and Mission — HOURLY SUMMARY

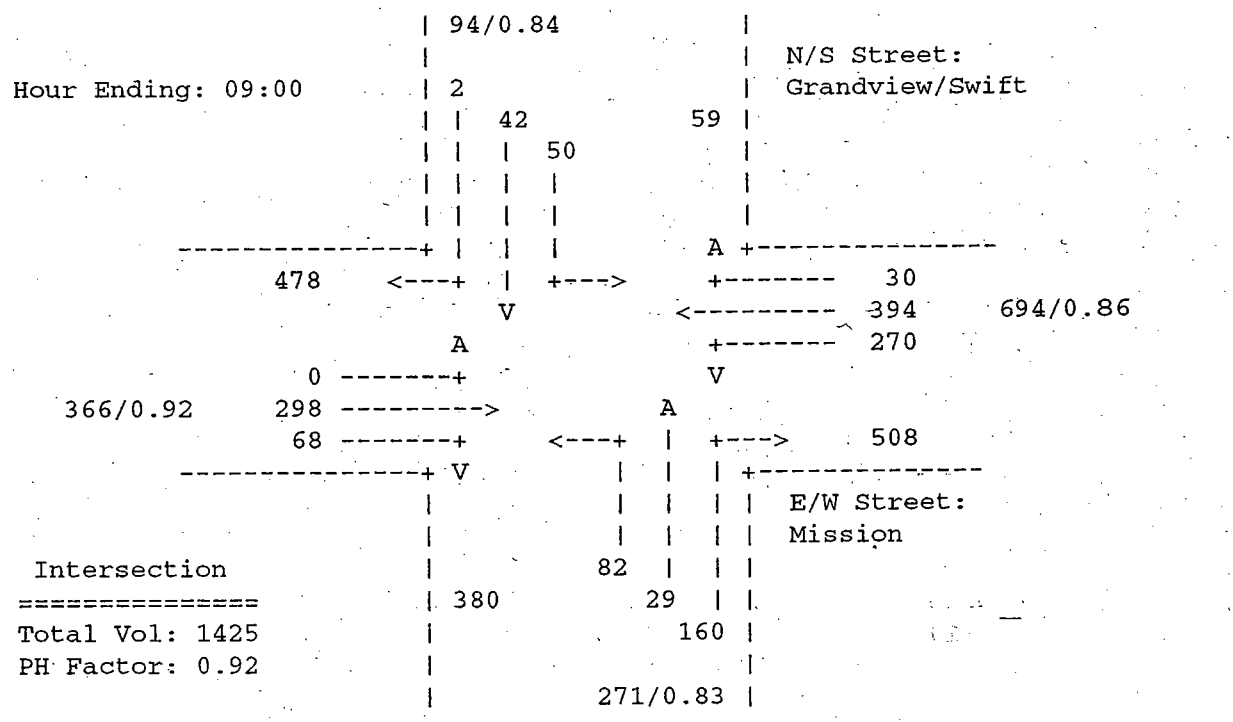
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 4 | 6 | 9 | 2 | 96 | 61 | 9 | 2 | 8 | 1 | 63 | 1 | 262* |
| 07:30 | 5 | 11 | 21 | 2 | 181 | 119 | 61 | 4 | 17 | 7 | 134 | 1 | 563* |
| 07:45 | 5 | 20 | 39 | 7 | 249 | 187 | 98 | 10 | 28 | 18 | 208 | 1 | 870* |
| 08:00 | 5 | 27 | 50 | 10 | 340 | 256 | 130 | 16 | 44 | 29 | 288 | 1 | 1196 |
| 08:15 | 1 | 38 | 52 | 14 | 323 | 258 | 176 | 22 | 55 | 46 | 306 | 0 | 1291 |
| 08:30 | 1 | 42 | 56 | 22 | 349 | 283 | 161 | 29 | 72 | 57 | 306 | 0 | 1378 |
| 08:45 | 1 | 44 | 45 | 25 | 379 | 280 | 153 | 30 | 77 | 63 | 300 | 0 | 1397 |
| 09:00 | 2 | 42 | 50 | 30 | 394 | 270 | 160 | 29 | 82 | 68 | 298 | 0 | 1425 |

* indicates partial hour total.

City of Santz Cruz - UCSC Long Marine Lab #7
Thursday

SUM-IT
COUNT DATE
05/17/01

1 - Grandview/Swift and Mission — MORNING PEAK



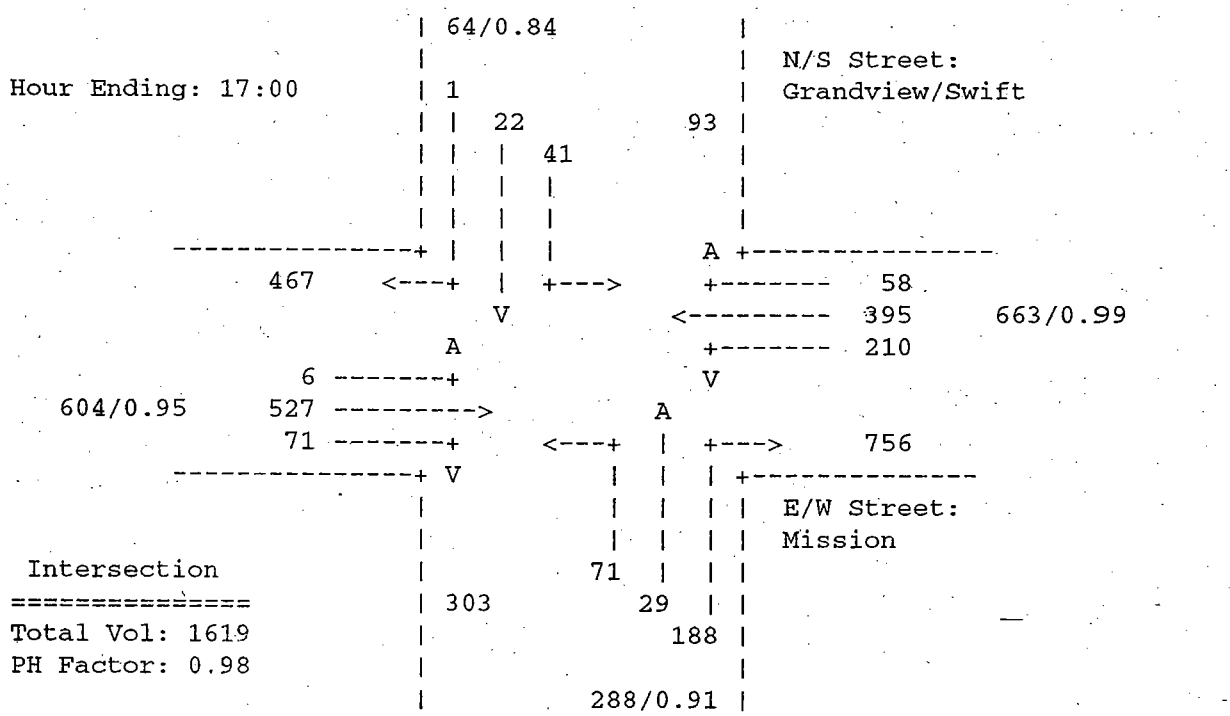
1 - Grandview/Swift and Mission — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 0 | 3 | 11 | 17 | 98 | 48 | 51 | 11 | 17 | 21 | 131 | 3 | 411* |
| 16:30 | 1 | 8 | 24 | 29 | 203 | 98 | 95 | 18 | 32 | 36 | 274 | 4 | 822* |
| 16:45 | 1 | 18 | 33 | 39 | 304 | 153 | 143 | 22 | 52 | 54 | 412 | 4 | 1235* |
| 17:00 | 1 | 22 | 41 | 58 | 395 | 210 | 188 | 29 | 71 | 71 | 527 | 6 | 1619 |
| 17:15 | 4 | 27 | 38 | 55 | 385 | 216 | 191 | 38 | 73 | 68 | 508 | 5 | 1608 |
| 17:30 | 4 | 25 | 42 | 57 | 388 | 216 | 198 | 43 | 70 | 68 | 492 | 4 | 1607 |
| 17:45 | 4 | 23 | 45 | 67 | 392 | 226 | 194 | 51 | 67 | 59 | 473 | 5 | 1606 |
| 18:00 | 4 | 25 | 50 | 62 | 419 | 219 | 190 | 60 | 71 | 57 | 450 | 6 | 1613 |

* indicates partial hour total.

City of Santz Cruz - UCSC Long Marine Lab #7 — SUM-IT
Tuesday — COUNT DATE 05/22/01

1 - Grandview/Swift and Mission — EVENING PEAK



1 - Younglove and Mission — HOURLY SUMMARY

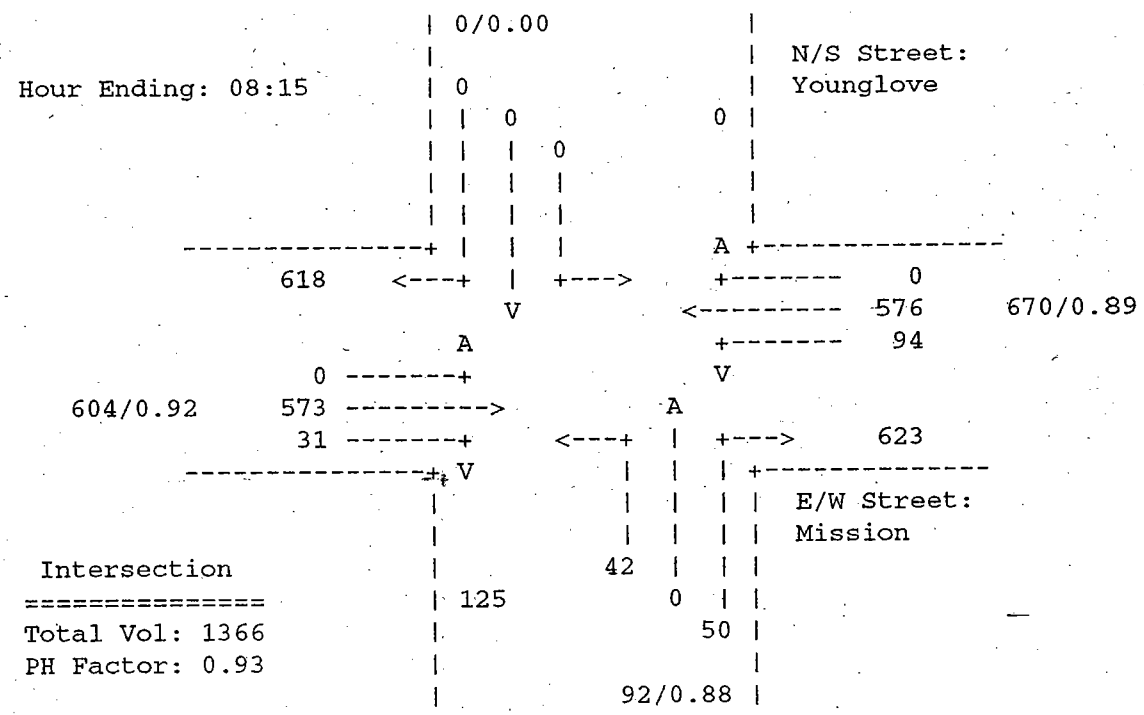
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 0 | 0 | 163 | 20 | 17 | 0 | 6 | 10 | 151 | 0 | 367* |
| 07:30 | 0 | 0 | 0 | 0 | 302 | 35 | 29 | 0 | 16 | 23 | 279 | 0 | 684* |
| 07:45 | 0 | 0 | 0 | 0 | 457 | 62 | 41 | 0 | 27 | 27 | 439 | 0 | 1053* |
| 08:00 | 0 | 0 | 0 | 0 | 581 | 84 | 53 | 0 | 36 | 33 | 577 | 0 | 1364 |
| 08:15 | 0 | 0 | 0 | 0 | 576 | 94 | 50 | 0 | 42 | 31 | 573 | 0 | 1366 |
| 08:30 | 0 | 0 | 0 | 0 | 577 | 100 | 44 | 0 | 38 | 26 | 563 | 0 | 1348 |
| 08:45 | 0 | 0 | 0 | 0 | 585 | 96 | 46 | 0 | 39 | 34 | 517 | 0 | 1317 |
| 09:00 | 0 | 0 | 0 | 0 | 600 | 100 | 44 | 0 | 53 | 39 | 498 | 0 | 1334 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #13a
Tuesday
Clear and warm

SUM-IT
COUNT DATE
05/22/01

1 - Younglove and Mission — MORNING PEAK



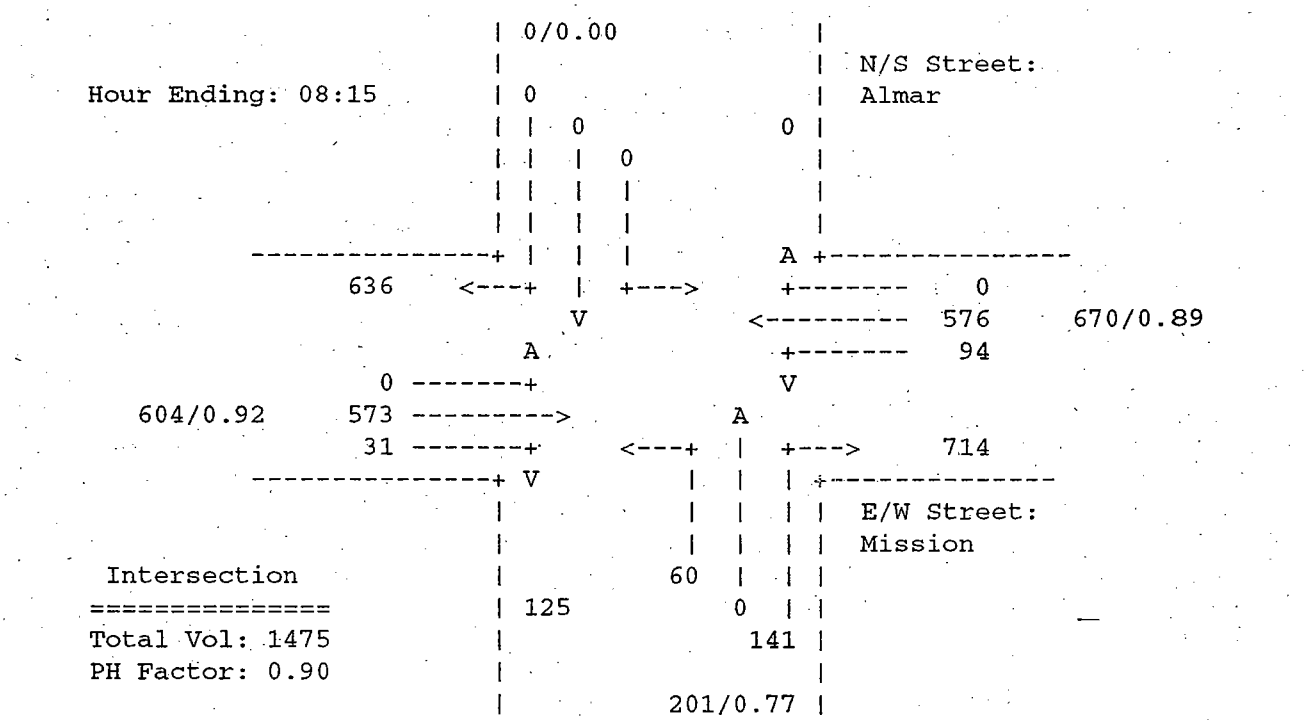
1 - Almar and Mission — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 0 | 0 | 163 | 20 | 38 | 0 | 5 | 10 | 151 | 0 | 387* |
| 07:30 | 0 | 0 | 0 | 0 | 302 | 35 | 62 | 0 | 16 | 23 | 279 | 0 | 717* |
| 07:45 | 0 | 0 | 0 | 0 | 457 | 62 | 108 | 0 | 35 | 27 | 439 | 0 | 1128* |
| 08:00 | 0 | 0 | 0 | 0 | 581 | 84 | 139 | 0 | 48 | 33 | 577 | 0 | 1462 |
| 08:15 | 0 | 0 | 0 | 0 | 576 | 94 | 141 | 0 | 60 | 31 | 573 | 0 | 1475 |
| 08:30 | 0 | 0 | 0 | 0 | 577 | 100 | 143 | 0 | 60 | 26 | 563 | 0 | 1469 |
| 08:45 | 0 | 0 | 0 | 0 | 585 | 96 | 131 | 0 | 56 | 34 | 517 | 0 | 1419 |
| 09:00 | 0 | 0 | 0 | 0 | 600 | 100 | 123 | 0 | 56 | 39 | 498 | 0 | 1416 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #13b — SUM-IT
Tuesday — COUNT DATE
Clear and warm — 05/17/01

1 - Almar and Mission — MORNING PEAK



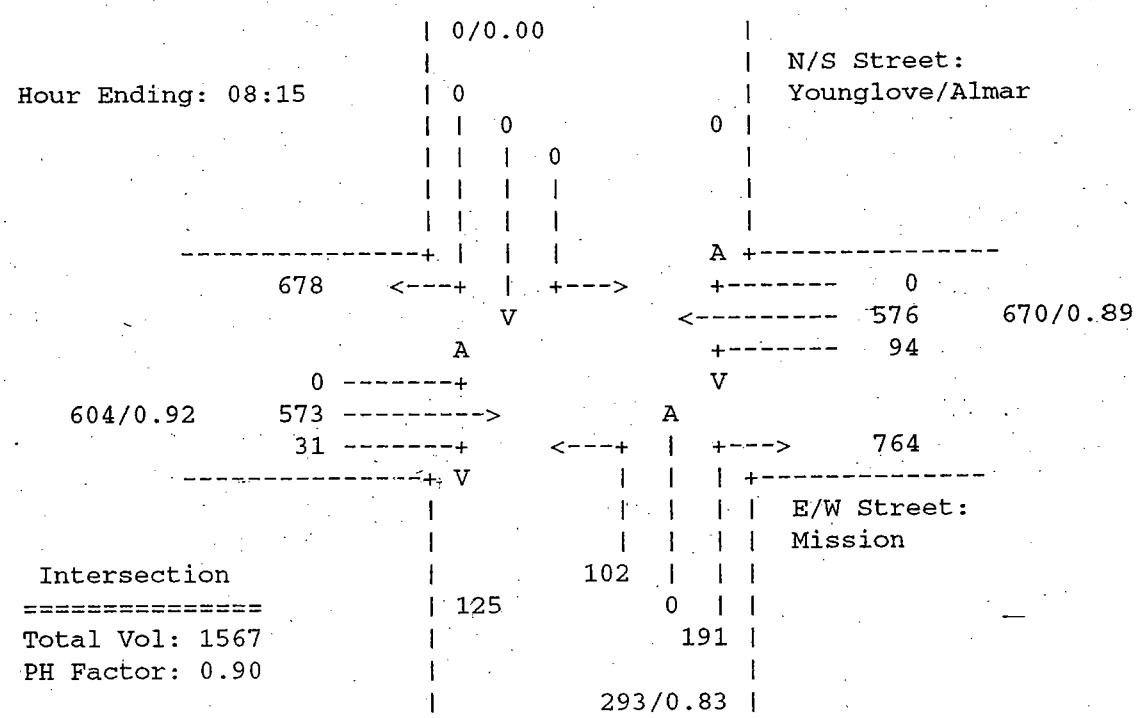
1 - Younglove/Almar and Mission — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 0 | 0 | 163 | 20 | 55 | 0 | 11 | 10 | 151 | 0 | 410* |
| 07:30 | 0 | 0 | 0 | 0 | 302 | 35 | 91 | 0 | 32 | 23 | 279 | 0 | 762* |
| 07:45 | 0 | 0 | 0 | 0 | 457 | 62 | 149 | 0 | 62 | 27 | 439 | 0 | 1196* |
| 08:00 | 0 | 0 | 0 | 0 | 581 | 84 | 192 | 0 | 84 | 33 | 577 | 0 | 1551 |
| 08:15 | 0 | 0 | 0 | 0 | 576 | 94 | 191 | 0 | 102 | 31 | 573 | 0 | 1567 |
| 08:30 | 0 | 0 | 0 | 0 | 577 | 100 | 187 | 0 | 98 | 26 | 563 | 0 | 1551 |
| 08:45 | 0 | 0 | 0 | 0 | 585 | 96 | 177 | 0 | 95 | 34 | 517 | 0 | 1504 |
| 09:00 | 0 | 0 | 0 | 0 | 600 | 100 | 167 | 0 | 109 | 39 | 498 | 0 | 1513 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #13c — SUM-IT
Tuesday — COUNT DATE
Clear and warm — 05/17/01

1 - Younglove/Almar and Mission — MORNING PEAK



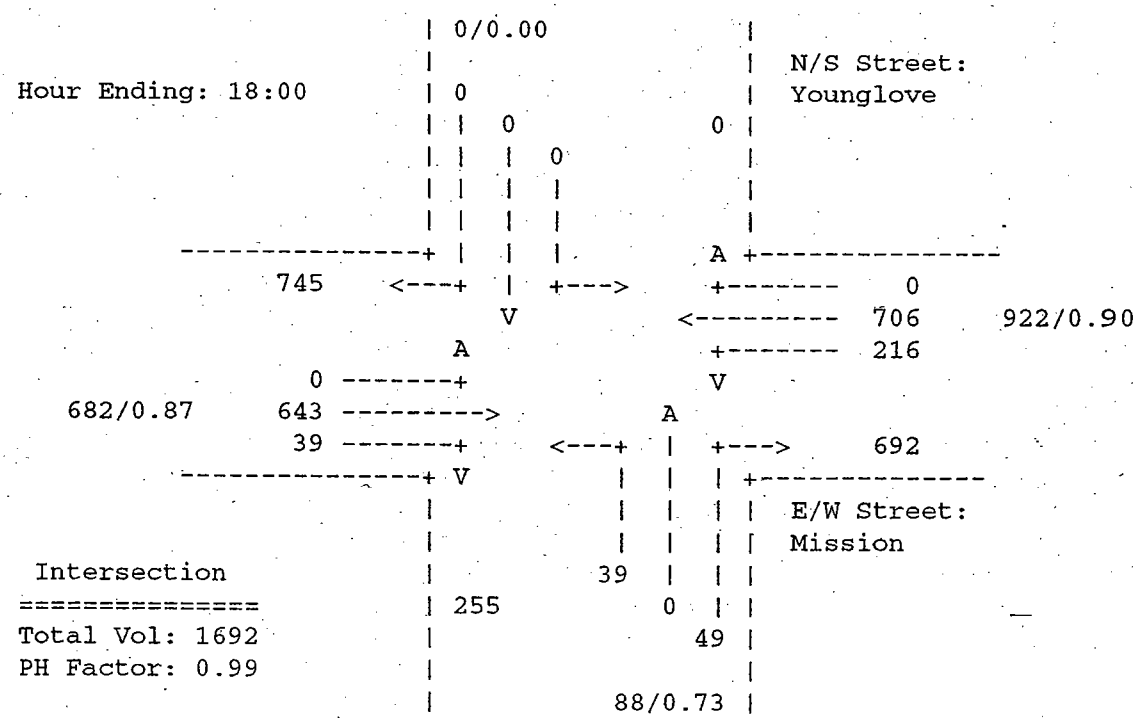
1 - Younglove and Mission HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 0 | 0 | 0 | 0 | 148 | 47 | 3 | 0 | 11 | 11 | 169 | 0 | 389* |
| 16:30 | 0 | 0 | 0 | 0 | 310 | 93 | 15 | 0 | 21 | 24 | 362 | 0 | 825* |
| 16:45 | 0 | 0 | 0 | 0 | 460 | 153 | 23 | 0 | 27 | 31 | 532 | 0 | 1226* |
| 17:00 | 0 | 0 | 0 | 0 | 619 | 201 | 32 | 0 | 39 | 42 | 681 | 0 | 1614 |
| 17:15 | 0 | 0 | 0 | 0 | 624 | 208 | 38 | 0 | 37 | 38 | 702 | 0 | 1647 |
| 17:30 | 0 | 0 | 0 | 0 | 633 | 211 | 45 | 0 | 38 | 39 | 668 | 0 | 1634 |
| 17:45 | 0 | 0 | 0 | 0 | 665 | 208 | 46 | 0 | 39 | 40 | 653 | 0 | 1651 |
| 18:00 | 0 | 0 | 0 | 0 | 706 | 216 | 49 | 0 | 39 | 39 | 643 | 0 | 1692 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #13a SUM-IT
Tuesday COUNT DATE
Clear and warm 05/22/01

1 - Younglove and Mission EVENING PEAK



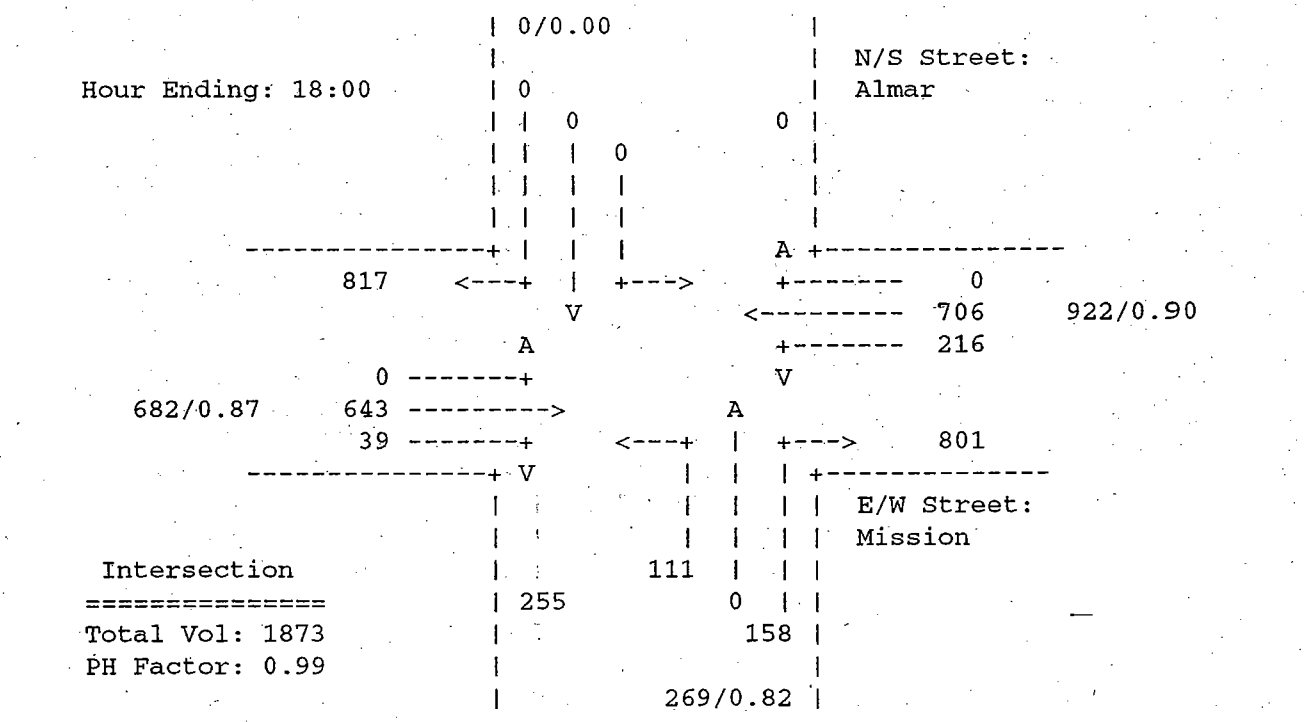
1 - Almar and Mission HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 0 | 0 | 0 | 0 | 148 | 47 | 38 | 0 | 16 | 11 | 169 | 0 | 429* |
| 16:30 | 0 | 0 | 0 | 0 | 310 | 93 | 71 | 0 | 39 | 24 | 362 | 0 | 899* |
| 16:45 | 0 | 0 | 0 | 0 | 460 | 153 | 100 | 0 | 48 | 31 | 532 | 0 | 1324* |
| 17:00 | 0 | 0 | 0 | 0 | 619 | 201 | 136 | 0 | 69 | 42 | 681 | 0 | 1748 |
| 17:15 | 0 | 0 | 0 | 0 | 624 | 208 | 134 | 0 | 83 | 38 | 702 | 0 | 1789 |
| 17:30 | 0 | 0 | 0 | 0 | 633 | 211 | 149 | 0 | 94 | 39 | 668 | 0 | 1794 |
| 17:45 | 0 | 0 | 0 | 0 | 665 | 208 | 158 | 0 | 112 | 40 | 653 | 0 | 1836 |
| 18:00 | 0 | 0 | 0 | 0 | 706 | 216 | 158 | 0 | 111 | 39 | 643 | 0 | 1873 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #13b SUM-IT
Tuesday COUNT DATE
Clear and warm 05/22/01

1 - Almar and Mission EVENING PEAK



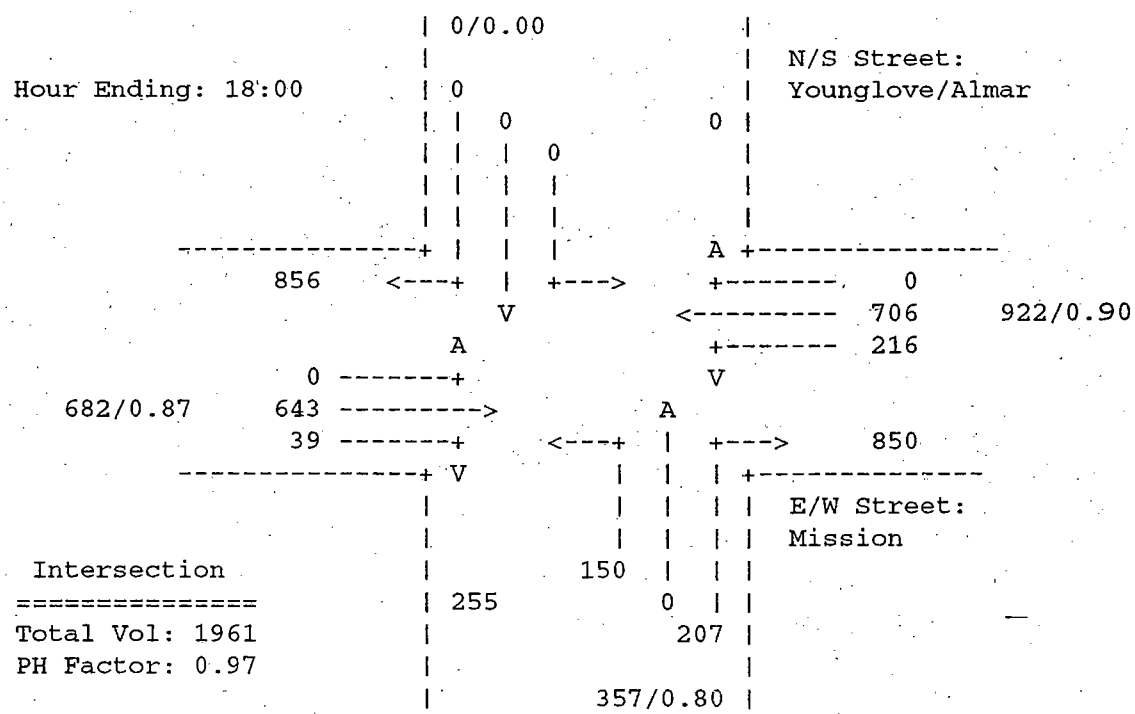
1 - Younglove/Almar and Mission — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 0 | 0 | 0 | 0 | 148 | 47 | 41 | 0 | 27 | 11 | 169 | 0 | 443* |
| 16:30 | 0 | 0 | 0 | 0 | 310 | 93 | 86 | 0 | 60 | 24 | 362 | 0 | 935* |
| 16:45 | 0 | 0 | 0 | 0 | 460 | 153 | 123 | 0 | 75 | 31 | 532 | 0 | 1374* |
| 17:00 | 0 | 0 | 0 | 0 | 619 | 201 | 168 | 0 | 108 | 42 | 681 | 0 | 1819 |
| 17:15 | 0 | 0 | 0 | 0 | 624 | 208 | 172 | 0 | 120 | 38 | 702 | 0 | 1864 |
| 17:30 | 0 | 0 | 0 | 0 | 633 | 211 | 194 | 0 | 132 | 39 | 668 | 0 | 1877 |
| 17:45 | 0 | 0 | 0 | 0 | 665 | 208 | 204 | 0 | 151 | 40 | 653 | 0 | 1921 |
| 18:00 | 0 | 0 | 0 | 0 | 706 | 216 | 207 | 0 | 150 | 39 | 643 | 0 | 1961 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #13c — SUM-IT
Tuesday — COUNT DATE
Clear and warm — 05/22/01

1 - Younglove/Almar and Mission — EVENING PEAK



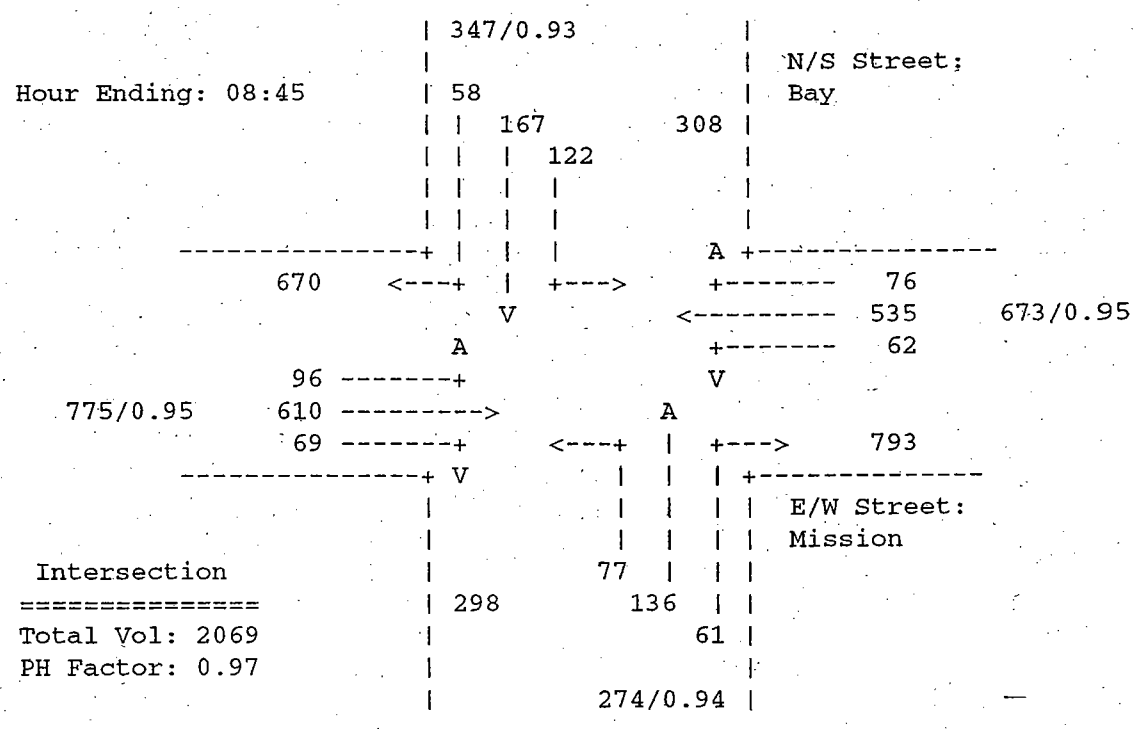
1 - Bay and Mission HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 10 | 13 | 35 | 17 | 204 | 5 | 19 | 11 | 4 | 5 | 150 | 4 | 477* |
| 07:30 | 17 | 33 | 68 | 37 | 385 | 14 | 42 | 28 | 8 | 16 | 286 | 17 | 951* |
| 07:45 | 33 | 54 | 97 | 56 | 519 | 28 | 63 | 55 | 22 | 21 | 446 | 36 | 1430* |
| 08:00 | 45 | 92 | 136 | 78 | 661 | 42 | 79 | 86 | 36 | 38 | 600 | 68 | 1961 |
| 08:15 | 47 | 125 | 131 | 76 | 590 | 61 | 73 | 117 | 50 | 62 | 602 | 81 | 2015 |
| 08:30 | 50 | 151 | 119 | 72 | 541 | 68 | 66 | 133 | 70 | 60 | 634 | 95 | 2059 |
| 08:45 | 58 | 167 | 122 | 76 | 535 | 62 | 61 | 136 | 77 | 69 | 610 | 96 | 2069 |
| 09:00 | 61 | 158 | 111 | 70 | 505 | 60 | 54 | 147 | 83 | 72 | 595 | 82 | 1998 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #15 SUM-IT
Thursday COUNT DATE
05/10/01

1 - Bay and Mission MORNING PEAK



1 - Bay and Mission HOURLY SUMMARY

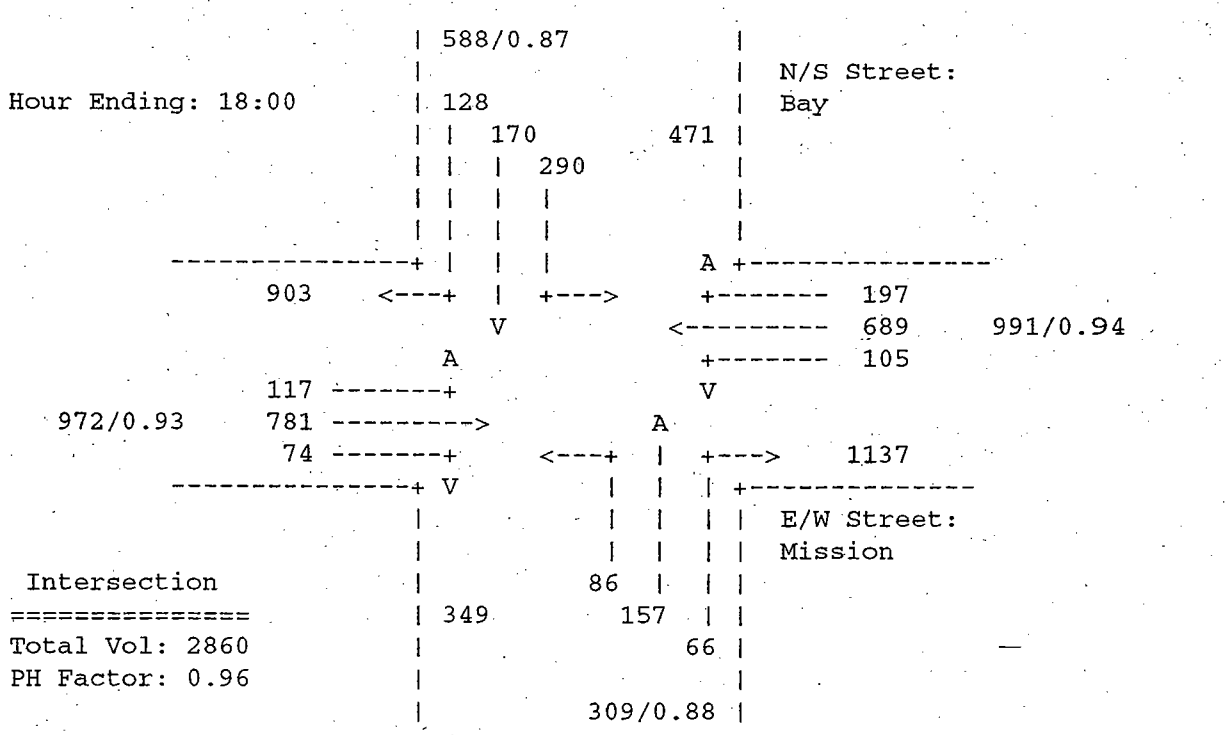
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 18 | 45 | 63 | 37 | 159 | 21 | 16 | 35 | 31 | 18 | 185 | 26 | 654* |
| 16:30 | 45 | 86 | 127 | 82 | 324 | 44 | 26 | 62 | 50 | 30 | 358 | 60 | 1294* |
| 16:45 | 71 | 122 | 171 | 127 | 492 | 66 | 45 | 99 | 73 | 48 | 524 | 82 | 1920* |
| 17:00 | 87 | 158 | 228 | 185 | 670 | 99 | 51 | 133 | 97 | 67 | 696 | 124 | 2595 |
| 17:15 | 94 | 162 | 255 | 201 | 662 | 99 | 46 | 141 | 81 | 70 | 719 | 131 | 2661 |
| 17:30 | 100 | 174 | 274 | 214 | 670 | 100 | 54 | 150 | 96 | 83 | 723 | 127 | 2765 |
| 17:45 | 117 | 169 | 292 | 210 | 679 | 107 | 47 | 159 | 89 | 83 | 735 | 129 | 2816 |
| 18:00 | 128 | 170 | 290 | 197 | 689 | 105 | 66 | 157 | 86 | 74 | 781 | 117 | 2860 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #15 SUM-IT

Thursday COUNT DATE 05/10/01

1 - Bay and Mission EVENING PEAK



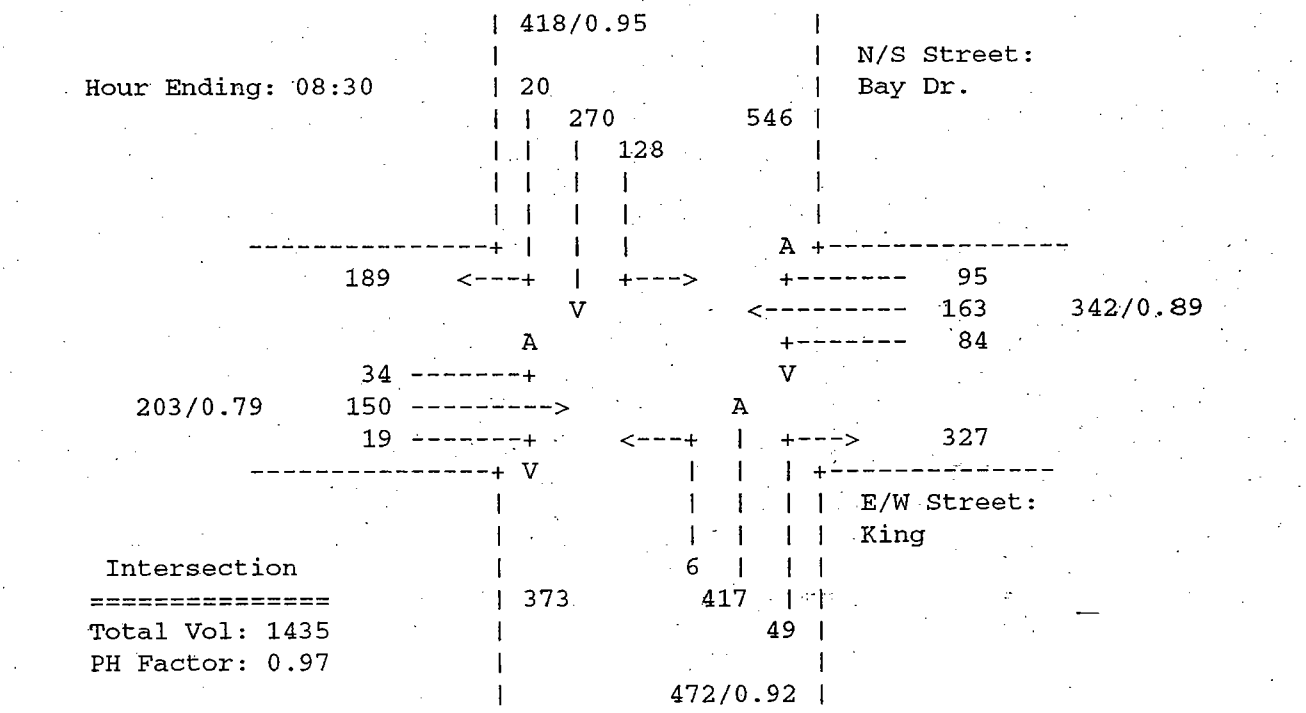
1 - Bay Dr. and King — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 3 | 46 | 10 | 10 | 11 | 3 | 3 | 34 | 1 | 2 | 19 | 2 | 144* |
| 07:30 | 4 | 95 | 32 | 22 | 19 | 11 | 7 | 80 | 3 | 2 | 39 | 7 | 321* |
| 07:45 | 7 | 158 | 68 | 46 | 54 | 26 | 24 | 190 | 4 | 7 | 86 | 15 | 685* |
| 08:00 | 13 | 223 | 94 | 68 | 94 | 51 | 36 | 291 | 6 | 13 | 136 | 23 | 1048 |
| 08:15 | 16 | 256 | 108 | 83 | 132 | 70 | 45 | 369 | 6 | 14 | 144 | 31 | 1274 |
| 08:30 | 20 | 270 | 128 | 95 | 163 | 84 | 49 | 417 | 6 | 19 | 150 | 34 | 1435 |
| 08:45 | 23 | 273 | 121 | 99 | 176 | 85 | 46 | 384 | 8 | 24 | 135 | 32 | 1406 |
| 09:00 | 24 | 277 | 116 | 105 | 198 | 77 | 40 | 388 | 11 | 22 | 125 | 29 | 1412 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #16 — SUM-IT
Tuesday — COUNT DATE
Clear and sunny — 05/15/01

1 - Bay Dr. and King — MORNING PEAK



1 - Bay Dr. and King — HOURLY SUMMARY

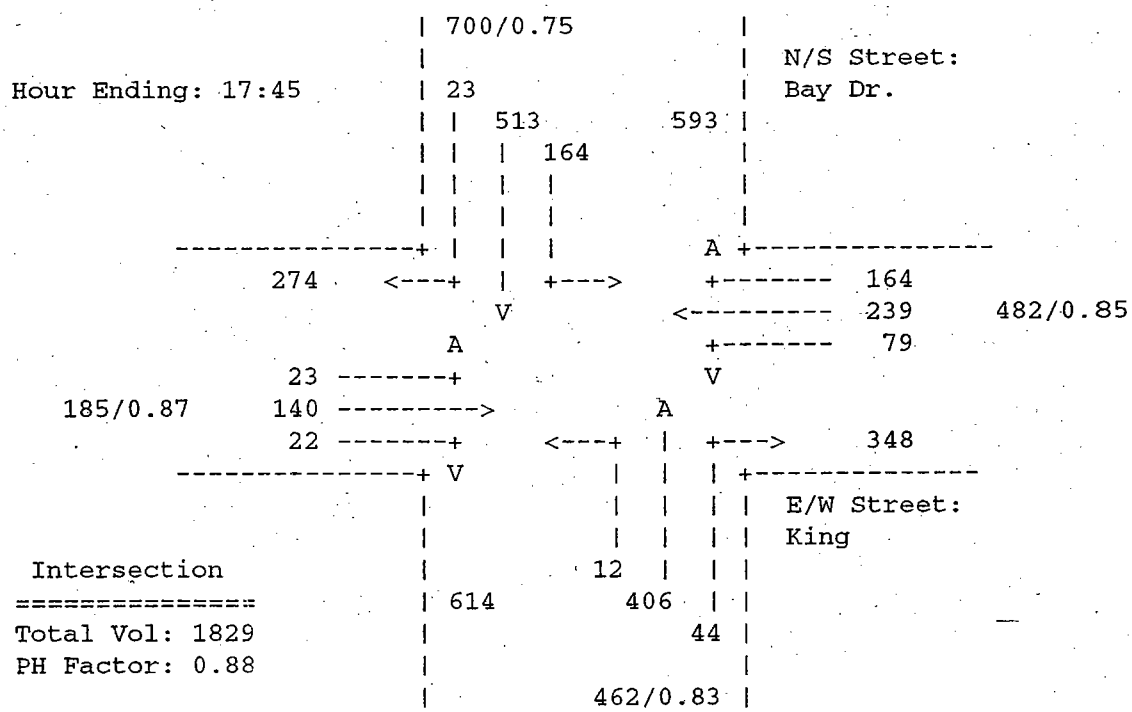
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 5 | 116 | 35 | 22 | 41 | 20 | 11 | 75 | 3 | 7 | 35 | 6 | 376* |
| 16:30 | 10 | 220 | 71 | 50 | 77 | 38 | 24 | 172 | 8 | 11 | 68 | 13 | 762* |
| 16:45 | 16 | 316 | 107 | 95 | 115 | 61 | 35 | 273 | 11 | 16 | 122 | 20 | 1187* |
| 17:00 | 20 | 436 | 146 | 139 | 169 | 80 | 47 | 397 | 14 | 19 | 156 | 28 | 1651 |
| 17:15 | 27 | 487 | 166 | 161 | 187 | 76 | 46 | 425 | 13 | 19 | 162 | 27 | 1796 |
| 17:30 | 25 | 495 | 167 | 166 | 205 | 75 | 44 | 410 | 11 | 20 | 162 | 27 | 1807 |
| 17:45 | 23 | 513 | 164 | 164 | 239 | 79 | 44 | 406 | 12 | 22 | 140 | 23 | 1829 |
| 18:00 | 27 | 488 | 155 | 160 | 231 | 76 | 46 | 356 | 15 | 25 | 133 | 19 | 1731 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #16
Tuesday

SUM-IT
COUNT DATE
05/15/01

1 - Bay Dr. and King — EVENING PEAK



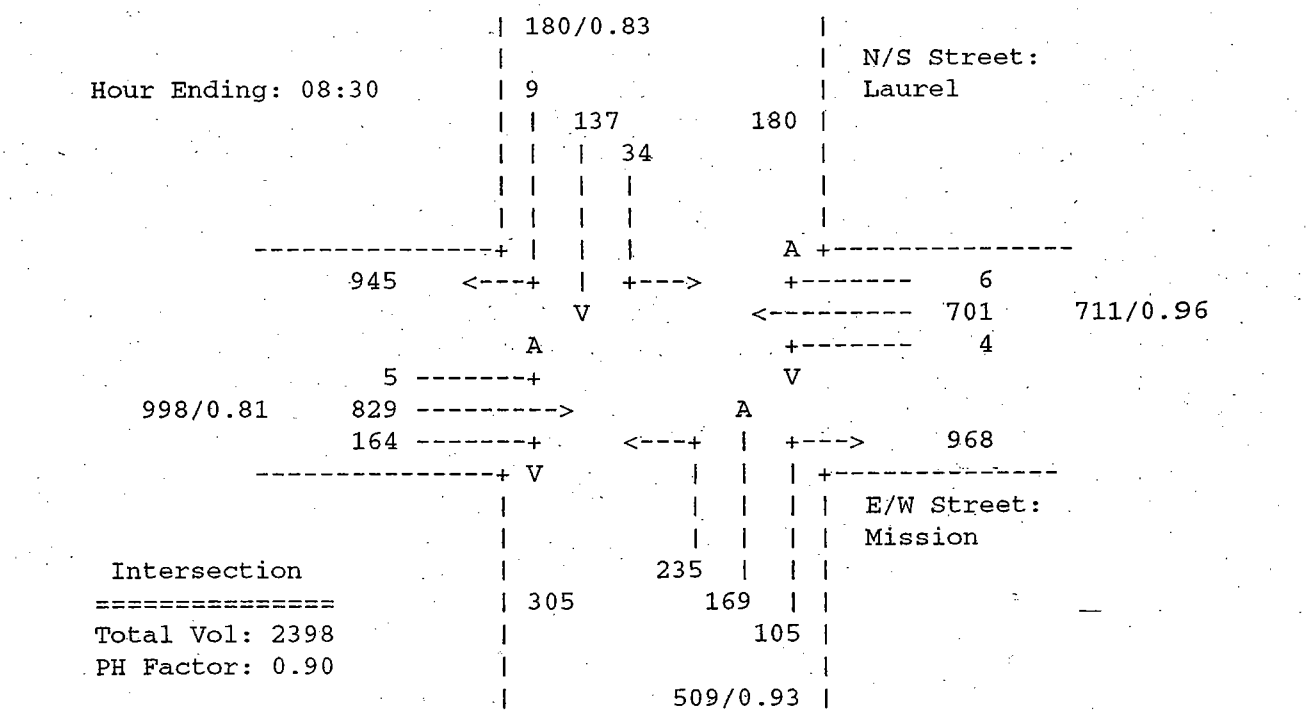
1 - Laurel and Mission HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 18 | 6 | 1 | 153 | 1 | 21 | 14 | 41 | 19 | 153 | 0 | 427* |
| 07:30 | 0 | 38 | 12 | 1 | 356 | 4 | 44 | 36 | 85 | 58 | 347 | 0 | 981* |
| 07:45 | 2 | 58 | 15 | 4 | 532 | 4 | 67 | 71 | 150 | 105 | 543 | 1 | 1552* |
| 08:00 | 3 | 93 | 31 | 6 | 699 | 5 | 90 | 127 | 208 | 153 | 802 | 2 | 2219 |
| 08:15 | 7 | 115 | 35 | 6 | 727 | 7 | 100 | 156 | 219 | 172 | 804 | 3 | 2351 |
| 08:30 | 9 | 137 | 34 | 6 | 701 | 4 | 105 | 169 | 235 | 164 | 829 | 5 | 2398 |
| 08:45 | 10 | 142 | 37 | 5 | 696 | 5 | 98 | 161 | 238 | 148 | 839 | 4 | 2383 |
| 09:00 | 11 | 146 | 28 | 10 | 689 | 8 | 97 | 147 | 254 | 139 | 794 | 5 | 2328 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #19 SUM-IT
Wednesday COUNT DATE
05/23/01

1 - Laurel and Mission MORNING PEAK



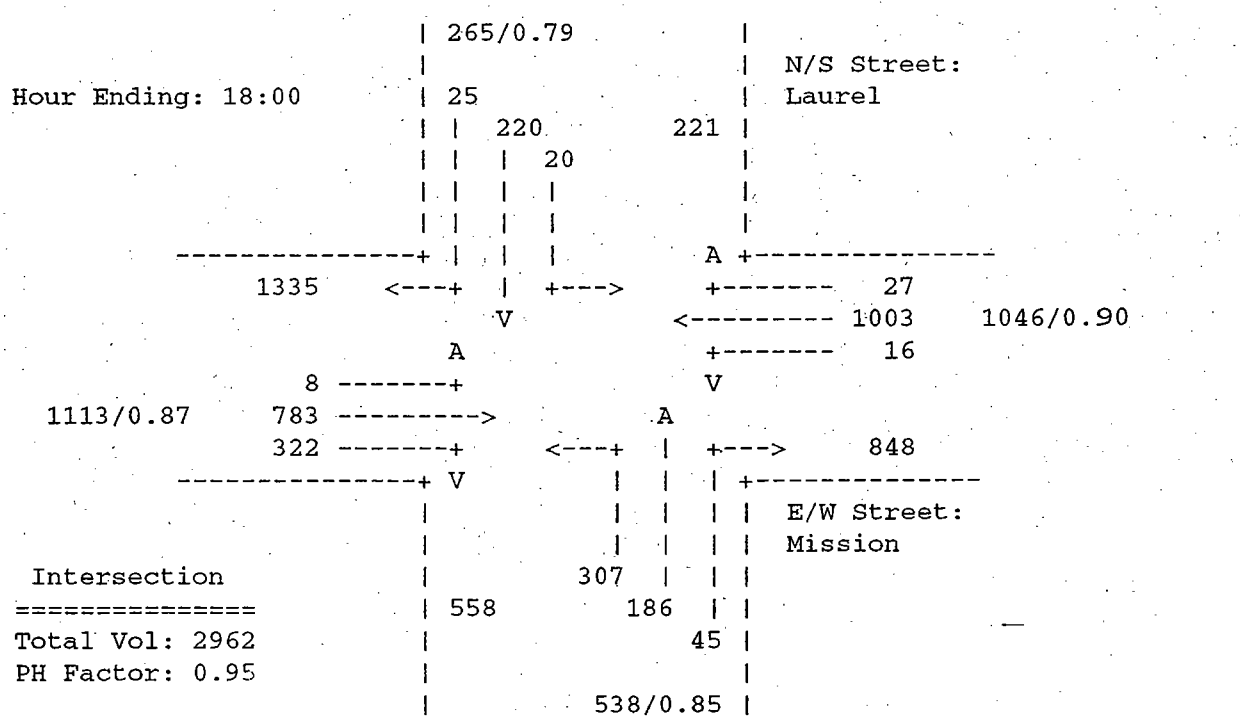
1 - Laurel and Mission HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 2 | 46 | 2 | 6 | 209 | 2 | 11 | 45 | 63 | 81 | 216 | 1 | 684* |
| 16:30 | 7 | 82 | 14 | 13 | 413 | 5 | 21 | 84 | 112 | 166 | 396 | 3 | 1316* |
| 16:45 | 18 | 125 | 22 | 19 | 631 | 6 | 29 | 137 | 178 | 237 | 598 | 4 | 2004* |
| 17:00 | 19 | 179 | 27 | 28 | 824 | 9 | 39 | 197 | 257 | 314 | 786 | 4 | 2683 |
| 17:15 | 24 | 182 | 31 | 31 | 868 | 10 | 37 | 200 | 266 | 327 | 793 | 6 | 2775 |
| 17:30 | 27 | 217 | 24 | 29 | 877 | 12 | 43 | 205 | 296 | 310 | 803 | 7 | 2850 |
| 17:45 | 19 | 229 | 17 | 31 | 914 | 15 | 46 | 185 | 297 | 327 | 775 | 8 | 2863 |
| 18:00 | 25 | 220 | 20 | 27 | 1003 | 16 | 45 | 186 | 307 | 322 | 783 | 8 | 2962 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #19 SUM-IT
Wednesday COUNT DATE
05/23/01

1 - Laurel and Mission EVENING PEAK



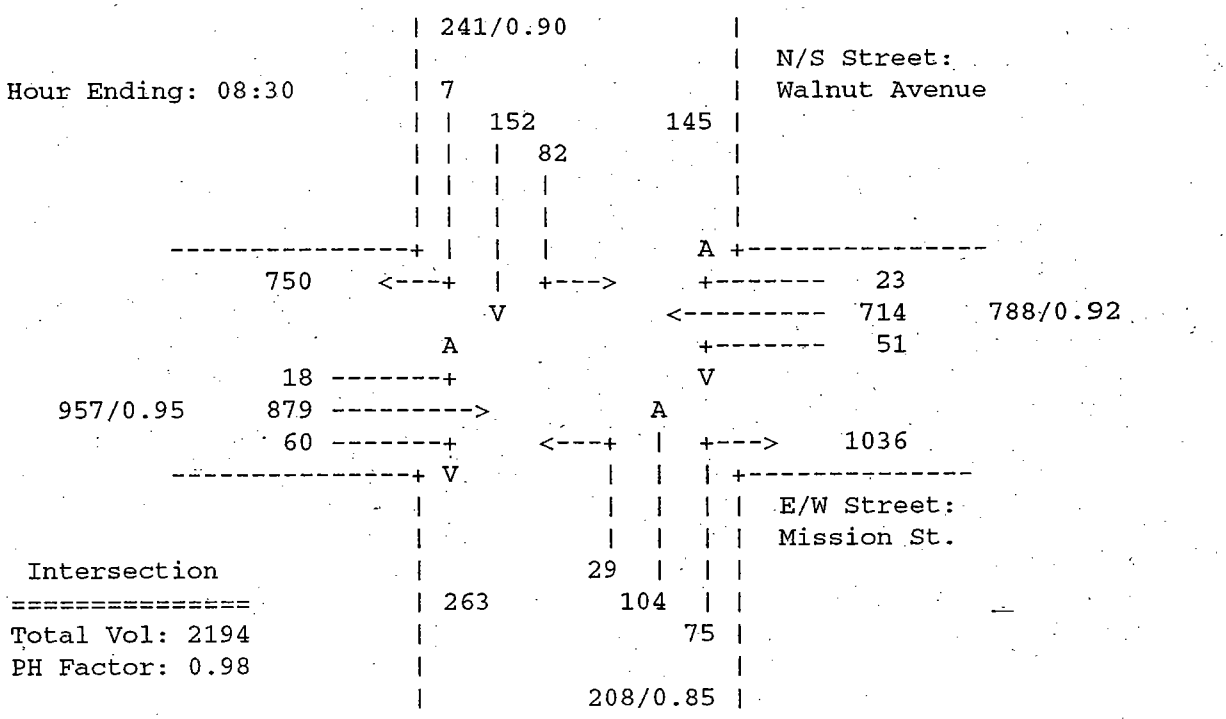
1 - Walnut Avenue and Mission St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 10 | 4 | 0 | 172 | 1 | 7 | 3 | 7 | 9 | 192 | 2 | 407* |
| 07:30 | 1 | 23 | 8 | 5 | 330 | 8 | 16 | 11 | 11 | 19 | 330 | 4 | 766* |
| 07:45 | 2 | 60 | 26 | 11 | 499 | 20 | 32 | 36 | 14 | 39 | 549 | 8 | 1296* |
| 08:00 | 3 | 105 | 38 | 17 | 654 | 41 | 52 | 65 | 23 | 53 | 776 | 18 | 1845 |
| 08:15 | 5 | 133 | 61 | 27 | 667 | 49 | 62 | 94 | 28 | 59 | 795 | 18 | 1998 |
| 08:30 | 7 | 152 | 82 | 23 | 714 | 51 | 75 | 104 | 29 | 60 | 879 | 18 | 2194 |
| 08:45 | 7 | 127 | 71 | 23 | 657 | 49 | 68 | 88 | 35 | 47 | 784 | 14 | 1970 |
| 09:00 | 6 | 112 | 78 | 25 | 736 | 36 | 76 | 70 | 38 | 43 | 812 | 7 | 2039 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #21 SUM-IT
Tuesday COUNT DATE
05/22/01

1 - Walnut Avenue and Mission St. MORNING PEAK



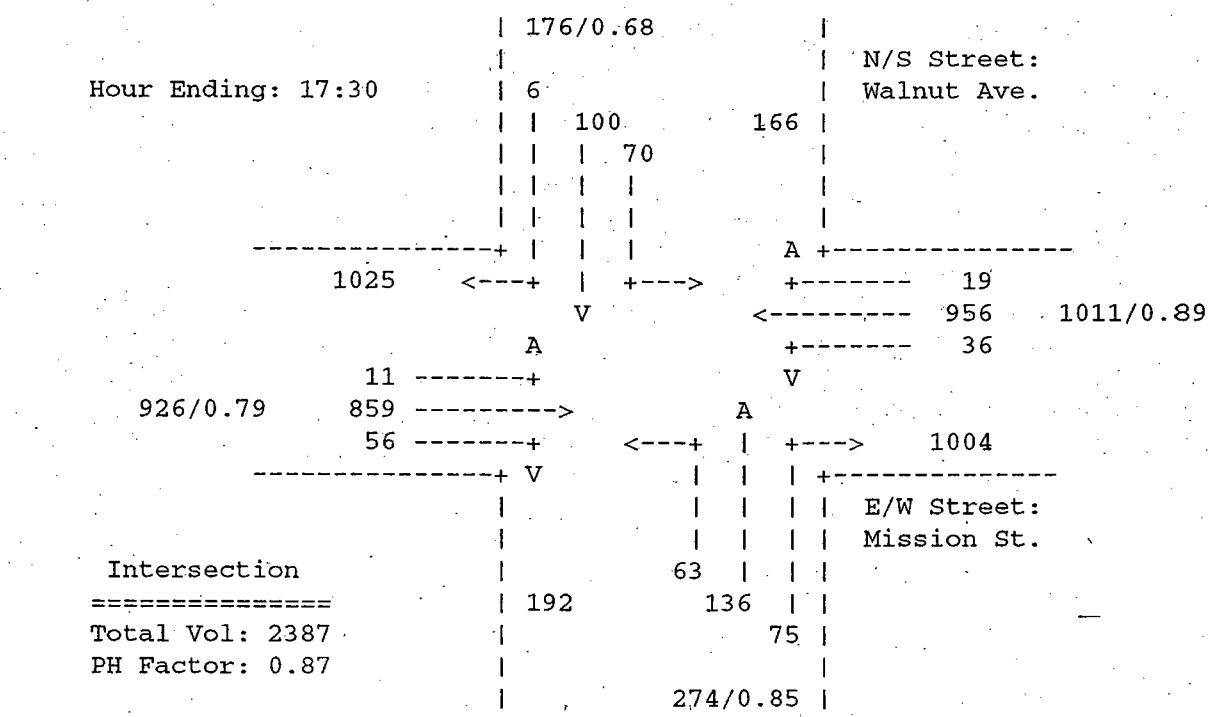
1 - Walnut Ave. and Mission St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 4 | 28 | 21 | 0 | 209 | 13 | 18 | 25 | 9 | 9 | 213 | 1 | 550* |
| 16:30 | 5 | 45 | 32 | 6 | 402 | 22 | 29 | 40 | 23 | 11 | 393 | 2 | 1010* |
| 16:45 | 7 | 68 | 50 | 9 | 672 | 33 | 47 | 79 | 41 | 17 | 667 | 4 | 1694* |
| 17:00 | 9 | 90 | 61 | 12 | 864 | 40 | 59 | 102 | 59 | 32 | 782 | 5 | 2115 |
| 17:15 | 7 | 99 | 66 | 18 | 876 | 40 | 64 | 105 | 64 | 39 | 840 | 9 | 2227 |
| 17:30 | 6 | 100 | 70 | 19 | 956 | 36 | 75 | 136 | 63 | 56 | 859 | 11 | 2387 |
| 17:45 | 6 | 99 | 56 | 22 | 908 | 27 | 75 | 143 | 58 | 64 | 728 | 10 | 2196 |
| 18:00 | 5 | 89 | 52 | 21 | 978 | 31 | 82 | 138 | 48 | 65 | 800 | 11 | 2320 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #21 SUM-IT
Tuesday COUNT DATE
05/22/01

1 - Walnut Ave. and Mission St. EVENING PEAK



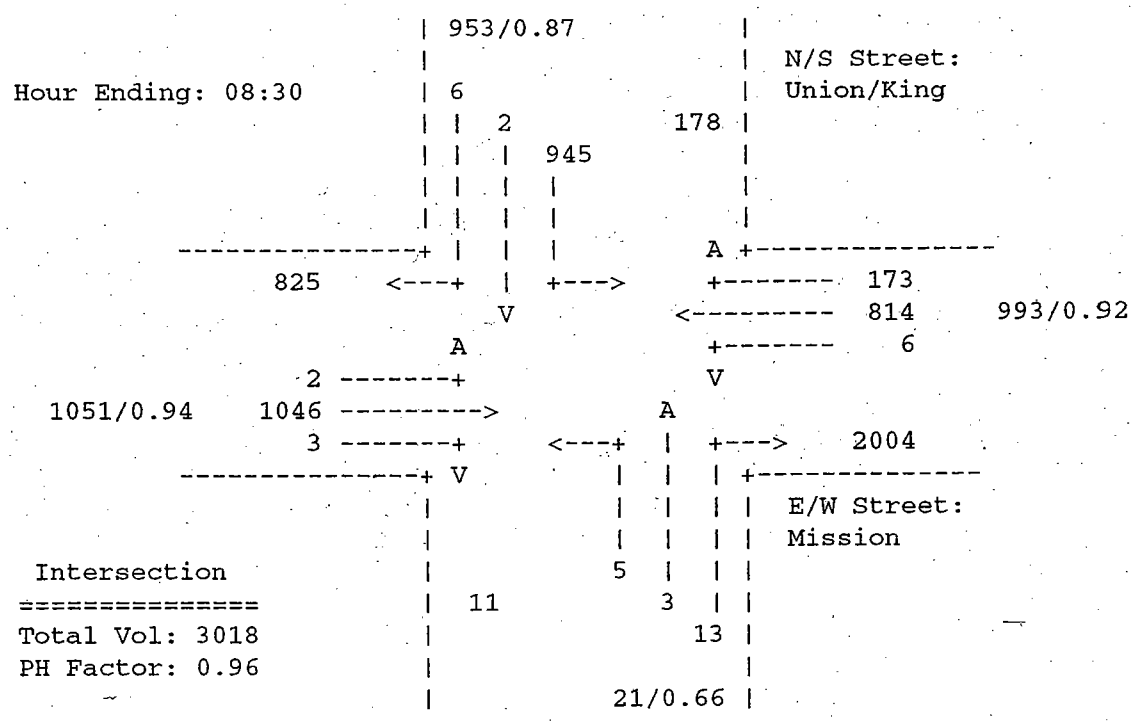
1 - Union/King and Mission HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 137 | 6 | 194 | 1 | 3 | 0 | 0 | 0 | 168 | 0 | 509* |
| 07:30 | 0 | 0 | 304 | 34 | 404 | 1 | 5 | 0 | 0 | 0 | 396 | 0 | 1144* |
| 07:45 | 2 | 0 | 515 | 90 | 617 | 1 | 5 | 0 | 1 | 0 | 632 | 0 | 1863* |
| 08:00 | 3 | 1 | 736 | 131 | 816 | 2 | 8 | 1 | 2 | 0 | 897 | 0 | 2597 |
| 08:15 | 4 | 1 | 840 | 166 | 826 | 3 | 9 | 2 | 4 | 3 | 1006 | 0 | 2864 |
| 08:30 | 6 | 2 | 945 | 173 | 814 | 6 | 13 | 3 | 5 | 3 | 1046 | 2 | 3018 |
| 08:45 | 8 | 3 | 981 | 148 | 800 | 7 | 17 | 4 | 4 | 5 | 1014 | 2 | 2993 |
| 09:00 | 9 | 2 | 996 | 133 | 808 | 10 | 19 | 3 | 4 | 7 | 972 | 3 | 2966 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #22 SUM-IT
Tuesday COUNT DATE
Sunny 05/08/01

1 - Union/King and Mission MORNING PEAK



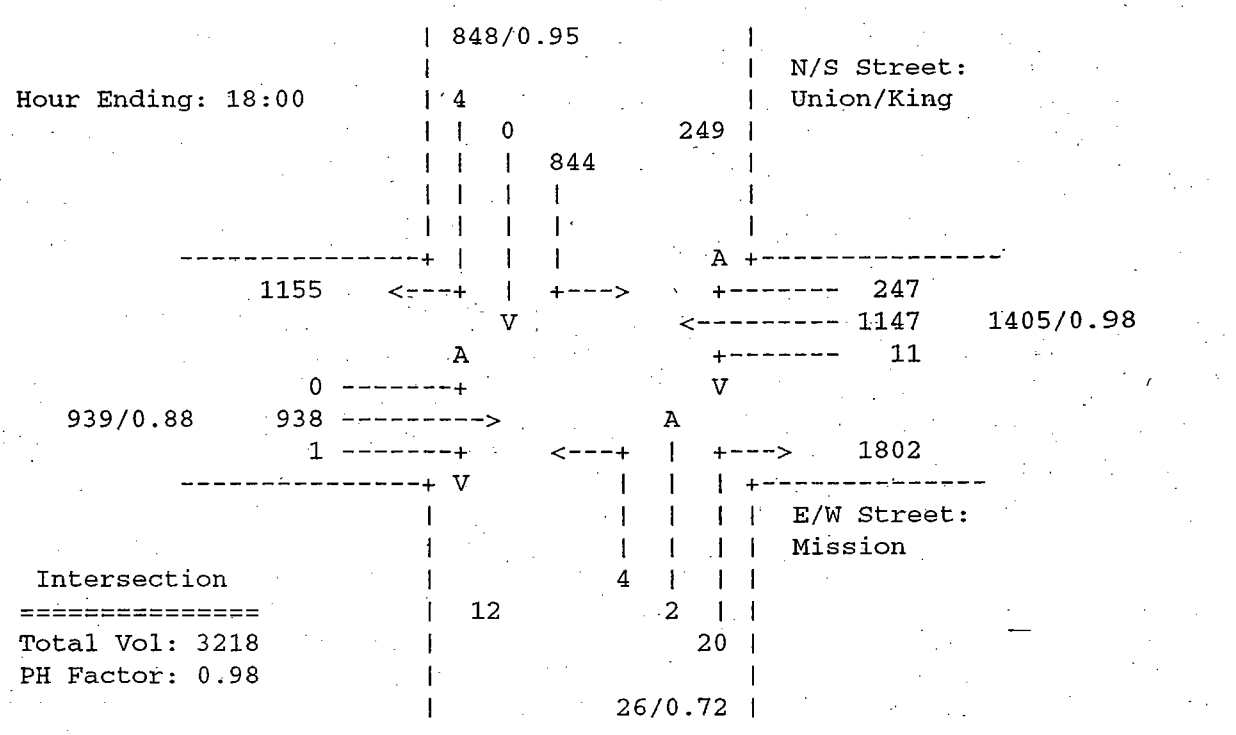
1 - Union/King and Mission HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 3 | 0 | 237 | 43 | 240 | 3 | 6 | 0 | 2 | 1 | 214 | 0 | 749* |
| 16:30 | 4 | 0 | 488 | 87 | 473 | 8 | 11 | 0 | 6 | 3 | 459 | 1 | 1540* |
| 16:45 | 5 | 0 | 722 | 132 | 703 | 10 | 17 | 1 | 7 | 3 | 668 | 1 | 2269* |
| 17:00 | 6 | 0 | 924 | 192 | 979 | 10 | 21 | 1 | 9 | 4 | 891 | 1 | 3038 |
| 17:15 | 4 | 0 | 900 | 212 | 1017 | 9 | 22 | 1 | 7 | 4 | 913 | 1 | 3090 |
| 17:30 | 3 | 0 | 862 | 237 | 1070 | 9 | 19 | 2 | 4 | 2 | 913 | 0 | 3121 |
| 17:45 | 4 | 0 | 848 | 253 | 1129 | 9 | 20 | 2 | 4 | 2 | 894 | 0 | 3165 |
| 18:00 | 4 | 0 | 844 | 247 | 1147 | 11 | 20 | 2 | 4 | 1 | 938 | 0 | 3218 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #22 SUM-IT
Tuesday COUNT DATE
Sunny, HOT 05/08/01

1 - Union/King and Mission EVENING PEAK



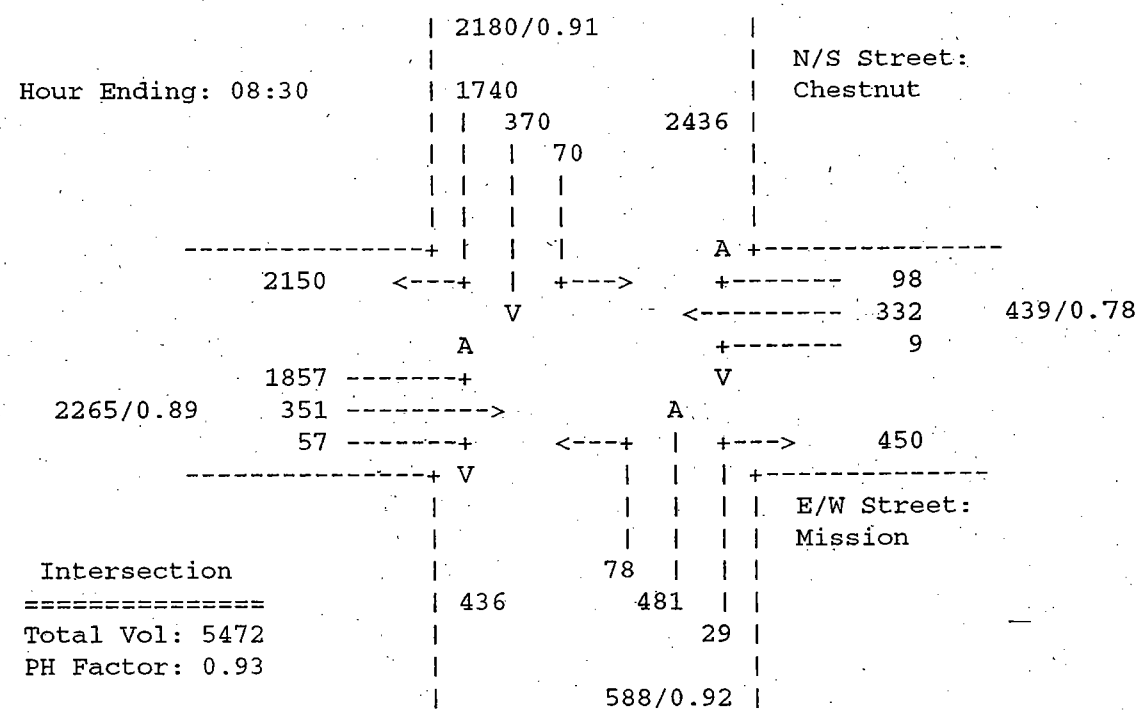
1 - Chestnut and Mission HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 303 | 54 | 7 | 4 | 23 | 3 | 4 | 45 | 5 | 8 | 40 | 367 | 863* |
| 07:30 | 707 | 123 | 15 | 14 | 80 | 4 | 9 | 114 | 9 | 19 | 97 | 758 | 1949* |
| 07:45 | 1168 | 196 | 32 | 27 | 172 | 6 | 12 | 207 | 31 | 28 | 166 | 1227 | 3272* |
| 08:00 | 1616 | 301 | 50 | 48 | 254 | 10 | 17 | 333 | 59 | 45 | 267 | 1744 | 4744 |
| 08:15 | 1776 | 359 | 65 | 82 | 332 | 9 | 26 | 416 | 67 | 50 | 324 | 1760 | 5266 |
| 08:30 | 1740 | 370 | 70 | 98 | 332 | 9 | 29 | 481 | 78 | 57 | 351 | 1857 | 5472 |
| 08:45 | 1628 | 371 | 60 | 96 | 319 | 8 | 32 | 512 | 72 | 66 | 356 | 1840 | 5360 |
| 09:00 | 1612 | 324 | 62 | 85 | 306 | 6 | 33 | 495 | 56 | 69 | 332 | 1777 | 5157 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #23 SUM-IT
Tuesday COUNT DATE
Overcast, then sunny and warm 05/15/01

1 - Chestnut and Mission MORNING PEAK



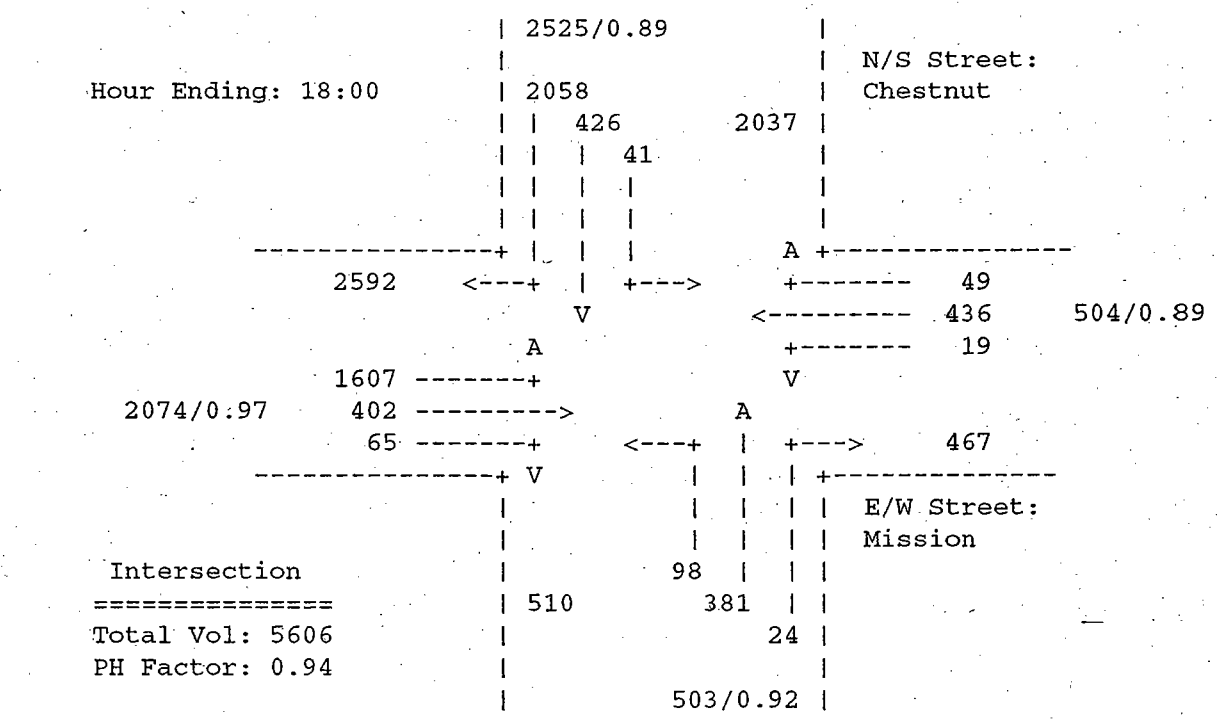
1 - Chestnut and Mission HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 351 | 83 | 17 | 19 | 102 | 14 | 6 | 78 | 23 | 19 | 101 | 430 | 1243* |
| 16:30 | 719 | 177 | 30 | 38 | 188 | 20 | 10 | 149 | 40 | 34 | 247 | 842 | 2494* |
| 16:45 | 1132 | 278 | 37 | 51 | 296 | 25 | 16 | 227 | 70 | 46 | 349 | 1212 | 3739* |
| 17:00 | 1586 | 374 | 45 | 60 | 394 | 28 | 16 | 300 | 102 | 62 | 446 | 1602 | 5015 |
| 17:15 | 1724 | 403 | 36 | 53 | 415 | 20 | 18 | 329 | 95 | 58 | 448 | 1580 | 5179 |
| 17:30 | 1897 | 402 | 33 | 43 | 430 | 17 | 18 | 332 | 111 | 58 | 398 | 1591 | 5330 |
| 17:45 | 1951 | 381 | 41 | 43 | 434 | 17 | 20 | 344 | 108 | 63 | 397 | 1596 | 5395 |
| 18:00 | 2058 | 426 | 41 | 49 | 436 | 19 | 24 | 381 | 98 | 65 | 402 | 1607 | 5606 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #23 SUM-IT
Tuesday COUNT DATE
Sunny, warm 05/15/01

1 - Chestnut and Mission EVENING PEAK



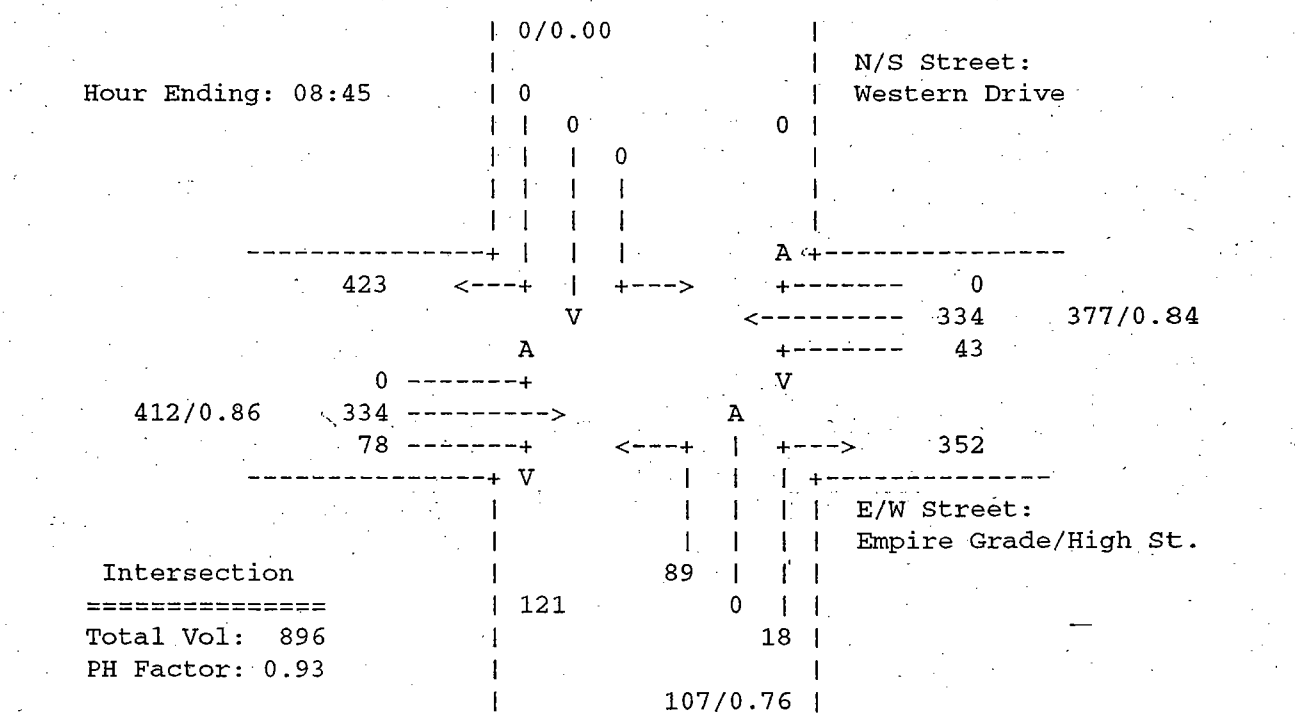
1 - Western Drive and Empire Grade/High St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 0 | 0 | 34 | 3 | 0 | 0 | 4 | 6 | 47 | 0 | 94* |
| 07:30 | 0 | 0 | 0 | 0 | 76 | 5 | 1 | 0 | 13 | 14 | 88 | 0 | 197* |
| 07:45 | 0 | 0 | 0 | 0 | 136 | 16 | 3 | 0 | 27 | 21 | 168 | 0 | 371* |
| 08:00 | 0 | 0 | 0 | 0 | 230 | 25 | 7 | 0 | 41 | 42 | 267 | 0 | 612 |
| 08:15 | 0 | 0 | 0 | 0 | 273 | 38 | 12 | 0 | 67 | 54 | 302 | 0 | 746 |
| 08:30 | 0 | 0 | 0 | 0 | 331 | 48 | 16 | 0 | 83 | 62 | 337 | 0 | 877 |
| 08:45 | 0 | 0 | 0 | 0 | 334 | 43 | 18 | 0 | 89 | 78 | 334 | 0 | 896 |
| 09:00 | 0 | 0 | 0 | 0 | 317 | 42 | 18 | 0 | 85 | 76 | 305 | 0 | 843 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #1 SUM-IT
Thursday COUNT DATE
Sunny and clear 05/24/01

1 - Western Drive and Empire Grade/High St. MORNING PEAK



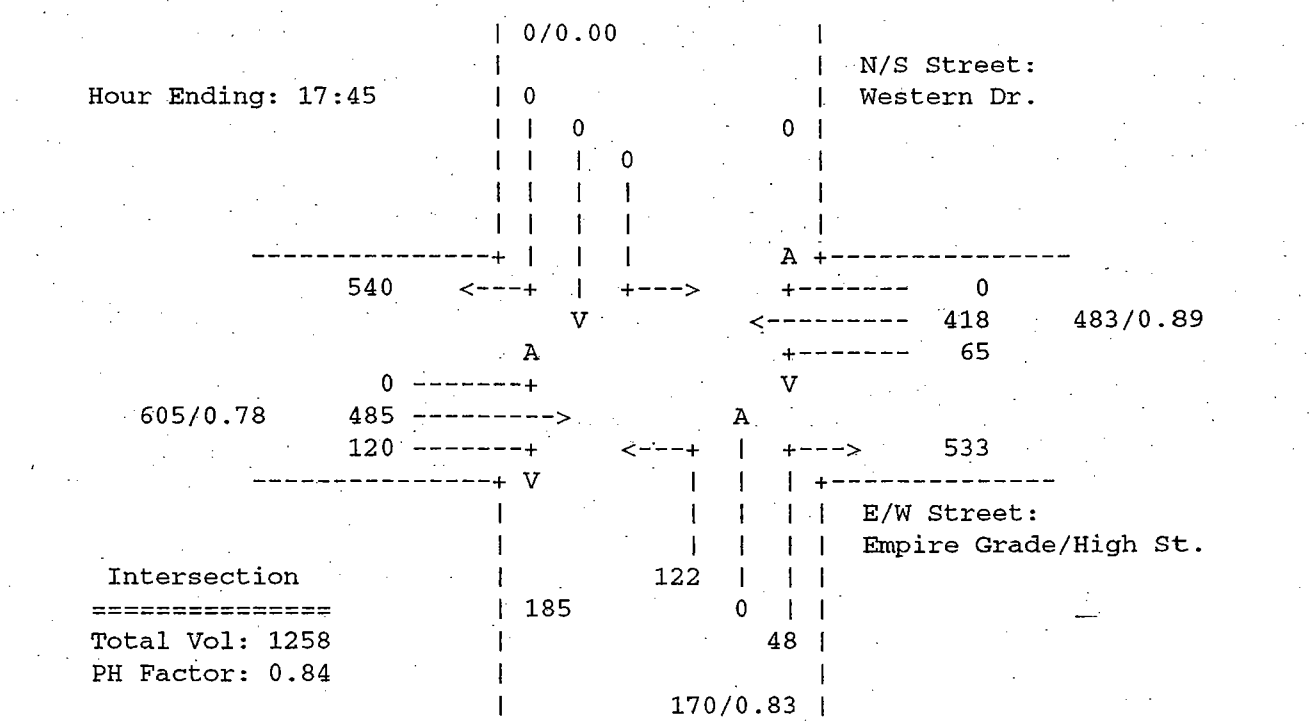
1 - Western Dr. and Empire Grade/High St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 0 | 0 | 0 | 0 | 58 | 11 | 8 | 0 | 20 | 24 | 95 | 0 | 216* |
| 16:30 | 0 | 0 | 0 | 0 | 138 | 29 | 19 | 0 | 33 | 40 | 182 | 0 | 441* |
| 16:45 | 0 | 0 | 0 | 0 | 238 | 45 | 37 | 0 | 66 | 63 | 296 | 0 | 745* |
| 17:00 | 0 | 0 | 0 | 0 | 359 | 59 | 50 | 0 | 97 | 85 | 406 | 0 | 1056 |
| 17:15 | 0 | 0 | 0 | 0 | 410 | 70 | 57 | 0 | 113 | 105 | 461 | 0 | 1216 |
| 17:30 | 0 | 0 | 0 | 0 | 419 | 60 | 52 | 0 | 131 | 112 | 480 | 0 | 1254 |
| 17:45 | 0 | 0 | 0 | 0 | 418 | 65 | 48 | 0 | 122 | 120 | 485 | 0 | 1258 |
| 18:00 | 0 | 0 | 0 | 0 | 373 | 61 | 45 | 0 | 112 | 116 | 466 | 0 | 1173 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #1 SUM-IT
Wednesday COUNT DATE
Sunny and warm 05/23/01

1 - Western Dr. and Empire Grade/High St. EVENING PEAK



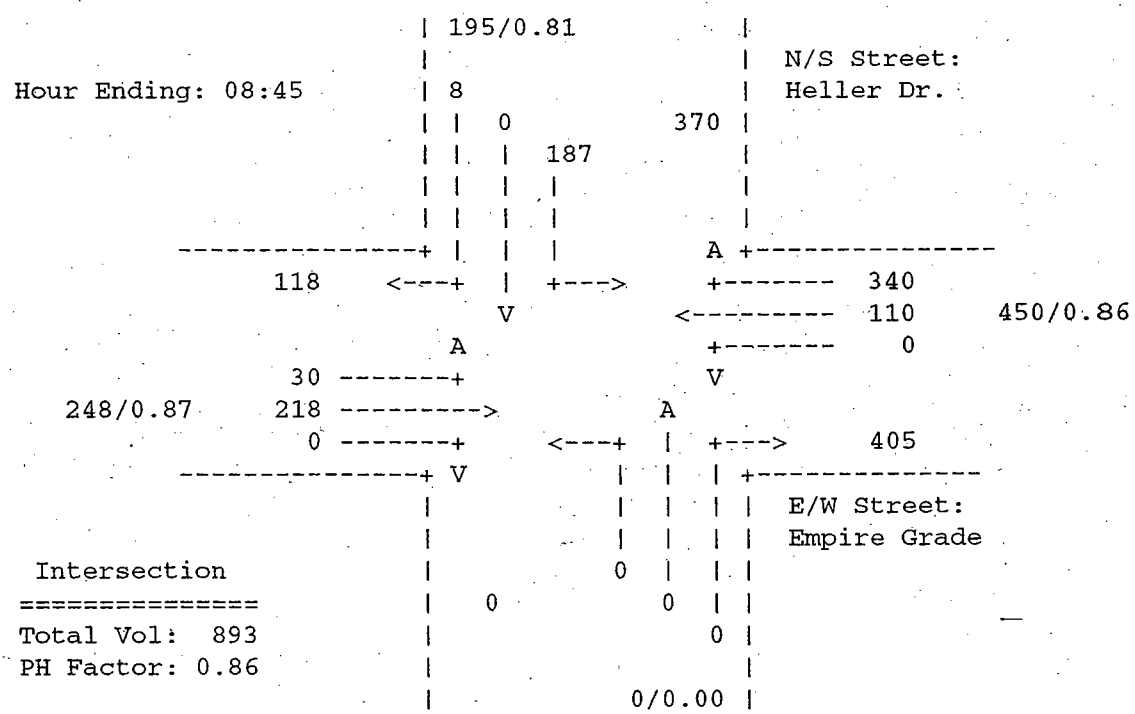
1 - Heller Dr. and Empire Grade — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 1 | 0 | 23 | 28 | 6 | 0 | 0 | 0 | 0 | 0 | 25 | 6 | 89* |
| 07:30 | 1 | 0 | 58 | 78 | 11 | 0 | 0 | 0 | 0 | 0 | 59 | 8 | 215* |
| 07:45 | 1 | 0 | 88 | 135 | 29 | 0 | 0 | 0 | 0 | 0 | 110 | 16 | 379* |
| 08:00 | 3 | 0 | 146 | 255 | 40 | 0 | 0 | 0 | 0 | 0 | 168 | 28 | 640 |
| 08:15 | 2 | 0 | 175 | 309 | 60 | 0 | 0 | 0 | 0 | 0 | 180 | 27 | 753 |
| 08:30 | 5 | 0 | 186 | 329 | 111 | 0 | 0 | 0 | 0 | 0 | 206 | 36 | 873 |
| 08:45 | 8 | 0 | 187 | 340 | 110 | 0 | 0 | 0 | 0 | 0 | 218 | 30 | 893 |
| 09:00 | 7 | 0 | 166 | 287 | 113 | 0 | 0 | 0 | 0 | 0 | 202 | 30 | 805 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #2 — SUM-IT
Tuesday — COUNT DATE 05/22/01

1 - Heller Dr. and Empire Grade — MORNING PEAK



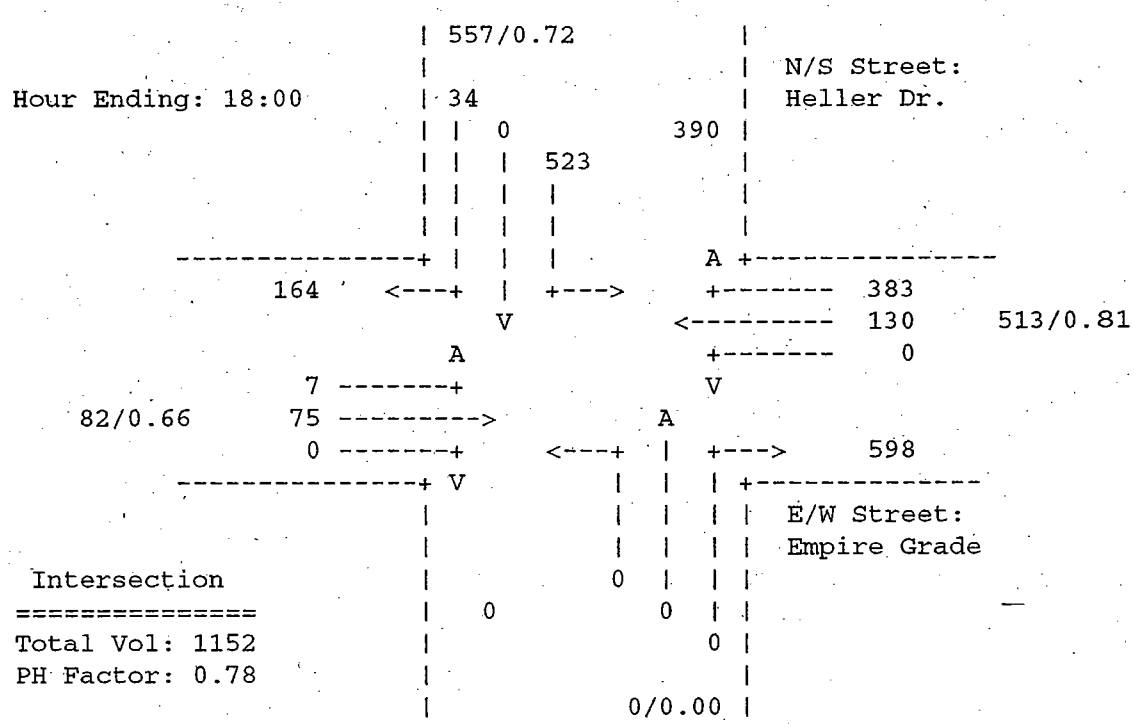
1 - Heller Dr. and Empire Grade — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 4 | 0 | 127 | 57 | 32 | 0 | 0 | 0 | 0 | 0 | 18 | 2 | 240* |
| 16:30 | 5 | 0 | 214 | 113 | 55 | 0 | 0 | 0 | 0 | 0 | 38 | 3 | 428* |
| 16:45 | 15 | 0 | 296 | 175 | 78 | 0 | 0 | 0 | 0 | 0 | 60 | 4 | 628* |
| 17:00 | 20 | 0 | 380 | 255 | 107 | 0 | 0 | 0 | 0 | 0 | 78 | 4 | 844 |
| 17:15 | 27 | 0 | 363 | 281 | 110 | 0 | 0 | 0 | 0 | 0 | 76 | 2 | 859 |
| 17:30 | 39 | 0 | 406 | 313 | 123 | 0 | 0 | 0 | 0 | 0 | 69 | 3 | 953 |
| 17:45 | 33 | 0 | 420 | 338 | 126 | 0 | 0 | 0 | 0 | 0 | 75 | 5 | 997 |
| 18:00 | 34 | 0 | 523 | 383 | 130 | 0 | 0 | 0 | 0 | 0 | 75 | 7 | 1152 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #2 — SUM-IT
Tuesday — COUNT DATE
sunny, hot — 05/22/01

1 - Heller Dr. and Empire Grade — EVENING PEAK



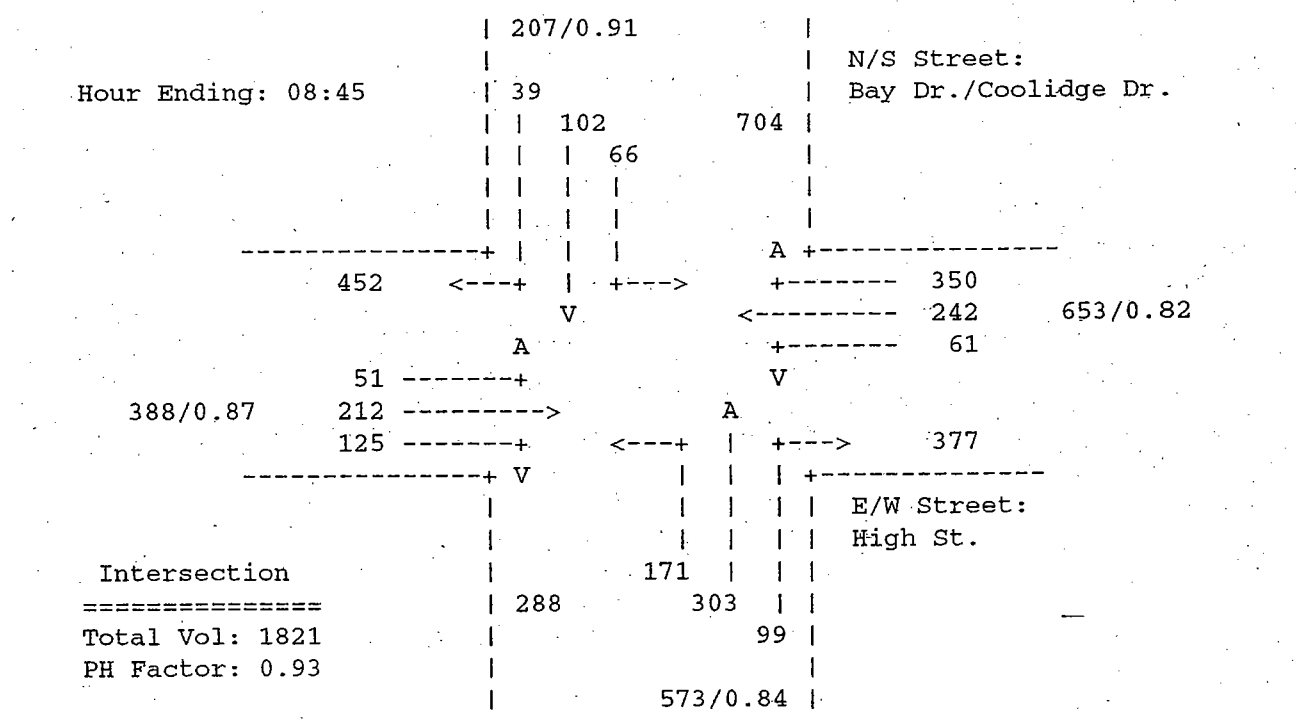
1 - Bay Dr./Coolidge Dr. and High St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 7 | 24 | 11 | 46 | 21 | 2 | 14 | 42 | 10 | 22 | 25 | 9 | 233* |
| 07:30 | 13 | 32 | 25 | 131 | 51 | 5 | 31 | 88 | 19 | 46 | 64 | 13 | 518* |
| 07:45 | 22 | 45 | 39 | 222 | 82 | 14 | 50 | 145 | 39 | 74 | 109 | 23 | 864* |
| 08:00 | 37 | 68 | 50 | 327 | 144 | 19 | 68 | 248 | 89 | 111 | 153 | 37 | 1351 |
| 08:15 | 39 | 67 | 64 | 364 | 169 | 37 | 85 | 276 | 119 | 121 | 171 | 36 | 1548 |
| 08:30 | 40 | 85 | 61 | 366 | 229 | 55 | 94 | 295 | 158 | 128 | 187 | 45 | 1743 |
| 08:45 | 39 | 102 | 66 | 350 | 242 | 61 | 99 | 303 | 171 | 125 | 212 | 51 | 1821 |
| 09:00 | 35 | 94 | 71 | 332 | 219 | 74 | 104 | 308 | 158 | 113 | 219 | 50 | 1777 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #3 SUM-IT
Wednesday COUNT DATE
low fog 05/16/01

1 - Bay Dr./Coolidge Dr. and High St. MORNING PEAK



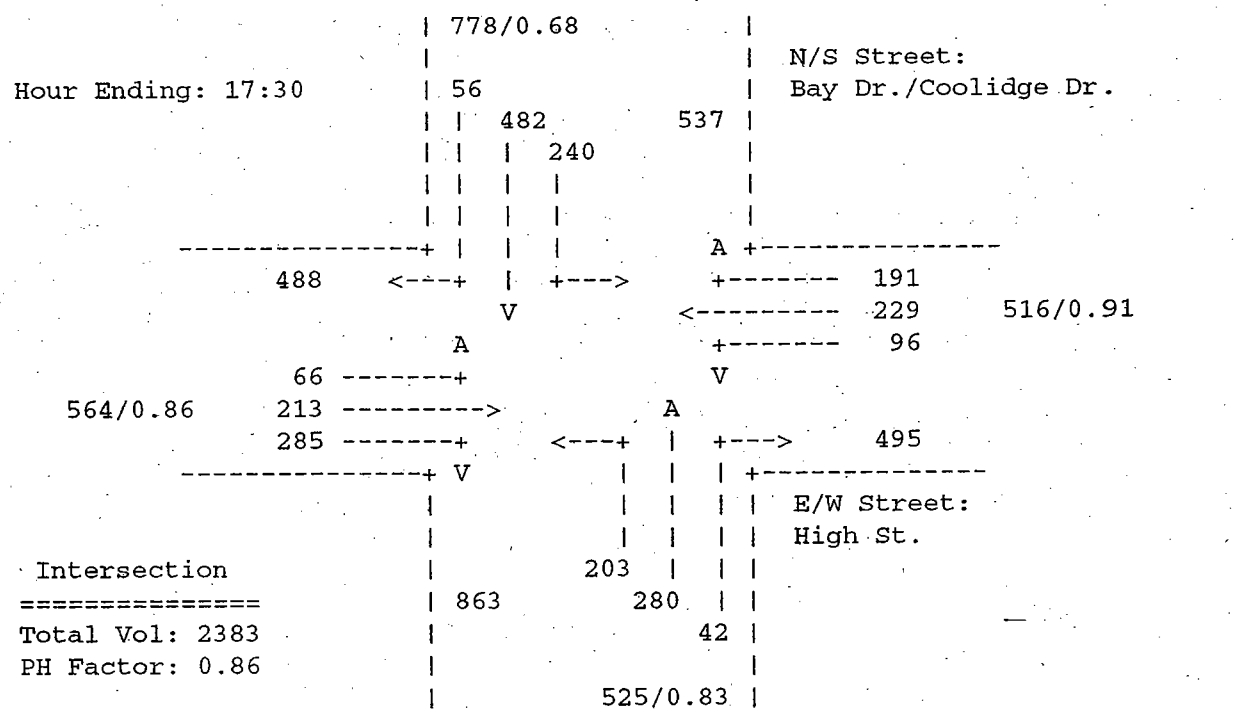
1 - Bay Dr./Coolidge Dr. and High St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 6 | 80 | 61 | 32 | 41 | 22 | 15 | 52 | 32 | 68 | 50 | 11 | 470* |
| 16:30 | 16 | 149 | 116 | 63 | 90 | 47 | 33 | 111 | 62 | 114 | 100 | 21 | 922* |
| 16:45 | 23 | 232 | 148 | 116 | 145 | 69 | 43 | 186 | 119 | 171 | 140 | 35 | 1427* |
| 17:00 | 46 | 323 | 200 | 166 | 201 | 87 | 53 | 281 | 173 | 238 | 196 | 57 | 2021 |
| 17:15 | 55 | 435 | 220 | 172 | 217 | 90 | 51 | 286 | 195 | 263 | 200 | 63 | 2247 |
| 17:30 | 56 | 482 | 240 | 191 | 229 | 96 | 42 | 280 | 203 | 285 | 213 | 66 | 2383 |
| 17:45 | 59 | 490 | 256 | 170 | 223 | 94 | 47 | 241 | 186 | 278 | 228 | 66 | 2338 |
| 18:00 | 42 | 487 | 256 | 148 | 202 | 101 | 48 | 189 | 180 | 261 | 217 | 55 | 2186 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #3 SUM-IT
Wednesday COUNT DATE
05/16/01

1 - Bay Dr./Coolidge Dr. and High St. EVENING PEAK



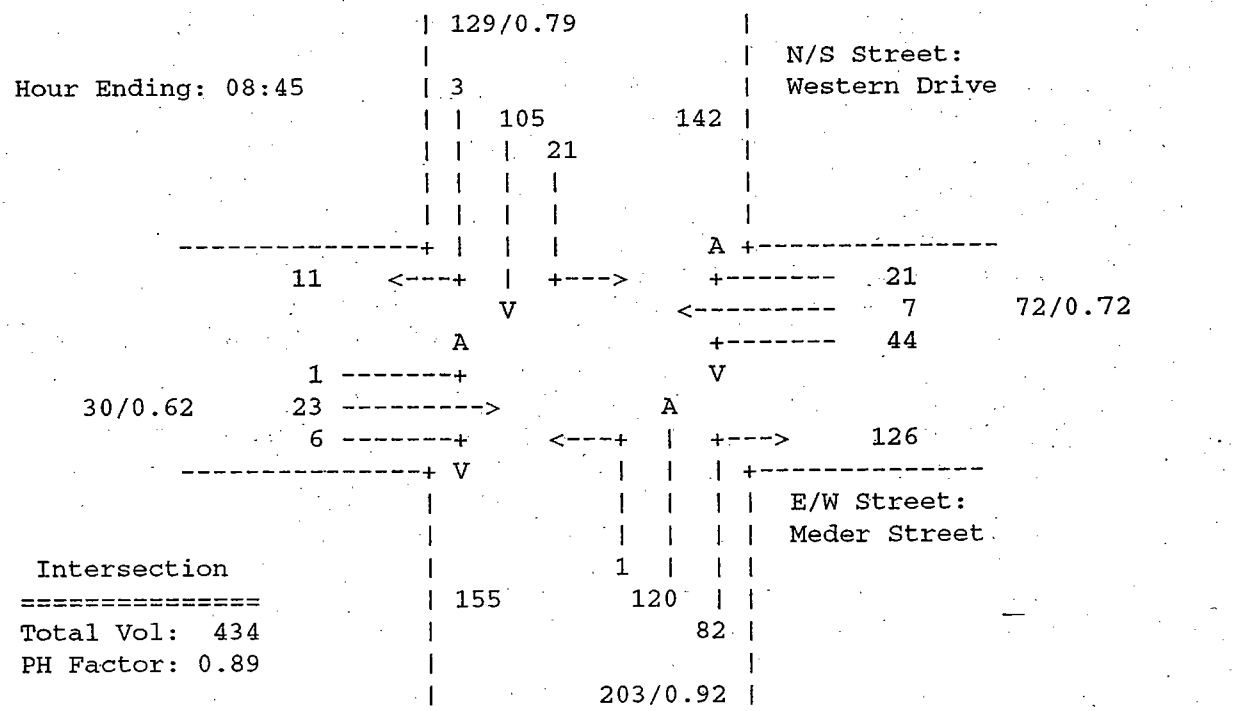
1 - Western Drive and Meder Street — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 7 | 5 | 1 | 1 | 5 | 15 | 2 | 0 | 1 | 1 | 0 | 38* |
| 07:30 | 1 | 14 | 7 | 1 | 1 | 11 | 28 | 12 | 0 | 2 | 3 | 0 | 80* |
| 07:45 | 2 | 27 | 13 | 8 | 2 | 20 | 52 | 42 | 0 | 2 | 10 | 1 | 179* |
| 08:00 | 2 | 49 | 21 | 12 | 4 | 27 | 72 | 77 | 0 | 3 | 20 | 2 | 289 |
| 08:15 | 2 | 77 | 22 | 19 | 5 | 33 | 86 | 100 | 1 | 3 | 23 | 2 | 373 |
| 08:30 | 2 | 90 | 24 | 22 | 6 | 48 | 88 | 121 | 1 | 4 | 23 | 2 | 431 |
| 08:45 | 3 | 105 | 21 | 21 | 7 | 44 | 82 | 120 | 1 | 6 | 23 | 1 | 434 |
| 09:00 | 4 | 108 | 16 | 18 | 5 | 43 | 79 | 109 | 2 | 5 | 14 | 0 | 403 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #4 — SUM-IT
Thursday — COUNT DATE
Fair — 05/24/01

1 - Western Drive and Meder Street — MORNING PEAK



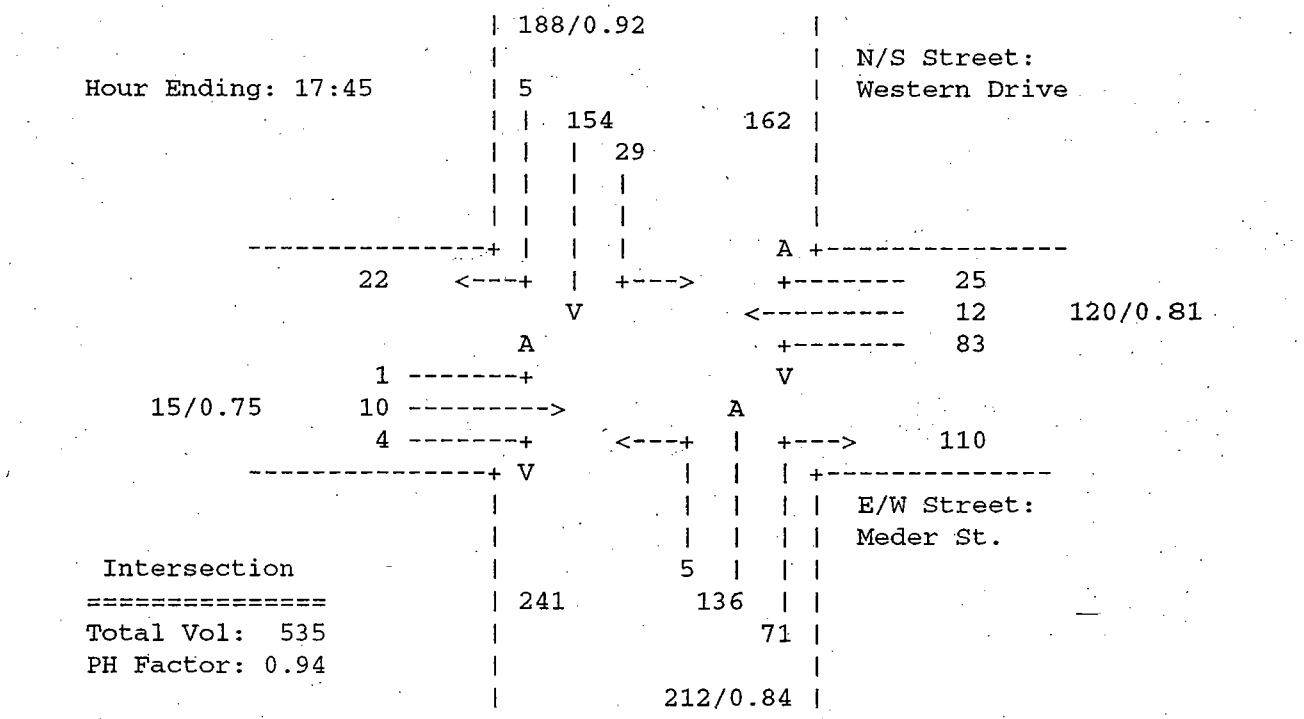
1 - Western Drive and Meder St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 1 | 30 | 1 | 5 | 3 | 12 | 14 | 24 | 0 | 1 | 1 | 1 | 93* |
| 16:30 | 4 | 57 | 5 | 10 | 5 | 24 | 33 | 44 | 1 | 1 | 4 | 2 | 190* |
| 16:45 | 6 | 77 | 7 | 17 | 7 | 38 | 47 | 90 | 6 | 4 | 5 | 3 | 307* |
| 17:00 | 7 | 111 | 18 | 24 | 9 | 55 | 69 | 130 | 7 | 5 | 8 | 3 | 446 |
| 17:15 | 6 | 126 | 23 | 25 | 7 | 68 | 69 | 147 | 9 | 4 | 10 | 2 | 496 |
| 17:30 | 4 | 139 | 23 | 27 | 8 | 71 | 66 | 154 | 10 | 5 | 11 | 1 | 519 |
| 17:45 | 5 | 154 | 29 | 25 | 12 | 83 | 71 | 136 | 5 | 4 | 10 | 1 | 535 |
| 18:00 | 6 | 148 | 21 | 23 | 15 | 83 | 63 | 121 | 7 | 3 | 8 | 2 | 500 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #4 SUM-IT
Wednesday COUNT DATE
Fair 05/23/01

1 - Western Drive and Meder St. EVENING PEAK



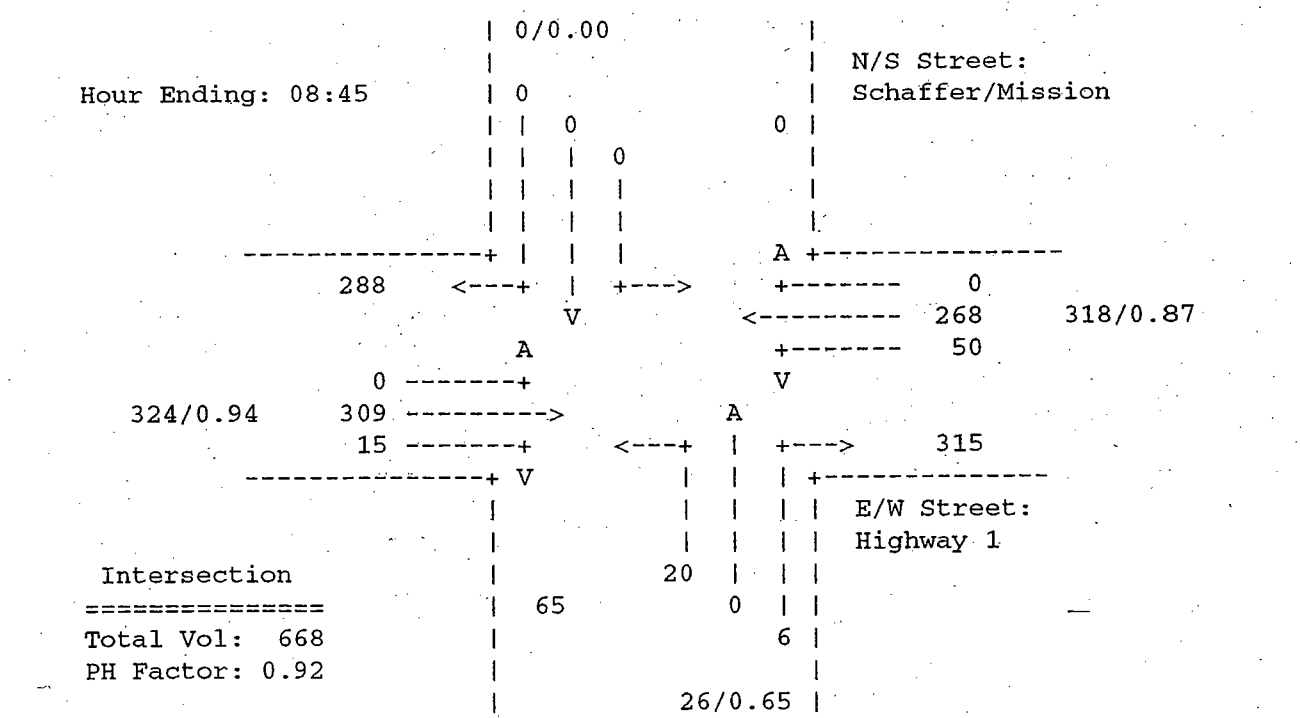
1 - Schaffer/Mission and Highway 1 HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 0 | 0 | 80 | 12 | 3 | 0 | 1 | 0 | 46 | 0 | 142* |
| 07:30 | 0 | 0 | 0 | 0 | 128 | 24 | 3 | 0 | 5 | 1 | 80 | 0 | 241* |
| 07:45 | 0 | 0 | 0 | 0 | 204 | 35 | 5 | 0 | 5 | 4 | 153 | 0 | 406* |
| 08:00 | 0 | 0 | 0 | 0 | 280 | 50 | 6 | 0 | 14 | 5 | 233 | 0 | 588 |
| 08:15 | 0 | 0 | 0 | 0 | 267 | 55 | 7 | 0 | 17 | 11 | 262 | 0 | 619 |
| 08:30 | 0 | 0 | 0 | 0 | 264 | 53 | 7 | 0 | 16 | 15 | 299 | 0 | 654 |
| 08:45 | 0 | 0 | 0 | 0 | 268 | 50 | 6 | 0 | 20 | 15 | 309 | 0 | 668 |
| 09:00 | 0 | 0 | 0 | 0 | 260 | 39 | 6 | 0 | 15 | 18 | 305 | 0 | 643 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #6a SUM-IT
Wednesday COUNT DATE
Overcast, road clear 05/16/01

1 - Schaffer/Mission and Highway 1 MORNING PEAK



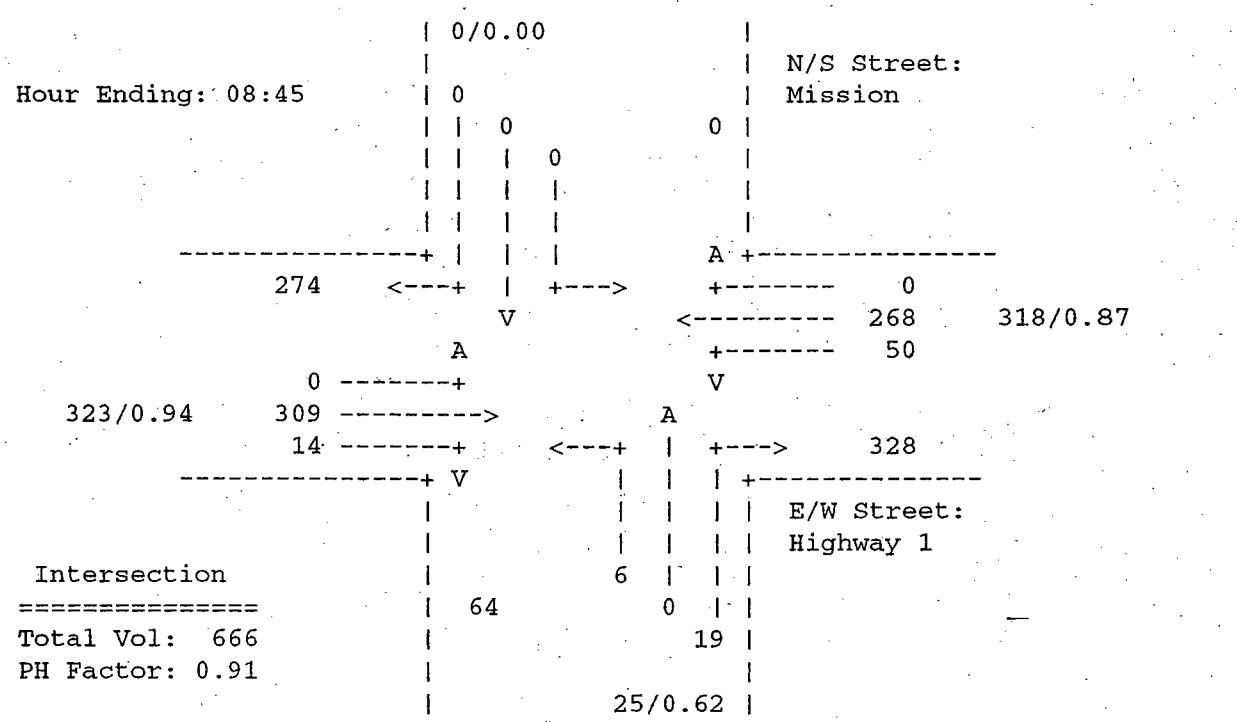
1 - Mission and Highway 1 HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 0 | 0 | 80 | 12 | 1 | 0 | 3 | 0 | 46 | 0 | 142* |
| 07:30 | 0 | 0 | 0 | 0 | 128 | 24 | 5 | 0 | 3 | 1 | 80 | 0 | 241* |
| 07:45 | 0 | 0 | 0 | 0 | 204 | 35 | 5 | 0 | 5 | 4 | 153 | 0 | 406* |
| 08:00 | 0 | 0 | 0 | 0 | 280 | 50 | 14 | 0 | 6 | 5 | 233 | 0 | 588 |
| 08:15 | 0 | 0 | 0 | 0 | 267 | 55 | 17 | 0 | 7 | 10 | 262 | 0 | 618 |
| 08:30 | 0 | 0 | 0 | 0 | 264 | 53 | 16 | 0 | 7 | 14 | 299 | 0 | 653 |
| 08:45 | 0 | 0 | 0 | 0 | 268 | 50 | 19 | 0 | 6 | 14 | 309 | 0 | 666 |
| 09:00 | 0 | 0 | 0 | 0 | 260 | 39 | 14 | 0 | 6 | 16 | 305 | 0 | 640 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #6b SUM-IT
Wednesday COUNT DATE
Overcast, road clear 05/16/01

1 - Mission and Highway 1 MORNING PEAK



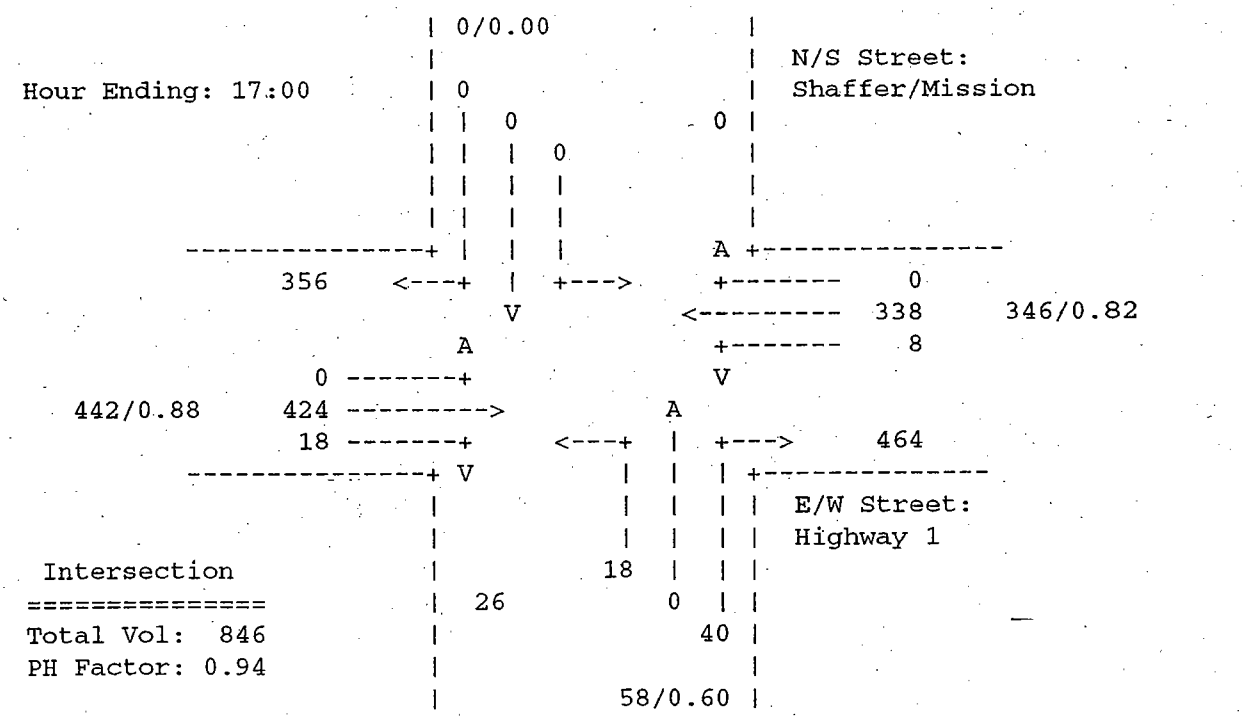
1 - Shaffer/Mission and Highway 1 HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 0 | 0 | 0 | 0 | 73 | 3 | 20 | 0 | 4 | 8 | 118 | 0 | 226* |
| 16:30 | 0 | 0 | 0 | 0 | 152 | 4 | 30 | 0 | 9 | 9 | 224 | 0 | 428* |
| 16:45 | 0 | 0 | 0 | 0 | 234 | 6 | 35 | 0 | 12 | 11 | 338 | 0 | 636* |
| 17:00 | 0 | 0 | 0 | 0 | 338 | 8 | 40 | 0 | 18 | 18 | 424 | 0 | 846 |
| 17:15 | 0 | 0 | 0 | 0 | 345 | 8 | 23 | 0 | 19 | 15 | 402 | 0 | 812 |
| 17:30 | 0 | 0 | 0 | 0 | 328 | 9 | 16 | 0 | 19 | 20 | 371 | 0 | 763 |
| 17:45 | 0 | 0 | 0 | 0 | 340 | 7 | 16 | 0 | 20 | 25 | 348 | 0 | 756 |
| 18:00 | 0 | 0 | 0 | 0 | 339 | 8 | 16 | 0 | 17 | 28 | 352 | 0 | 760 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #6a SUM-IT
Tuesday COUNT DATE
Sunny, clear, WARM 05/15/01

1 - Shaffer/Mission and Highway 1 EVENING PEAK



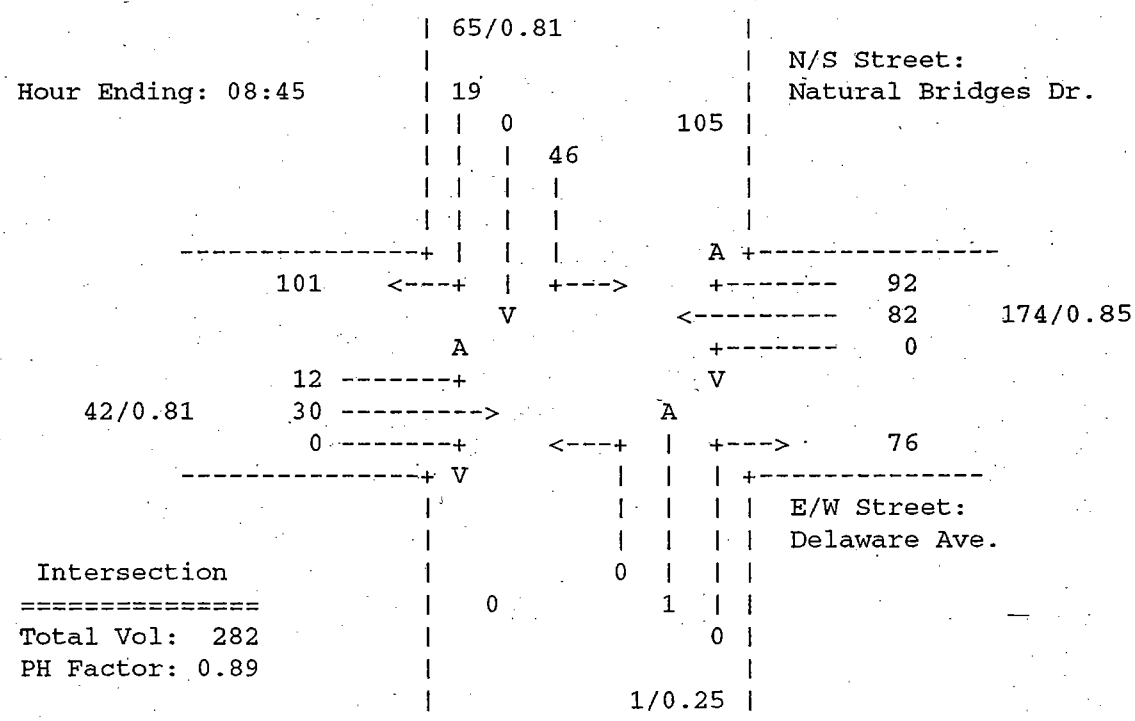
1 - Natural Bridges Dr. and Delaware Ave. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 1 | 1 | 7 | 10 | 15 | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 41* |
| 07:30 | 5 | 1 | 23 | 19 | 23 | 0 | 0 | 0 | 0 | 0 | 14 | 1 | 86* |
| 07:45 | 8 | 1 | 33 | 28 | 34 | 0 | 0 | 0 | 0 | 0 | 26 | 1 | 131* |
| 08:00 | 12 | 1 | 45 | 55 | 47 | 0 | 0 | 1 | 0 | 0 | 36 | 3 | 200 |
| 08:15 | 15 | 0 | 48 | 71 | 57 | 0 | 0 | 1 | 0 | 0 | 39 | 6 | 237 |
| 08:30 | 17 | 0 | 46 | 91 | 69 | 0 | 0 | 1 | 0 | 0 | 38 | 9 | 271 |
| 08:45 | 19 | 0 | 46 | 92 | 82 | 0 | 0 | 1 | 0 | 0 | 30 | 12 | 282 |
| 09:00 | 17 | 0 | 43 | 83 | 89 | 0 | 0 | 0 | 0 | 0 | 32 | 11 | 275 |

* indicates partial hour total.

City of Santz Cruz - UCSC Long Marine Lab #8 SUM-IT
Thursday COUNT DATE
Overcast 05/10/01

1 - Natural Bridges Dr. and Delaware Ave. MORNING PEAK



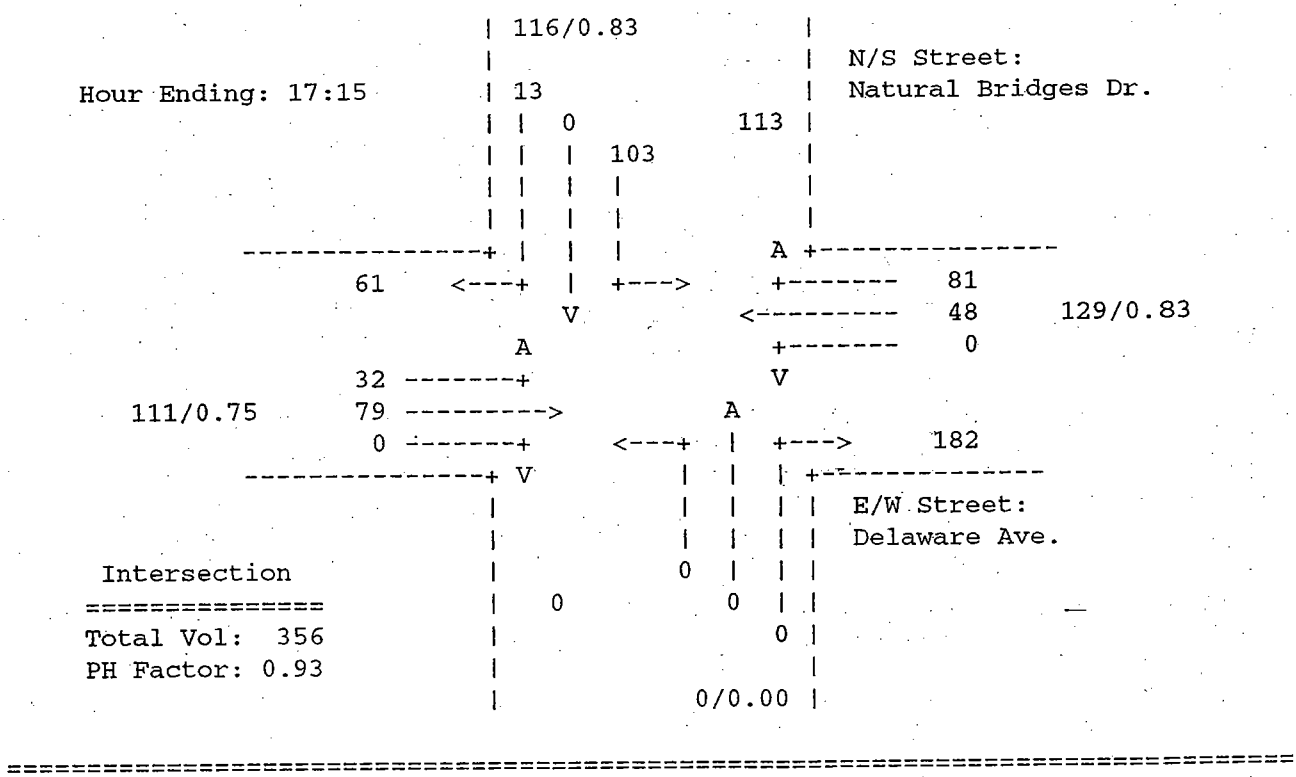
1 - Natural Bridges Dr. and Delaware Ave. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 5 | 0 | 25 | 20 | 15 | 0 | 0 | 1 | 0 | 0 | 16 | 5 | 87* |
| 16:30 | 9 | 0 | 49 | 44 | 30 | 0 | 0 | 1 | 0 | 0 | 31 | 13 | 177* |
| 16:45 | 12 | 0 | 81 | 58 | 40 | 0 | 0 | 1 | 0 | 0 | 51 | 18 | 261* |
| 17:00 | 17 | 0 | 103 | 80 | 51 | 0 | 0 | 1 | 0 | 0 | 70 | 25 | 347 |
| 17:15 | 13 | 0 | 103 | 81 | 48 | 0 | 0 | 0 | 0 | 0 | 79 | 32 | 356 |
| 17:30 | 12 | 0 | 101 | 79 | 42 | 0 | 0 | 0 | 0 | 0 | 80 | 30 | 344 |
| 17:45 | 12 | 0 | 94 | 83 | 48 | 0 | 0 | 0 | 0 | 0 | 78 | 25 | 340 |
| 18:00 | 11 | 0 | 102 | 88 | 50 | 0 | 0 | 0 | 0 | 0 | 75 | 20 | 346 |

* indicates partial hour total.

City of Santz Cruz - UCSC Long Marine Lab #8 SUM-IT
Thursday COUNT DATE
clear 05/10/01

1 - Natural Bridges Dr. and Delaware Ave. EVENING PEAK



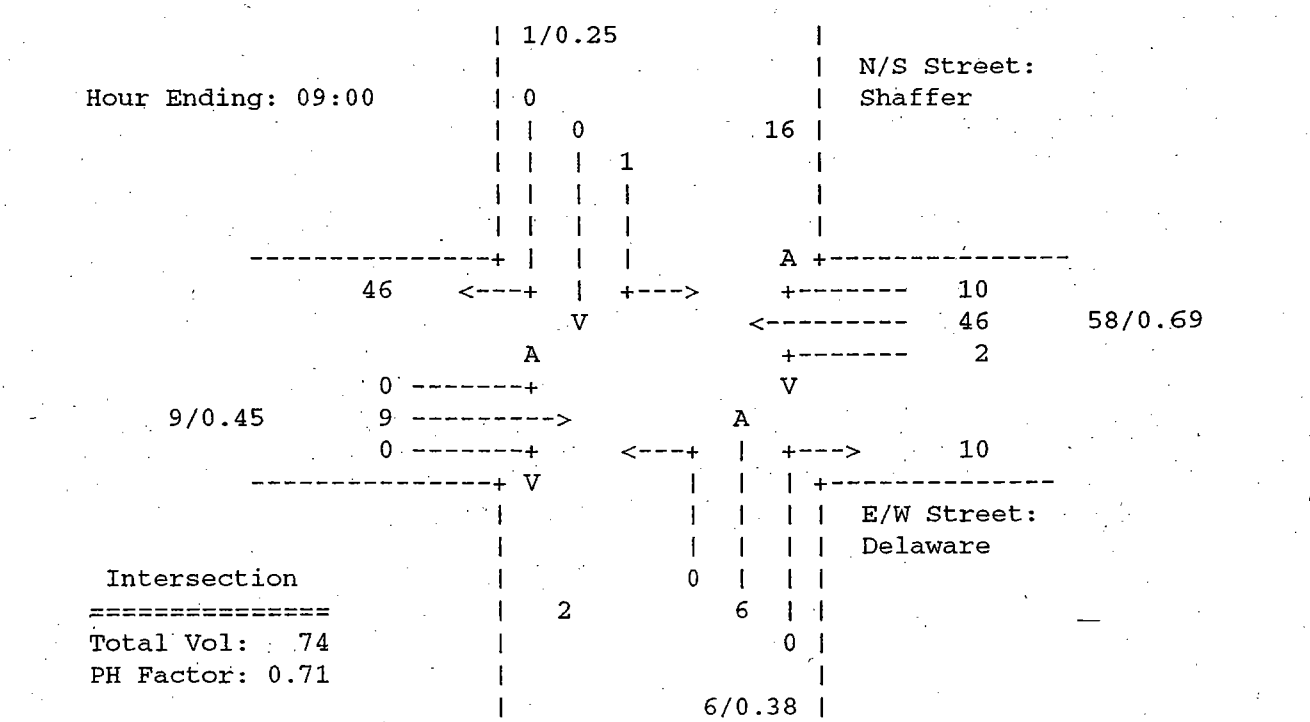
1 - Shaffer and Delaware — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 6* |
| 07:30 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 13* |
| 07:45 | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 27* |
| 08:00 | 1 | 0 | 0 | 2 | 36 | 0 | 0 | 1 | 0 | 0 | 7 | 0 | 47 |
| 08:15 | 1 | 0 | 1 | 5 | 46 | 1 | 0 | 1 | 0 | 0 | 11 | 0 | 66 |
| 08:30 | 1 | 0 | 1 | 5 | 49 | 1 | 0 | 2 | 0 | 0 | 12 | 0 | 71 |
| 08:45 | 1 | 0 | 1 | 6 | 44 | 2 | 0 | 3 | 0 | 0 | 11 | 0 | 68 |
| 09:00 | 0 | 0 | 1 | 10 | 46 | 2 | 0 | 6 | 0 | 0 | 9 | 0 | 74 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #9 — SUM-IT
Wednesday — COUNT DATE
Foggy and cool — 05/16/01

1 - Shaffer and Delaware — MORNING PEAK



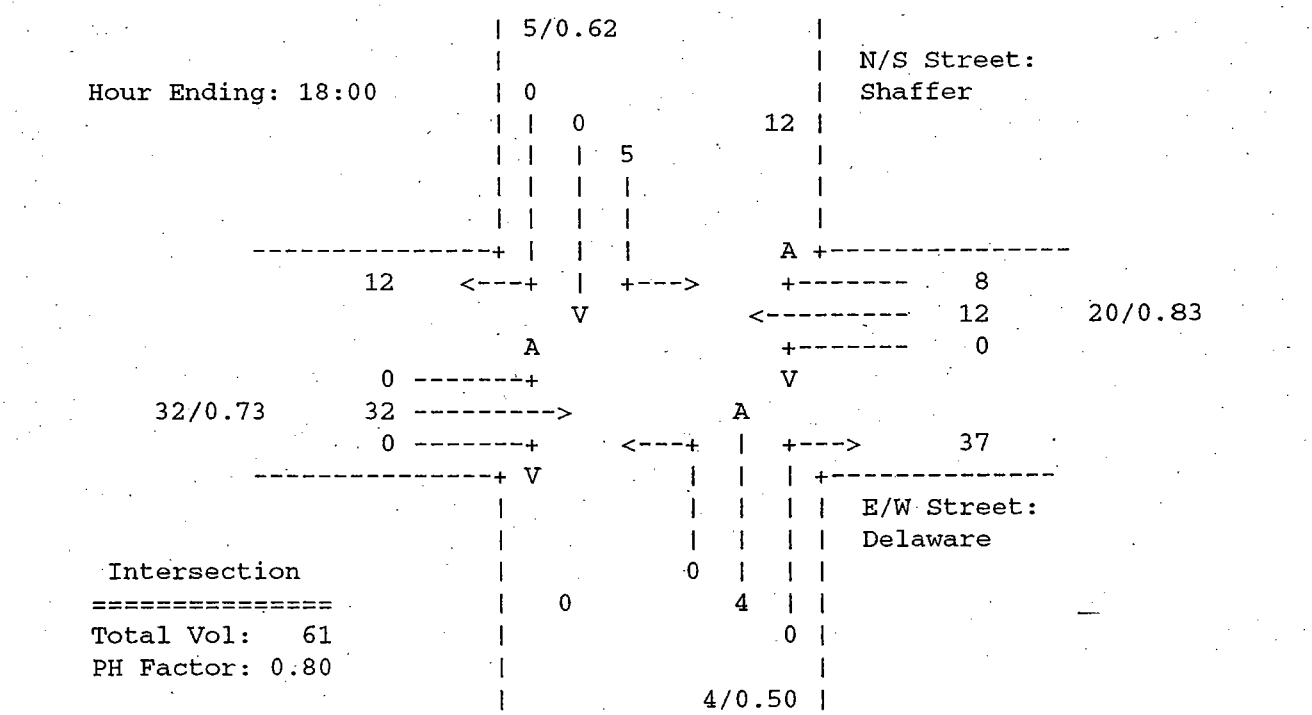
1 - Shaffer and Delaware HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 0 | 0 | 2 | 1 | 8 | 0 | 0 | 2 | 0 | 0 | 8 | 0 | 21* |
| 16:30 | 0 | 0 | 3 | 2 | 12 | 0 | 0 | 3 | 0 | 0 | 13 | 0 | 33* |
| 16:45 | 0 | 0 | 3 | 3 | 12 | 0 | 0 | 4 | 0 | 0 | 22 | 0 | 44* |
| 17:00 | 0 | 0 | 4 | 3 | 13 | 0 | 0 | 5 | 0 | 0 | 29 | 0 | 54 |
| 17:15 | 0 | 0 | 3 | 5 | 8 | 0 | 0 | 4 | 0 | 0 | 32 | 0 | 52 |
| 17:30 | 0 | 0 | 2 | 5 | 8 | 0 | 0 | 5 | 0 | 0 | 35 | 0 | 55 |
| 17:45 | 0 | 0 | 4 | 5 | 10 | 0 | 0 | 4 | 0 | 0 | 31 | 0 | 54 |
| 18:00 | 0 | 0 | 5 | 8 | 12 | 0 | 0 | 4 | 0 | 0 | 32 | 0 | 61 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #9 SUM-IT
Tuesday COUNT DATE
Warm 05/15/01

1 - Shaffer and Delaware EVENING PEAK



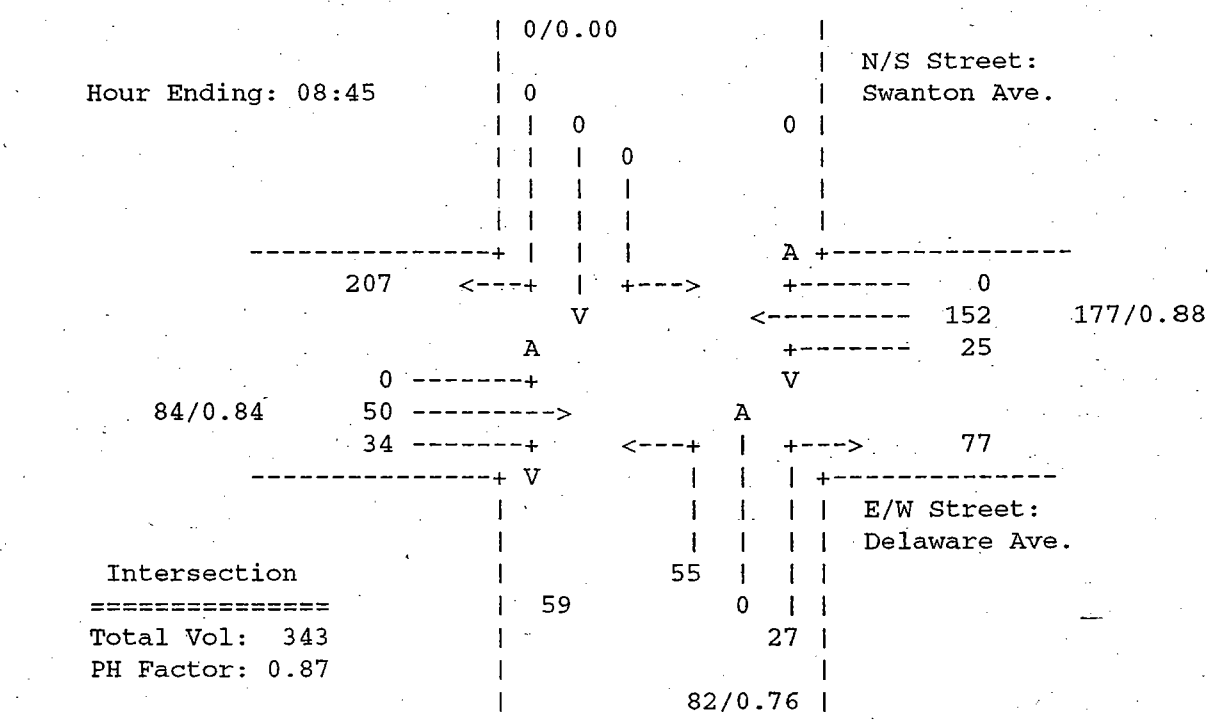
1 - Swanton Ave. and Delaware Ave. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 0 | 0 | 25 | 3 | 4 | 0 | 10 | 5 | 24 | 0 | 71* |
| 07:30 | 0 | 0 | 0 | 0 | 43 | 6 | 8 | 0 | 14 | 13 | 45 | 0 | 129* |
| 07:45 | 0 | 0 | 0 | 0 | 61 | 10 | 10 | 0 | 20 | 24 | 65 | 0 | 190* |
| 08:00 | 0 | 0 | 0 | 0 | 95 | 17 | 16 | 0 | 38 | 34 | 80 | 0 | 280 |
| 08:15 | 0 | 0 | 0 | 0 | 115 | 19 | 18 | 0 | 49 | 37 | 70 | 0 | 308 |
| 08:30 | 0 | 0 | 0 | 0 | 138 | 22 | 23 | 0 | 54 | 38 | 60 | 0 | 335 |
| 08:45 | 0 | 0 | 0 | 0 | 152 | 25 | 27 | 0 | 55 | 34 | 50 | 0 | 343 |
| 09:00 | 0 | 0 | 0 | 0 | 151 | 30 | 31 | 0 | 44 | 32 | 49 | 0 | 337 |

* indicates partial hour total.

City of Santz Cruz - UCSC Long Marine Lab #10 SUM-IT
Thursday COUNT DATE
overcast 05/10/01

1 - Swanton Ave. and Delaware Ave. MORNING PEAK



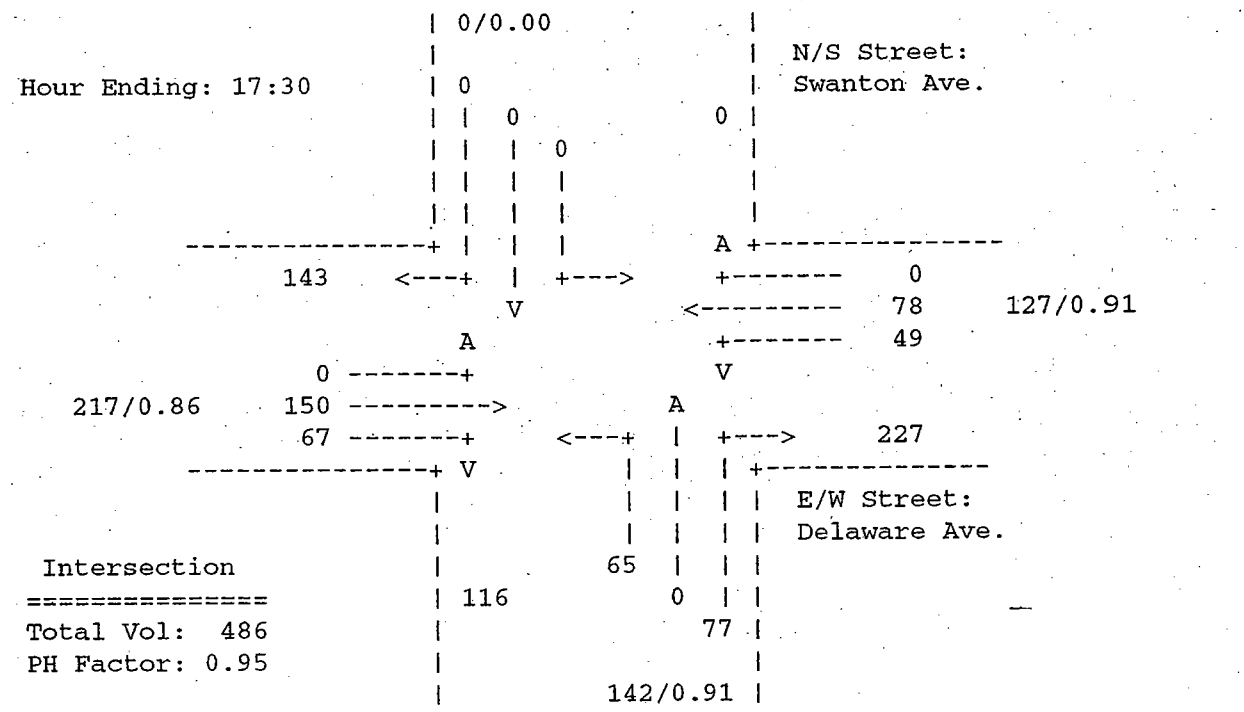
1 - Swanton Ave. and Delaware Ave. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 0 | 0 | 0 | 0 | 25 | 6 | 10 | 0 | 18 | 22 | 29 | 0 | 110* |
| 16:30 | 0 | 0 | 0 | 0 | 43 | 16 | 20 | 0 | 32 | 32 | 60 | 0 | 203* |
| 16:45 | 0 | 0 | 0 | 0 | 62 | 30 | 44 | 0 | 44 | 52 | 99 | 0 | 331* |
| 17:00 | 0 | 0 | 0 | 0 | 85 | 42 | 63 | 0 | 58 | 66 | 135 | 0 | 449 |
| 17:15 | 0 | 0 | 0 | 0 | 79 | 44 | 69 | 0 | 58 | 59 | 154 | 0 | 463 |
| 17:30 | 0 | 0 | 0 | 0 | 78 | 49 | 77 | 0 | 65 | 67 | 150 | 0 | 486 |
| 17:45 | 0 | 0 | 0 | 0 | 85 | 48 | 68 | 0 | 71 | 62 | 140 | 0 | 474 |
| 18:00 | 0 | 0 | 0 | 0 | 81 | 54 | 66 | 0 | 76 | 68 | 126 | 0 | 471 |

* indicates partial hour total.

City of Santz Cruz - UCSC Long Marine Lab #10 SUM-IT
Thursday COUNT DATE
clear 05/10/01

1 - Swanton Ave. and Delaware Ave. EVENING PEAK

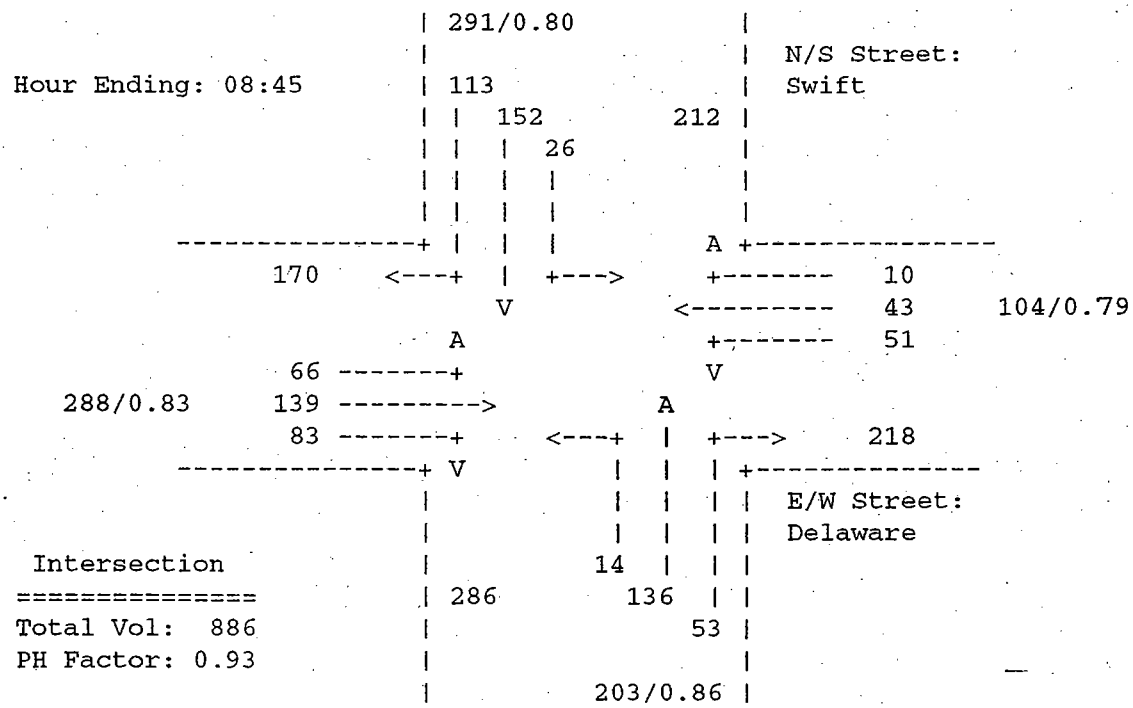


1 - Swift and Delaware HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 26 | 10 | 3 | 2 | 12 | 25 | 4 | 16 | 0 | 6 | 18 | 1 | 123* |
| 07:30 | 47 | 22 | 5 | 3 | 16 | 39 | 9 | 31 | 4 | 16 | 30 | 5 | 227* |
| 07:45 | 70 | 48 | 13 | 6 | 29 | 52 | 19 | 59 | 6 | 25 | 50 | 12 | 389* |
| 08:00 | 91 | 81 | 17 | 8 | 38 | 69 | 31 | 85 | 8 | 45 | 90 | 26 | 589 |
| 08:15 | 89 | 119 | 20 | 8 | 32 | 51 | 41 | 111 | 11 | 61 | 109 | 53 | 705 |
| 08:30 | 89 | 144 | 24 | 10 | 43 | 52 | 52 | 130 | 12 | 69 | 129 | 60 | 814 |
| 08:45 | 113 | 152 | 26 | 10 | 43 | 51 | 53 | 136 | 14 | 83 | 139 | 66 | 886 |
| 09:00 | 106 | 142 | 32 | 11 | 43 | 50 | 50 | 139 | 15 | 79 | 120 | 63 | 850 |

City of Santa Cruz - UCSC Long Marine Lab #11 SUM-IT
Thursday COUNT DATE
05/17/01

1 - Swift and Delaware MORNING PEAK



1 - Swift and Delaware — HOURLY SUMMARY

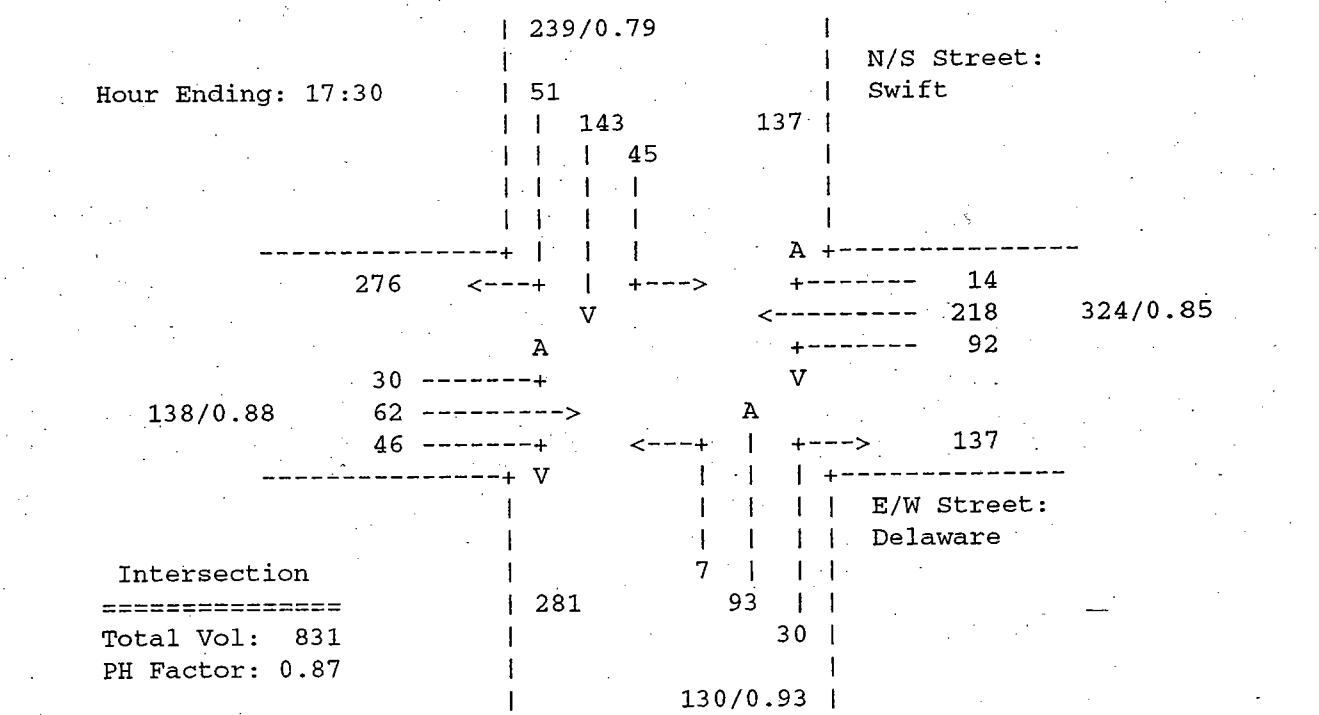
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 19 | 40 | 19 | 7 | 38 | 16 | 7 | 18 | 0 | 7 | 17 | 2 | 190* |
| 16:30 | 30 | 72 | 29 | 11 | 68 | 29 | 10 | 36 | 0 | 17 | 31 | 9 | 342* |
| 16:45 | 44 | 104 | 31 | 18 | 128 | 56 | 20 | 57 | 0 | 28 | 48 | 14 | 548* |
| 17:00 | 54 | 146 | 51 | 23 | 177 | 89 | 29 | 81 | 2 | 37 | 58 | 25 | 772 |
| 17:15 | 56 | 148 | 45 | 17 | 214 | 92 | 30 | 86 | 4 | 44 | 57 | 29 | 822 |
| 17:30 | 51 | 143 | 45 | 14 | 218 | 92 | 30 | 93 | 7 | 46 | 62 | 30 | 831 |
| 17:45 | 50 | 143 | 57 | 9 | 190 | 84 | 25 | 95 | 9 | 44 | 60 | 35 | 801 |
| 18:00 | 50 | 136 | 56 | 8 | 170 | 64 | 26 | 85 | 8 | 45 | 70 | 30 | 748 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #11
Wednesday
Sunny and windy

SUM-IT
COUNT DATE
05/16/01

1 - Swift and Delaware — EVENING PEAK



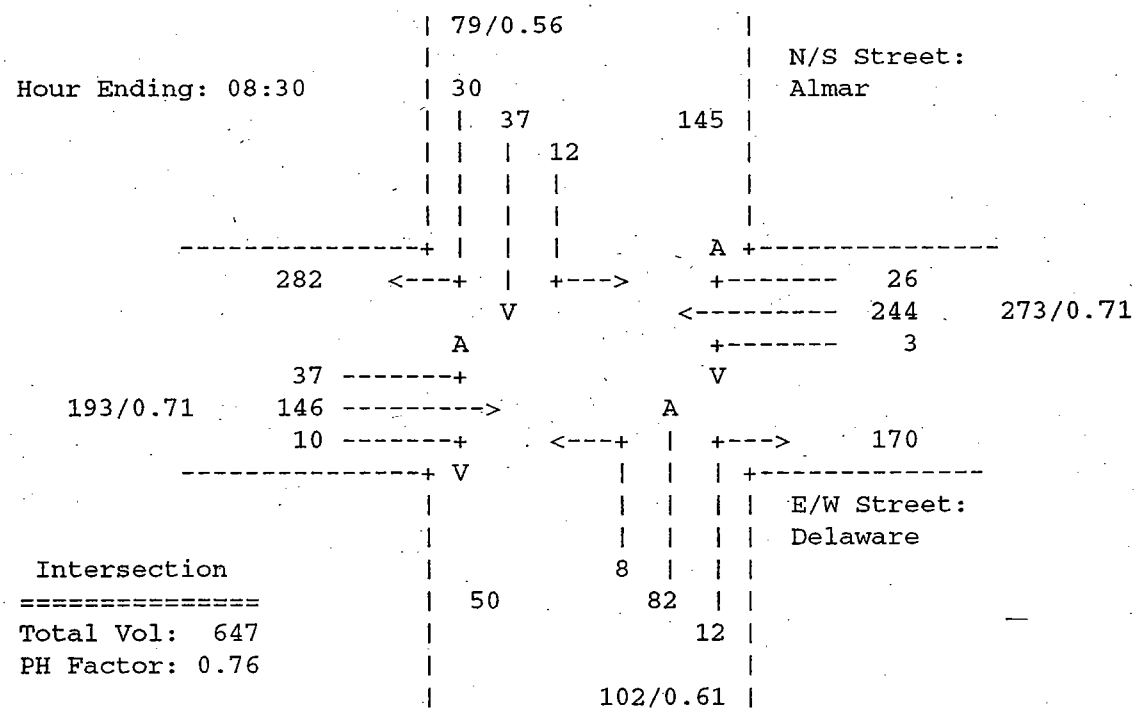
1 - Almar and Delaware — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 12 | 2 | 4 | 21 | 6 | 4 | 3 | 1 | 0 | 12 | 2 | 67* |
| 07:30 | 6 | 26 | 5 | 9 | 45 | 7 | 5 | 8 | 3 | 0 | 44 | 7 | 165* |
| 07:45 | 9 | 35 | 6 | 25 | 118 | 8 | 10 | 39 | 9 | 5 | 93 | 21 | 378* |
| 08:00 | 24 | 53 | 8 | 27 | 143 | 9 | 12 | 65 | 10 | 8 | 116 | 30 | 505 |
| 08:15 | 35 | 47 | 8 | 30 | 211 | 3 | 11 | 79 | 9 | 9 | 137 | 37 | 616 |
| 08:30 | 30 | 37 | 12 | 26 | 244 | 3 | 12 | 82 | 8 | 10 | 146 | 37 | 647 |
| 08:45 | 37 | 42 | 18 | 14 | 252 | 4 | 8 | 73 | 5 | 5 | 150 | 35 | 643 |
| 09:00 | 26 | 33 | 18 | 19 | 257 | 5 | 8 | 55 | 6 | 2 | 152 | 32 | 613 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #12 — SUM-IT
Thursday — COUNT DATE 05/17/01

1 - Almar and Delaware — MORNING PEAK



1 - Almar and Delaware — HOURLY SUMMARY

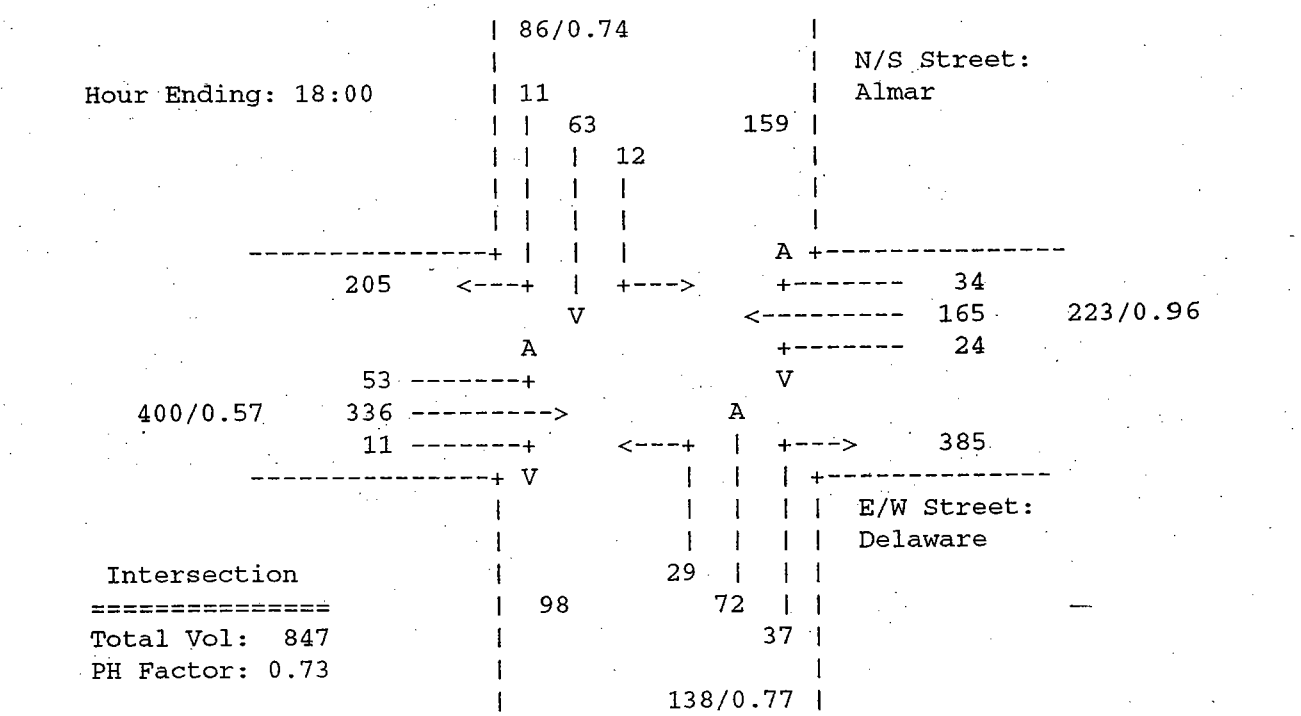
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 2 | 17 | 6 | 11 | 45 | 6 | 3 | 12 | 7 | 2 | 72 | 7 | 190* |
| 16:30 | 6 | 31 | 8 | 17 | 90 | 10 | 19 | 26 | 16 | 7 | 153 | 18 | 401* |
| 16:45 | 11 | 45 | 9 | 18 | 125 | 15 | 22 | 43 | 19 | 8 | 187 | 23 | 525* |
| 17:00 | 15 | 58 | 12 | 33 | 162 | 21 | 27 | 55 | 28 | 9 | 218 | 37 | 675 |
| 17:15 | 16 | 62 | 11 | 33 | 159 | 20 | 31 | 58 | 28 | 9 | 304 | 45 | 776 |
| 17:30 | 16 | 58 | 11 | 37 | 152 | 26 | 25 | 70 | 28 | 5 | 273 | 52 | 753 |
| 17:45 | 14 | 59 | 12 | 39 | 158 | 26 | 29 | 62 | 30 | 6 | 297 | 58 | 790 |
| 18:00 | 11 | 63 | 12 | 34 | 165 | 24 | 37 | 72 | 29 | 11 | 336 | 53 | 847 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #12
Wednesday
Warm

SUM-IT
COUNT DATE
05/16/01

1 - Almar and Delaware — EVENING PEAK



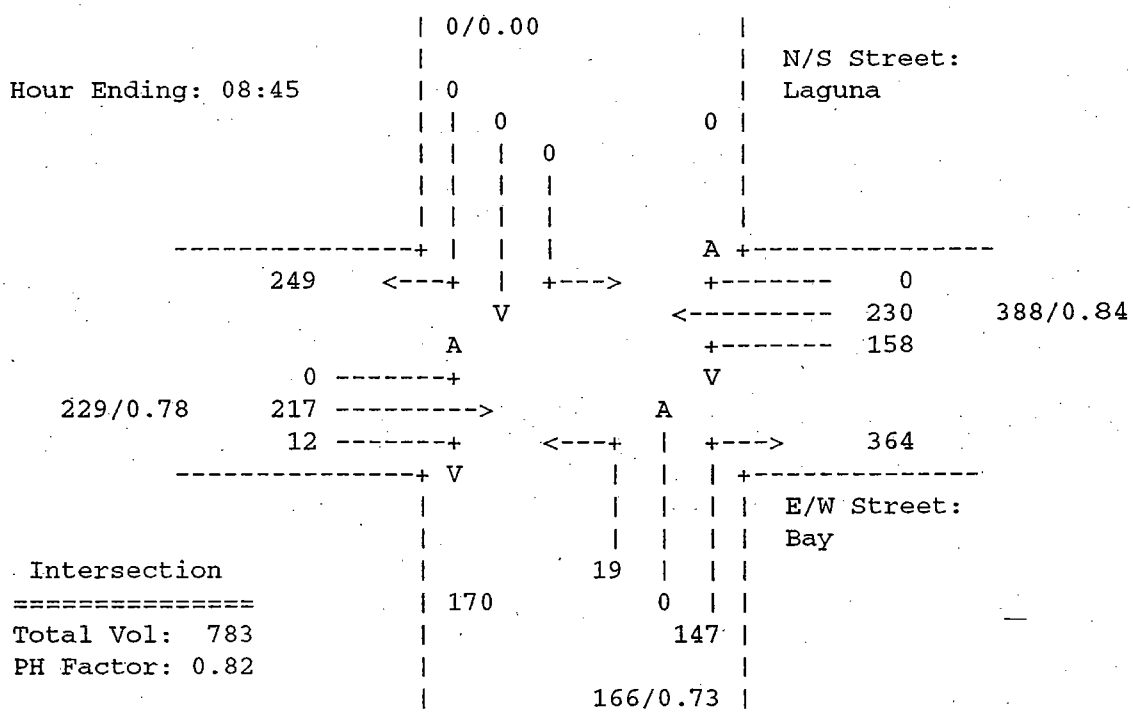
1 - Laguna and Bay HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 0 | 0 | 28 | 15 | 12 | 0 | 0 | 0 | 21 | 0 | 76* |
| 07:30 | 0 | 0 | 0 | 0 | 57 | 37 | 32 | 0 | 5 | 3 | 59 | 0 | 193* |
| 07:45 | 0 | 0 | 0 | 0 | 107 | 68 | 61 | 0 | 11 | 6 | 87 | 0 | 340* |
| 08:00 | 0 | 0 | 0 | 0 | 170 | 120 | 108 | 0 | 21 | 11 | 149 | 0 | 579 |
| 08:15 | 0 | 0 | 0 | 0 | 212 | 147 | 129 | 0 | 24 | 13 | 178 | 0 | 703 |
| 08:30 | 0 | 0 | 0 | 0 | 232 | 159 | 148 | 0 | 20 | 15 | 208 | 0 | 782 |
| 08:45 | 0 | 0 | 0 | 0 | 230 | 158 | 147 | 0 | 19 | 12 | 217 | 0 | 783 |
| 09:00 | 0 | 0 | 0 | 0 | 221 | 137 | 132 | 0 | 13 | 8 | 186 | 0 | 697 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marina Lab #14 SUM-IT
Tuesday COUNT DATE
Fair 05/15/01

1 - Laguna and Bay MORNING PEAK



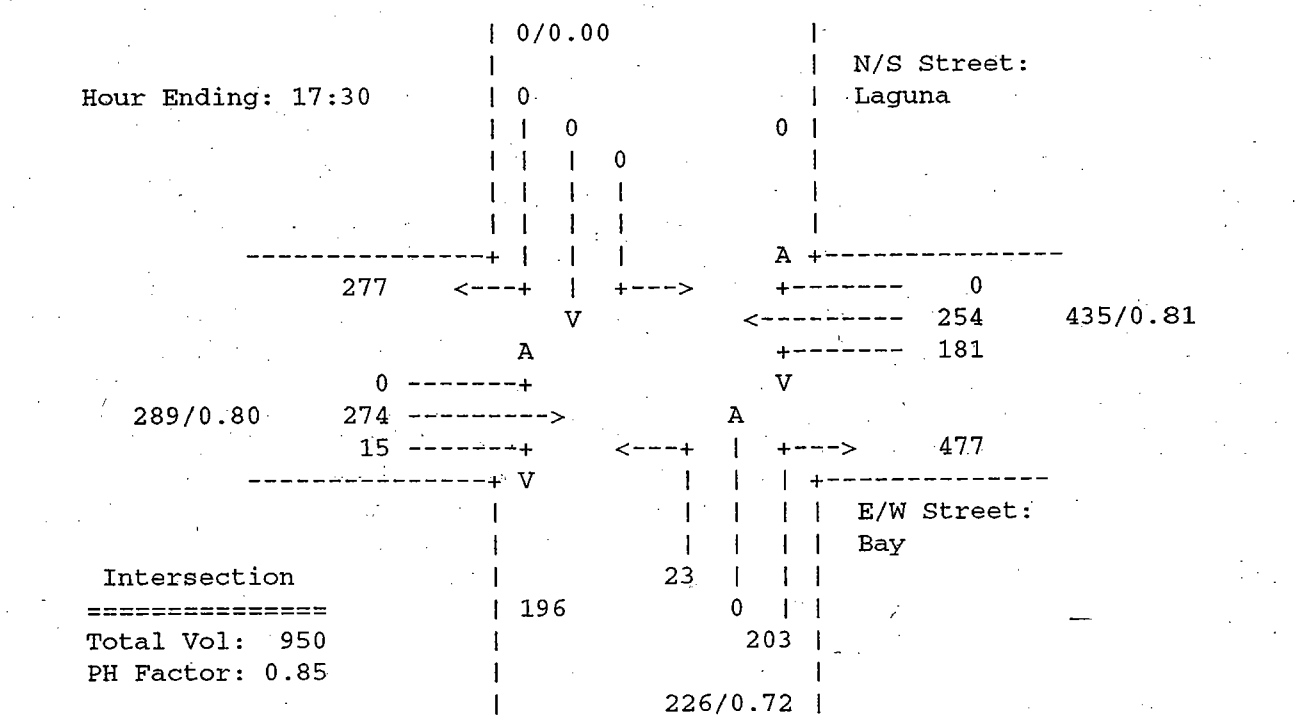
1 - Laguna and Bay HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 0 | 0 | 0 | 0 | 50 | 19 | 35 | 0 | 2 | 0 | 53 | 0 | 159* |
| 16:30 | 0 | 0 | 0 | 0 | 77 | 35 | 59 | 0 | 5 | 3 | 93 | 0 | 272* |
| 16:45 | 0 | 0 | 0 | 0 | 152 | 75 | 129 | 0 | 14 | 10 | 170 | 0 | 550* |
| 17:00 | 0 | 0 | 0 | 0 | 203 | 114 | 173 | 0 | 19 | 12 | 223 | 0 | 744 |
| 17:15 | 0 | 0 | 0 | 0 | 229 | 153 | 190 | 0 | 21 | 18 | 254 | 0 | 865 |
| 17:30 | 0 | 0 | 0 | 0 | 254 | 181 | 203 | 0 | 23 | 15 | 274 | 0 | 950 |
| 17:45 | 0 | 0 | 0 | 0 | 214 | 158 | 150 | 0 | 16 | 11 | 229 | 0 | 778 |
| 18:00 | 0 | 0 | 0 | 0 | 245 | 173 | 144 | 0 | 15 | 12 | 255 | 0 | 844 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marina Lab #14 SUM-IT
Tuesday COUNT DATE
Fair 05/15/01

1 - Laguna and Bay EVENING PEAK



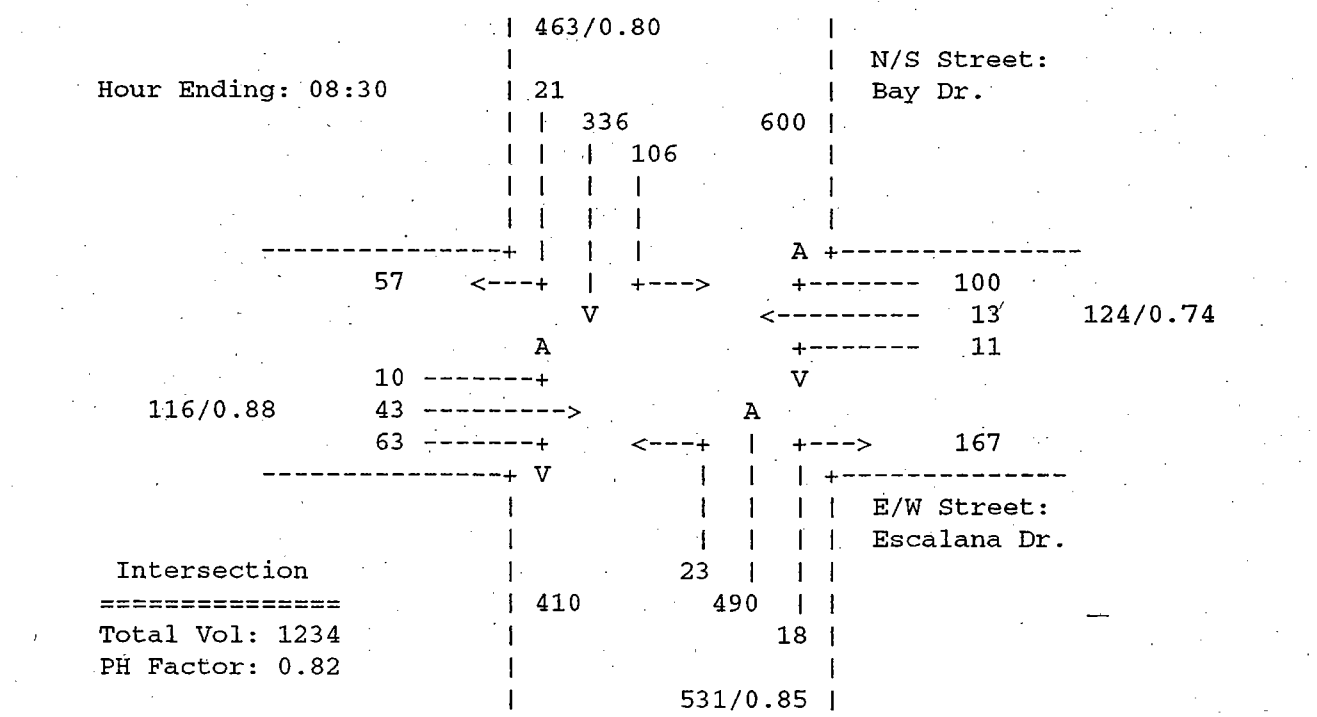
1 - Bay Dr. and Escalana Dr. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 3 | 36 | 4 | 1 | 2 | 0 | 0 | 31 | 2 | 3 | 3 | 1 | 86* |
| 07:30 | 8 | 92 | 15 | 3 | 3 | 0 | 2 | 91 | 3 | 9 | 8 | 1 | 235* |
| 07:45 | 12 | 177 | 39 | 17 | 6 | 0 | 4 | 191 | 6 | 26 | 11 | 4 | 493* |
| 08:00 | 19 | 257 | 96 | 51 | 10 | 4 | 11 | 334 | 12 | 34 | 33 | 7 | 868 |
| 08:15 | 18 | 297 | 105 | 79 | 11 | 7 | 19 | 441 | 15 | 49 | 39 | 6 | 1086 |
| 08:30 | 21 | 336 | 106 | 100 | 13 | 11 | 18 | 490 | 23 | 63 | 43 | 10 | 1234 |
| 08:45 | 18 | 333 | 89 | 100 | 11 | 12 | 17 | 497 | 27 | 66 | 46 | 11 | 1227 |
| 09:00 | 12 | 326 | 41 | 77 | 10 | 10 | 11 | 453 | 26 | 65 | 31 | 10 | 1072 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #17 SUM-IT
Tuesday COUNT DATE
05/15/01

1 - Bay Dr. and Escalana Dr. MORNING PEAK



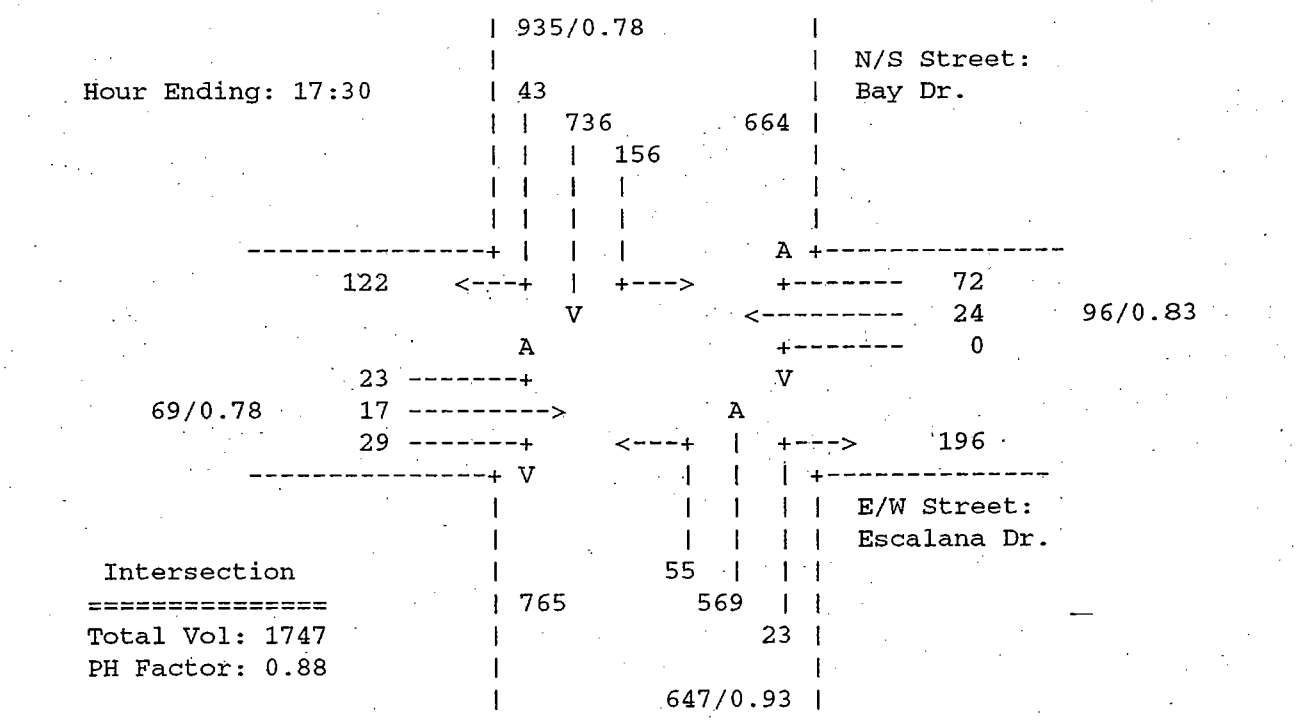
1 - Bay Dr. and Escalana Dr. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 11 | 174 | 26 | 7 | 5 | 5 | 7 | 108 | 15 | 19 | 4 | 7 | 388* |
| 16:30 | 17 | 257 | 41 | 15 | 14 | 5 | 10 | 192 | 23 | 29 | 4 | 10 | 617* |
| 16:45 | 23 | 398 | 60 | 28 | 22 | 5 | 16 | 326 | 34 | 38 | 4 | 16 | 970* |
| 17:00 | 38 | 573 | 83 | 53 | 26 | 5 | 22 | 478 | 41 | 44 | 14 | 22 | 1399 |
| 17:15 | 36 | 592 | 111 | 66 | 25 | 0 | 21 | 522 | 42 | 32 | 13 | 21 | 1481 |
| 17:30 | 43 | 736 | 156 | 72 | 24 | 0 | 23 | 569 | 55 | 29 | 17 | 23 | 1747 |
| 17:45 | 43 | 708 | 155 | 78 | 24 | 2 | 20 | 543 | 50 | 31 | 21 | 20 | 1695 |
| 18:00 | 37 | 683 | 155 | 69 | 25 | 4 | 17 | 504 | 57 | 32 | 12 | 17 | 1612 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #17 SUM-IT
Wednesday COUNT DATE
05/30/01

1 - Bay Dr. and Escalana Dr. EVENING PEAK



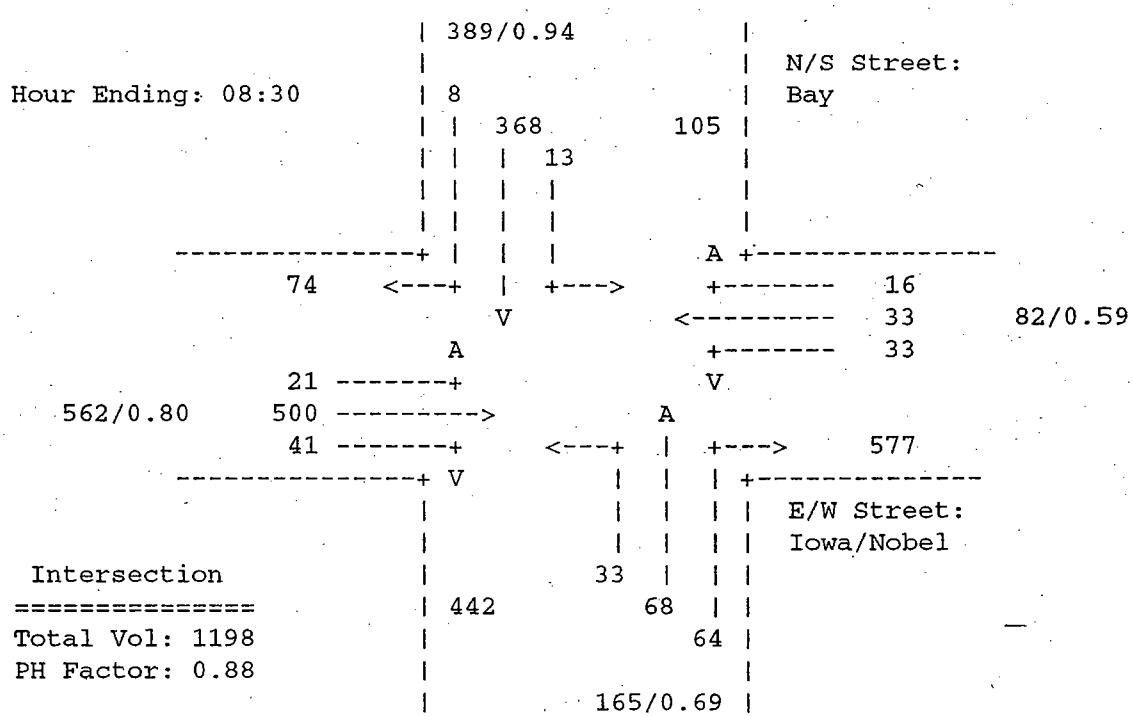
1 - Bay and Iowa/Nobel — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 1 | 43 | 4 | 0 | 1 | 7 | 5 | 10 | 4 | 4 | 37 | 2 | 118* |
| 07:30 | 1 | 83 | 6 | 1 | 2 | 11 | 17 | 14 | 8 | 11 | 103 | 4 | 261* |
| 07:45 | 3 | 177 | 8 | 2 | 8 | 16 | 32 | 25 | 16 | 21 | 207 | 5 | 520* |
| 08:00 | 3 | 279 | 9 | 7 | 11 | 24 | 53 | 40 | 26 | 26 | 369 | 13 | 860 |
| 08:15 | 6 | 318 | 12 | 10 | 20 | 23 | 64 | 65 | 31 | 39 | 447 | 21 | 1056 |
| 08:30 | 8 | 368 | 13 | 16 | 33 | 33 | 64 | 68 | 33 | 41 | 500 | 21 | 1198 |
| 08:45 | 17 | 350 | 11 | 15 | 33 | 34 | 60 | 65 | 32 | 35 | 495 | 27 | 1174 |
| 09:00 | 21 | 327 | 12 | 13 | 35 | 31 | 52 | 55 | 30 | 40 | 474 | 31 | 1121 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #18 — SUM-IT
Wednesday — COUNT DATE
Sunny and warm — 05/23/01

1 - Bay and Iowa/Nobel — MORNING PEAK



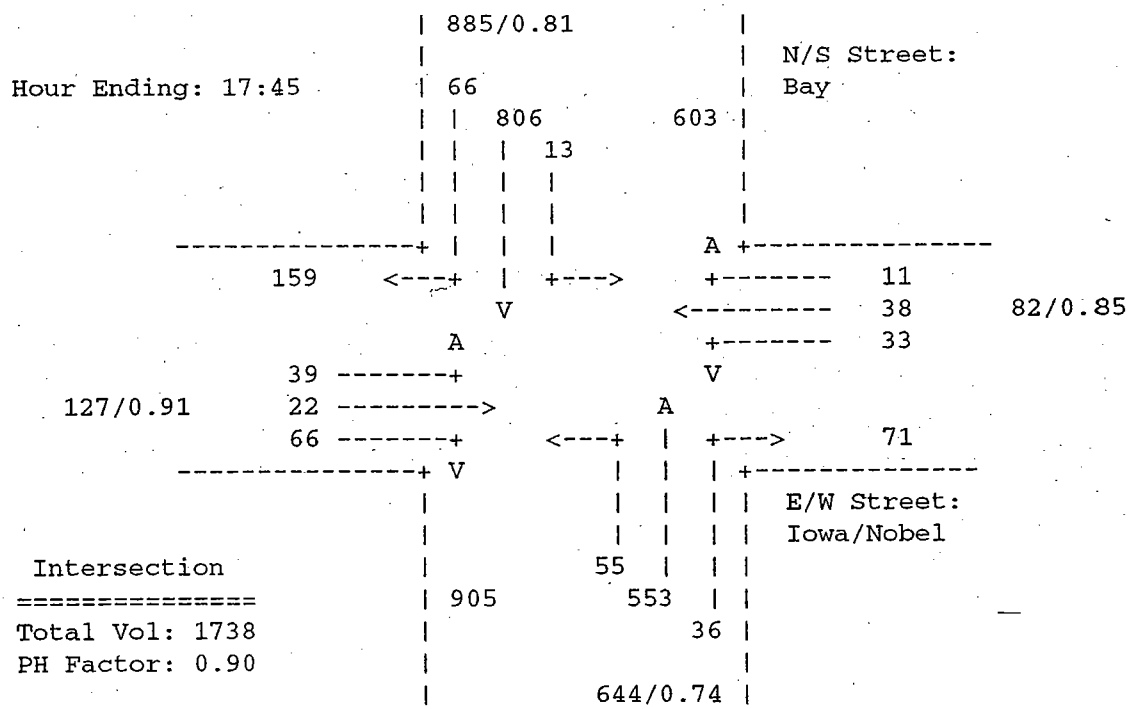
1 - Bay and Iowa/Nobel — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 9 | 152 | 3 | 1 | 11 | 11 | 9 | 76 | 7 | 11 | 8 | 5 | 303* |
| 16:30 | 15 | 307 | 7 | 4 | 23 | 23 | 22 | 165 | 19 | 23 | 11 | 10 | 629* |
| 16:45 | 25 | 462 | 16 | 6 | 35 | 30 | 31 | 298 | 28 | 34 | 19 | 23 | 1007* |
| 17:00 | 36 | 642 | 20 | 7 | 45 | 35 | 38 | 499 | 38 | 45 | 24 | 39 | 1468 |
| 17:15 | 51 | 734 | 22 | 9 | 42 | 37 | 38 | 545 | 51 | 50 | 23 | 46 | 1648 |
| 17:30 | 58 | 797 | 19 | 8 | 40 | 32 | 38 | 564 | 50 | 55 | 26 | 49 | 1736 |
| 17:45 | 66 | 806 | 13 | 11 | 38 | 33 | 36 | 553 | 55 | 66 | 22 | 39 | 1738 |
| 18:00 | 63 | 769 | 12 | 15 | 34 | 33 | 38 | 457 | 56 | 68 | 27 | 32 | 1604 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #18 — SUM-IT
Wednesday — COUNT DATE
Sunny and warm — 05/23/01

1 - Bay and Iowa/Nobel — EVENING PEAK



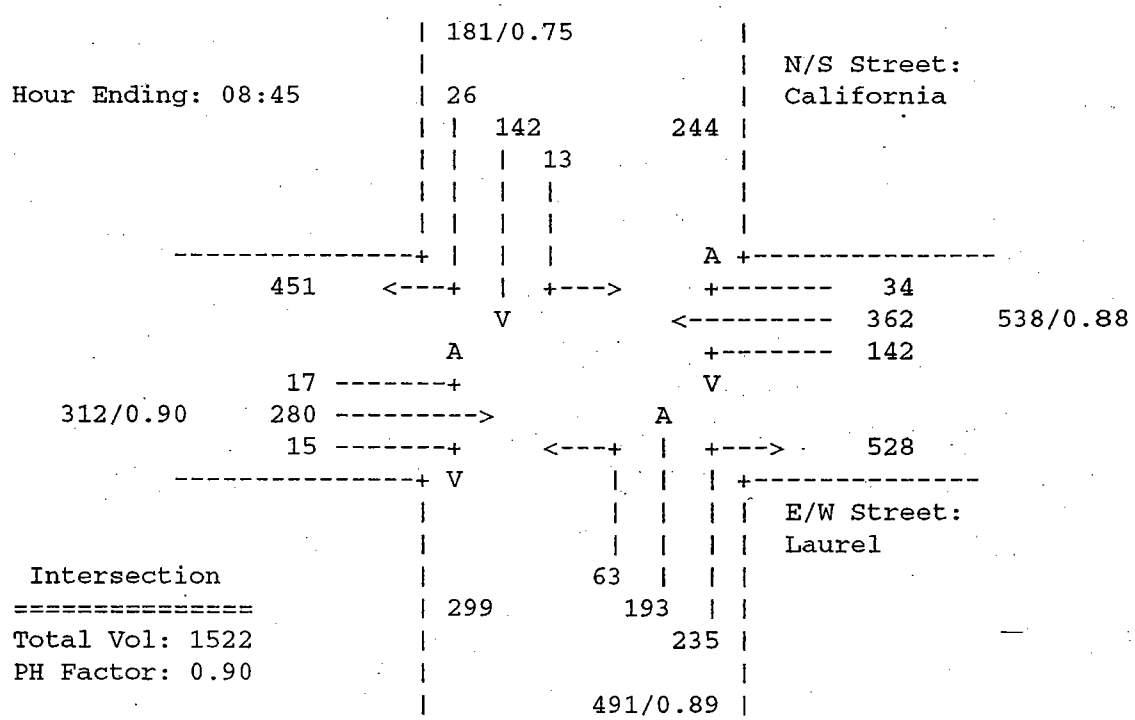
1 - California and Laurel — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 8 | 1 | 2 | 50 | 2 | 14 | 23 | 8 | 1 | 42 | 1 | 152* |
| 07:30 | 2 | 18 | 2 | 8 | 109 | 11 | 36 | 54 | 16 | 1 | 94 | 9 | 360* |
| 07:45 | 6 | 34 | 2 | 16 | 181 | 35 | 78 | 107 | 28 | 7 | 148 | 20 | 662* |
| 08:00 | 15 | 69 | 6 | 34 | 282 | 63 | 135 | 153 | 46 | 10 | 223 | 28 | 1064 |
| 08:15 | 28 | 103 | 10 | 45 | 326 | 106 | 181 | 180 | 54 | 11 | 261 | 32 | 1337 |
| 08:30 | 28 | 118 | 12 | 40 | 352 | 134 | 227 | 201 | 64 | 14 | 283 | 24 | 1497 |
| 08:45 | 26 | 142 | 13 | 34 | 362 | 142 | 235 | 193 | 63 | 15 | 280 | 17 | 1522 |
| 09:00 | 20 | 126 | 13 | 20 | 354 | 139 | 246 | 202 | 57 | 17 | 277 | 12 | 1483 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #20 — SUM-IT
Wednesday — COUNT DATE 05/23/01

1 - California and Laurel — MORNING PEAK



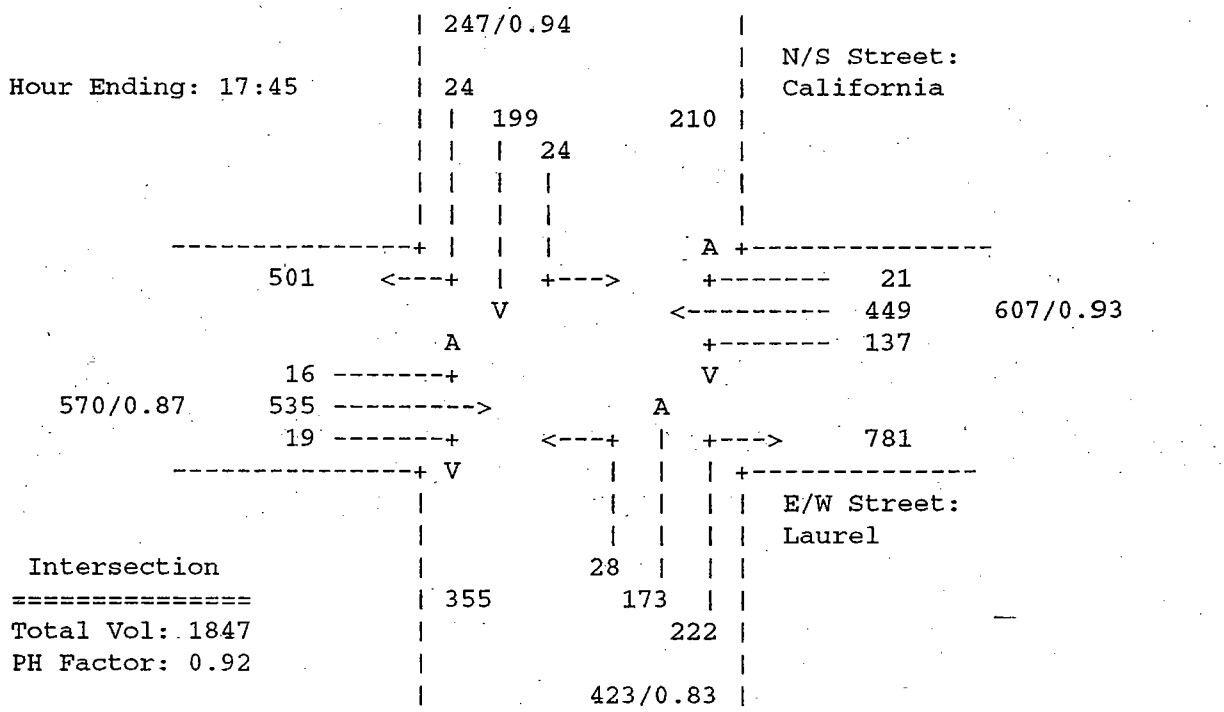
1 - California and Laurel — HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 6 | 30 | 7 | 10 | 84 | 29 | 61 | 36 | 7 | 2 | 136 | 1 | 409* |
| 16:30 | 11 | 68 | 9 | 13 | 167 | 65 | 115 | 64 | 12 | 5 | 250 | 3 | 782* |
| 16:45 | 17 | 115 | 15 | 14 | 293 | 97 | 176 | 97 | 19 | 13 | 366 | 5 | 1227* |
| 17:00 | 27 | 159 | 27 | 17 | 418 | 133 | 232 | 130 | 24 | 20 | 495 | 8 | 1690 |
| 17:15 | 27 | 178 | 26 | 10 | 429 | 135 | 228 | 138 | 25 | 22 | 474 | 11 | 1703 |
| 17:30 | 26 | 188 | 27 | 14 | 461 | 135 | 241 | 160 | 30 | 23 | 513 | 15 | 1833 |
| 17:45 | 24 | 199 | 24 | 21 | 449 | 137 | 222 | 173 | 28 | 19 | 535 | 16 | 1847 |
| 18:00 | 16 | 192 | 14 | 24 | 458 | 144 | 225 | 171 | 29 | 16 | 514 | 21 | 1824 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #20 — SUM-IT
Wednesday — COUNT DATE 05/23/01

1 - California and Laurel — EVENING PEAK



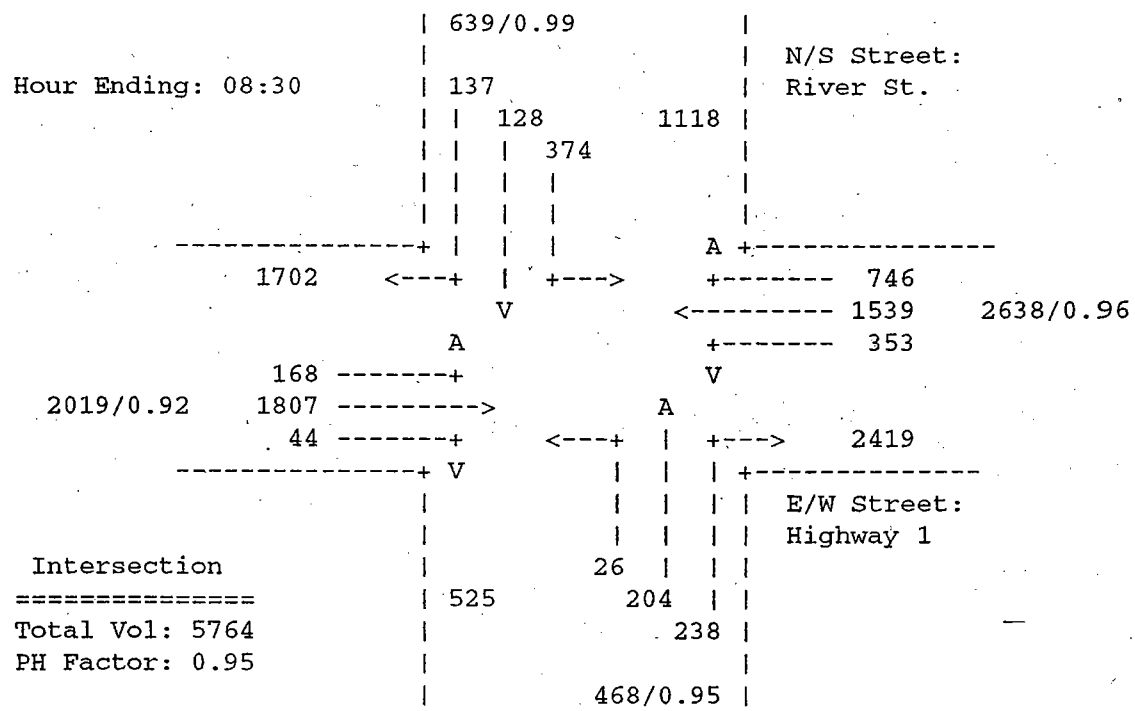
1 - River St. and Highway 1 HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 29 | 23 | 42 | 111 | 300 | 46 | 24 | 24 | 3 | 8 | 300 | 33 | 943* |
| 07:30 | 52 | 53 | 117 | 280 | 629 | 89 | 62 | 78 | 7 | 19 | 608 | 66 | 2060* |
| 07:45 | 96 | 94 | 186 | 457 | 1056 | 161 | 129 | 127 | 12 | 28 | 1037 | 103 | 3486* |
| 08:00 | 130 | 119 | 289 | 659 | 1446 | 254 | 179 | 176 | 18 | 40 | 1502 | 155 | 4967 |
| 08:15 | 134 | 128 | 344 | 741 | 1525 | 313 | 217 | 205 | 23 | 42 | 1677 | 186 | 5535 |
| 08:30 | 137 | 128 | 374 | 746 | 1539 | 353 | 238 | 204 | 26 | 44 | 1807 | 168 | 5764 |
| 08:45 | 125 | 114 | 415 | 697 | 1466 | 369 | 251 | 194 | 35 | 50 | 1763 | 225 | 5704 |
| 09:00 | 115 | 118 | 427 | 637 | 1395 | 361 | 277 | 186 | 47 | 55 | 1687 | 235 | 5540 |

* indicates partial hour total.

City of Santz Cruz - UCSC Long Marine Lab #24 SUM-IT
Wednesday COUNT DATE
light fog 05/16/01

1 - River St. and Highway 1 MORNING PEAK



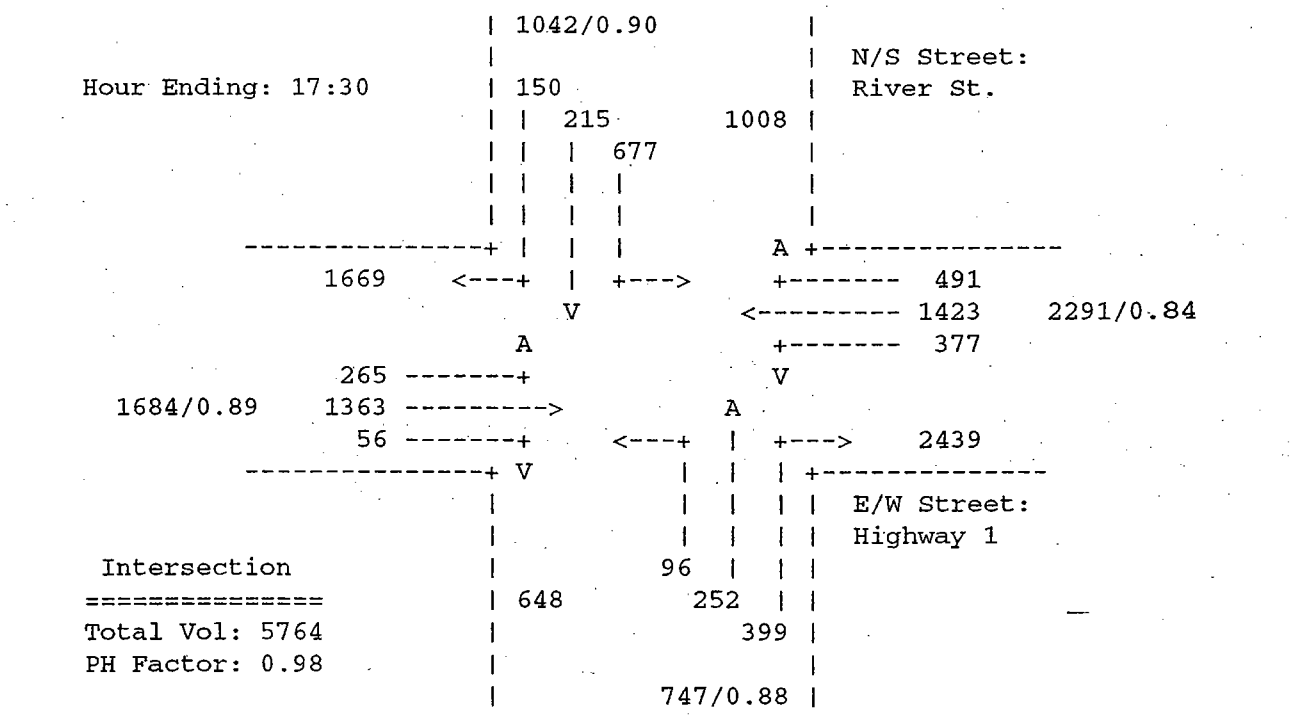
1 - River St. and Highway 1 HOURLY SUMMARY

| Hour | North | | | East | | | South | | | West | | | Int. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ending | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| 16:15 | 39 | 57 | 170 | 126 | 297 | 81 | 76 | 71 | 26 | 16 | 342 | 70 | 1371* |
| 16:30 | 85 | 119 | 351 | 251 | 648 | 163 | 150 | 137 | 36 | 32 | 677 | 152 | 2801* |
| 16:45 | 132 | 158 | 479 | 375 | 1001 | 284 | 230 | 193 | 61 | 56 | 1045 | 217 | 4231* |
| 17:00 | 159 | 226 | 675 | 500 | 1307 | 379 | 326 | 269 | 93 | 65 | 1383 | 273 | 5655 |
| 17:15 | 150 | 229 | 681 | 494 | 1482 | 384 | 348 | 249 | 87 | 61 | 1298 | 285 | 5748 |
| 17:30 | 150 | 215 | 677 | 491 | 1423 | 377 | 399 | 252 | 96 | 56 | 1363 | 265 | 5764 |
| 17:45 | 154 | 215 | 685 | 484 | 1465 | 348 | 405 | 253 | 90 | 38 | 1352 | 271 | 5760 |
| 18:00 | 182 | 184 | 640 | 452 | 1541 | 335 | 366 | 229 | 72 | 39 | 1309 | 267 | 5616 |

* indicates partial hour total.

City of Santz Cruz - UCSC Long Marine Lab #24 SUM-IT
Wednesday COUNT DATE
clear 05/16/01

1 - River St. and Highway 1 EVENING PEAK



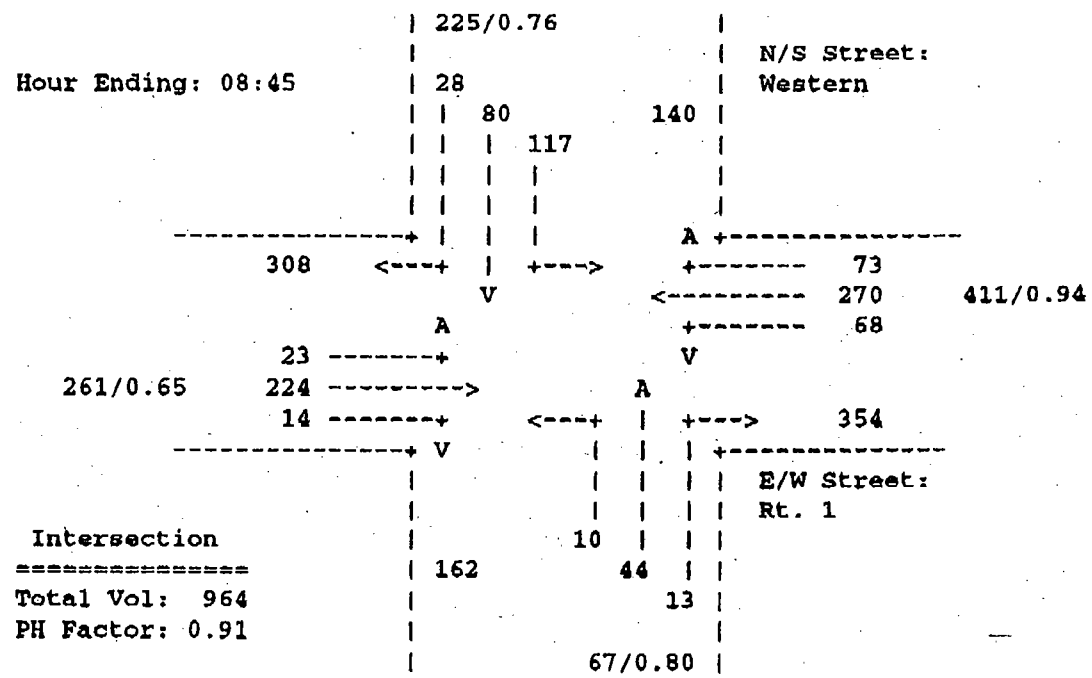
1 - Western and Rt. 1 HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 2 | 3 | 13 | 8 | 66 | 10 | 3 | 5 | 2 | 0 | 24 | 3 | 139* |
| 07:30 | 4 | 10 | 36 | 22 | 144 | 26 | 5 | 9 | 4 | 1 | 62 | 4 | 327* |
| 07:45 | 8 | 19 | 60 | 37 | 198 | 44 | 7 | 16 | 5 | 3 | 112 | 10 | 519* |
| 08:00 | 14 | 36 | 80 | 53 | 269 | 62 | 10 | 28 | 8 | 6 | 202 | 17 | 785 |
| 08:15 | 19 | 56 | 111 | 64 | 255 | 70 | 13 | 34 | 10 | 10 | 211 | 19 | 872 |
| 08:30 | 24 | 72 | 115 | 71 | 247 | 71 | 14 | 43 | 9 | 14 | 226 | 23 | 929 |
| 08:45 | 28 | 80 | 117 | 73 | 270 | 68 | 13 | 44 | 10 | 14 | 224 | 23 | 964 |
| 09:00 | 25 | 78 | 121 | 79 | 259 | 64 | 16 | 41 | 10 | 12 | 208 | 19 | 932 |

* indicates partial hour total.

City of Santa Cruz - USCS Long Marine Lab #1 SUM-IT
Wednesday COUNT DATE
5/22/02

1 - Western and Rt. 1 MORNING PEAK



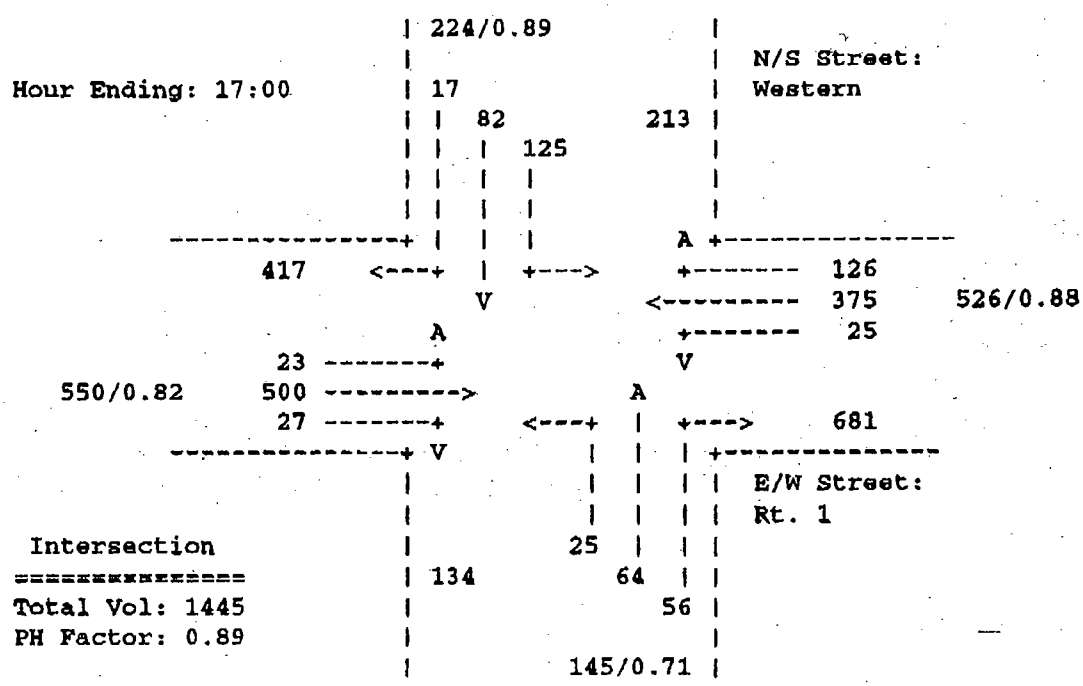
1 - Western and Rt. 1 HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 4 | 21 | 31 | 21 | 101 | 9 | 21 | 14 | 3 | 10 | 151 | 6 | 392* |
| 16:30 | 9 | 34 | 60 | 48 | 193 | 14 | 29 | 27 | 6 | 17 | 263 | 13 | 713* |
| 16:45 | 14 | 55 | 92 | 96 | 291 | 18 | 49 | 45 | 19 | 22 | 405 | 15 | 1121* |
| 17:00 | 17 | 82 | 125 | 126 | 375 | 25 | 56 | 64 | 25 | 27 | 500 | 23 | 1445 |
| 17:15 | 18 | 76 | 119 | 146 | 366 | 23 | 56 | 75 | 28 | 19 | 443 | 20 | 1389 |
| 17:30 | 18 | 82 | 114 | 145 | 358 | 26 | 64 | 79 | 27 | 14 | 439 | 23 | 1389 |
| 17:45 | 17 | 76 | 112 | 147 | 349 | 31 | 49 | 71 | 17 | 12 | 393 | 23 | 1297 |
| 18:00 | 18 | 60 | 110 | 185 | 351 | 30 | 48 | 65 | 12 | 12 | 392 | 16 | 1299 |

* indicates partial hour total.

City of Santa Cruz - USCS Long Marine Lab #1 SUM-IT
Wednesday COUNT DATE
6/5/02

1 - Western and Rt. 1 EVENING PEAK



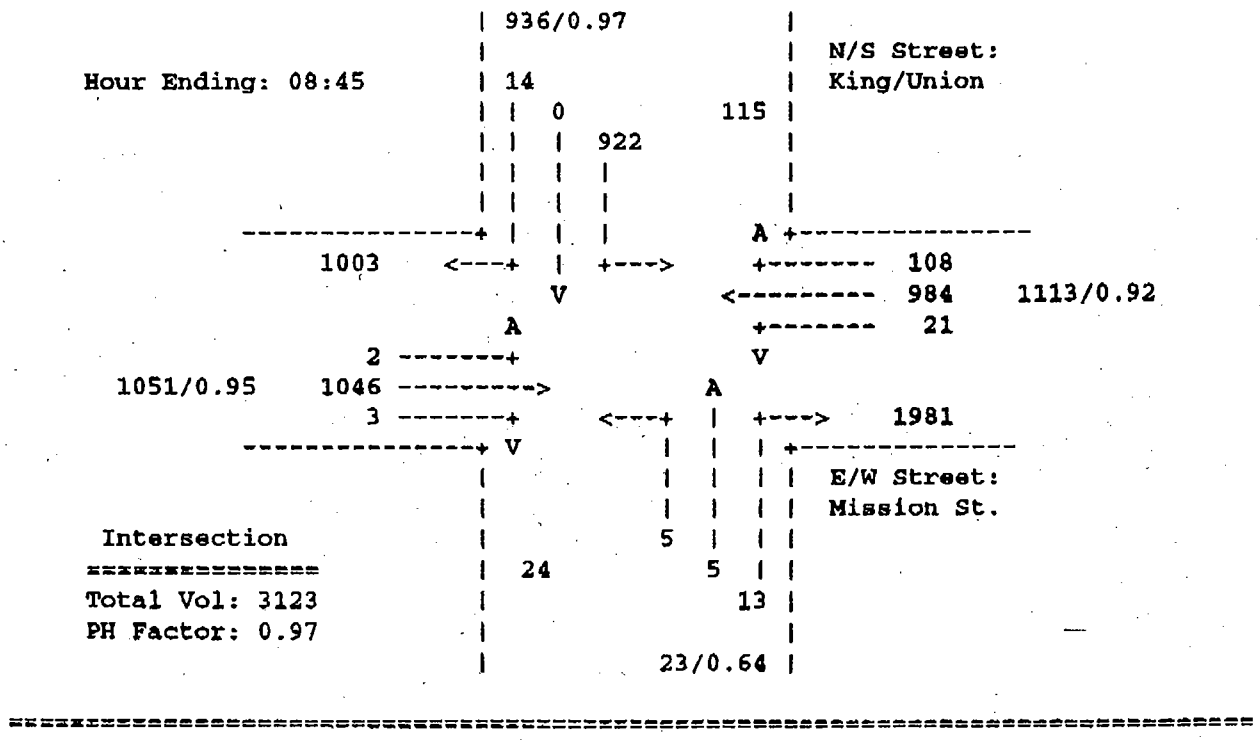
1 - King/Union and Mission St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 1 | 0 | 123 | 8 | 194 | 4 | 5 | 0 | 0 | 0 | 161 | 0 | 496* |
| 07:30 | 2 | 0 | 254 | 27 | 394 | 5 | 6 | 0 | 1 | 0 | 382 | 0 | 1071* |
| 07:45 | 5 | 0 | 440 | 47 | 596 | 6 | 9 | 0 | 1 | 0 | 589 | 0 | 1693* |
| 08:00 | 12 | 0 | 657 | 82 | 856 | 12 | 12 | 0 | 3 | 0 | 866 | 0 | 2500 |
| 08:15 | 12 | 0 | 772 | 100 | 882 | 14 | 9 | 3 | 3 | 1 | 944 | 1 | 2741 |
| 08:30 | 15 | 0 | 869 | 104 | 950 | 17 | 14 | 4 | 4 | 2 | 980 | 2 | 2961 |
| 08:45 | 14 | 0 | 922 | 108 | 984 | 21 | 13 | 5 | 5 | 3 | 1046 | 2 | 3123 |
| 09:00 | 7 | 0 | 922 | 104 | 1002 | 19 | 14 | 6 | 3 | 5 | 1037 | 4 | 3123 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #8 SUM-IT
Wednesday COUNT DATE
5/29/02

1 - King/Union and Mission St. MORNING PEAK



1 - King/Union and Mission St. HOURLY SUMMARY

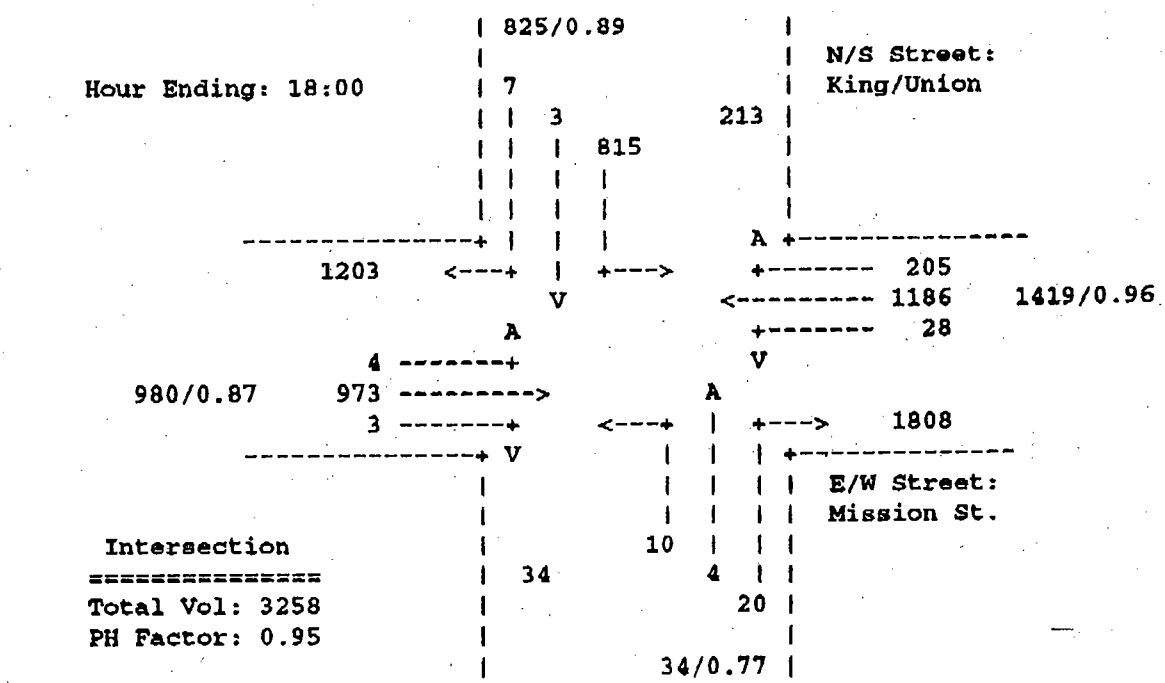
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 3 | 0 | 212 | 29 | 253 | 1 | 2 | 0 | 1 | 0 | 253 | 0 | 754* |
| 16:30 | 3 | 0 | 454 | 65 | 493 | 5 | 4 | 0 | 1 | 0 | 518 | 0 | 1543* |
| 16:45 | 4 | 0 | 635 | 100 | 744 | 6 | 6 | 1 | 1 | 0 | 768 | 0 | 2265* |
| 17:00 | 8 | 1 | 827 | 138 | 1017 | 9 | 8 | 2 | 3 | 2 | 1023 | 2 | 3040 |
| 17:15 | 6 | 1 | 800 | 168 | 1062 | 20 | 13 | 3 | 4 | 4 | 1025 | 4 | 3110 |
| 17:30 | 11 | 4 | 756 | 182 | 1134 | 18 | 12 | 3 | 7 | 5 | 1039 | 5 | 3176 |
| 17:45 | 10 | 4 | 777 | 195 | 1169 | 25 | 14 | 4 | 10 | 5 | 1025 | 5 | 3243 |
| 18:00 | 7 | 3 | 815 | 205 | 1186 | 28 | 20 | 4 | 10 | 3 | 973 | 4 | 3258 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #8
Wednesday

SUM-IT
COUNT DATE
5/29/02

1 - King/Union and Mission St. EVENING PEAK



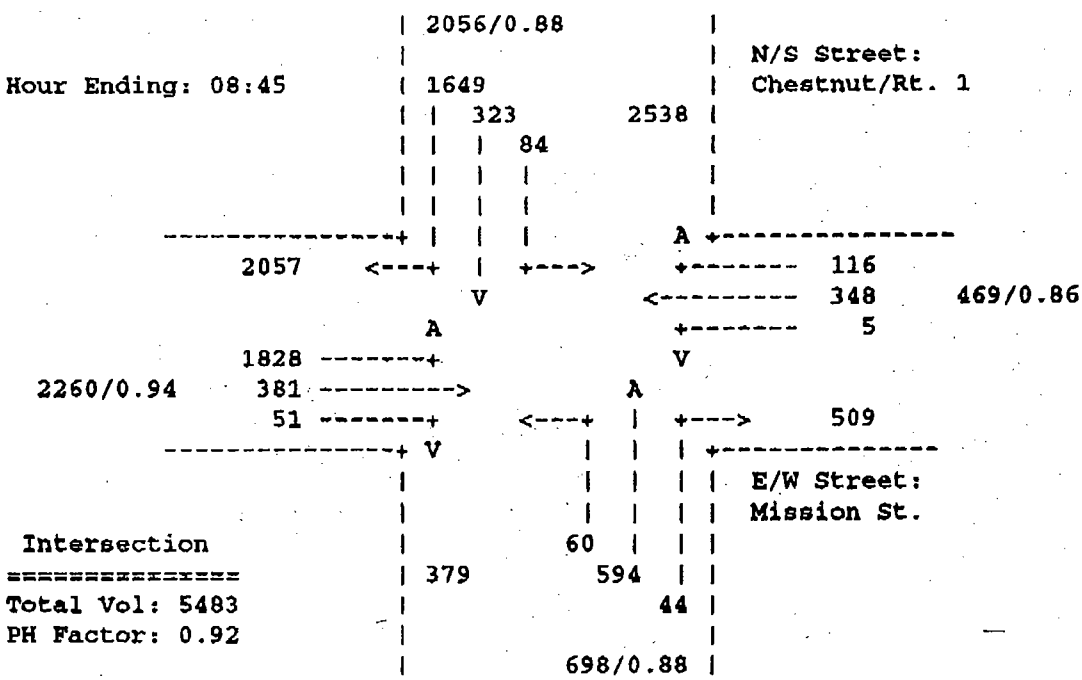
1 - Chestnut/Rt. 1 and Mission St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 260 | 50 | 11 | 4 | 37 | 2 | 1 | 53 | 6 | 5 | 41 | 242 | 712* |
| 07:30 | 717 | 107 | 31 | 18 | 78 | 4 | 3 | 132 | 12 | 14 | 97 | 578 | 1791* |
| 07:45 | 1131 | 159 | 45 | 30 | 163 | 8 | 5 | 253 | 31 | 24 | 163 | 959 | 2971* |
| 08:00 | 1581 | 274 | 65 | 44 | 243 | 12 | 24 | 399 | 47 | 34 | 243 | 1420 | 4386 |
| 08:15 | 1814 | 279 | 80 | 72 | 298 | 10 | 32 | 506 | 60 | 36 | 323 | 1654 | 5164 |
| 08:30 | 1716 | 308 | 82 | 82 | 342 | 9 | 42 | 602 | 66 | 47 | 345 | 1806 | 5447 |
| 08:45 | 1649 | 323 | 84 | 116 | 348 | 5 | 44 | 594 | 60 | 51 | 381 | 1828 | 5483 |
| 09:00 | 1572 | 328 | 95 | 121 | 331 | 3 | 31 | 629 | 62 | 57 | 399 | 1792 | 5420 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #9 SUM-IT
Tuesday COUNT DATE
6/4/02

1 - Chestnut/Rt. 1 and Mission St. MORNING PEAK



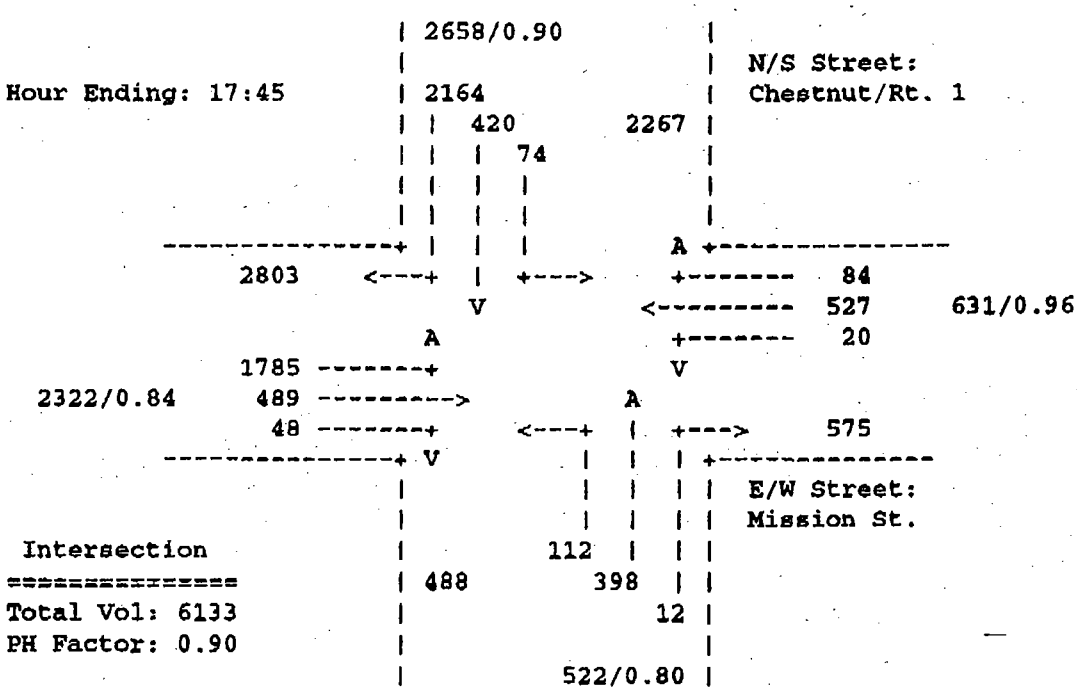
1 - Chestnut/Rt. 1 and Mission St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 307 | 75 | 26 | 18 | 90 | 1 | 5 | 95 | 24 | 16 | 101 | 350 | 1108* |
| 16:30 | 809 | 166 | 40 | 39 | 181 | 5 | 12 | 187 | 47 | 41 | 254 | 772 | 2553* |
| 16:45 | 1242 | 286 | 69 | 57 | 283 | 11 | 16 | 289 | 70 | 57 | 400 | 1129 | 3909* |
| 17:00 | 1756 | 330 | 87 | 78 | 409 | 15 | 17 | 367 | 94 | 77 | 505 | 1550 | 5285 |
| 17:15 | 2012 | 375 | 81 | 78 | 461 | 18 | 17 | 398 | 102 | 64 | 535 | 1671 | 5812 |
| 17:30 | 2083 | 427 | 87 | 78 | 503 | 19 | 11 | 393 | 112 | 52 | 505 | 1802 | 6072 |
| 17:45 | 2164 | 420 | 74 | 84 | 527 | 20 | 12 | 398 | 112 | 48 | 489 | 1785 | 6133 |
| 18:00 | 2071 | 490 | 76 | 82 | 513 | 21 | 20 | 383 | 115 | 43 | 490 | 1708 | 6012 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #9 SUM-IT
Tuesday COUNT DATE
6/04/02

1 - Chestnut/Rt. 1 and Mission St. EVENING PEAK



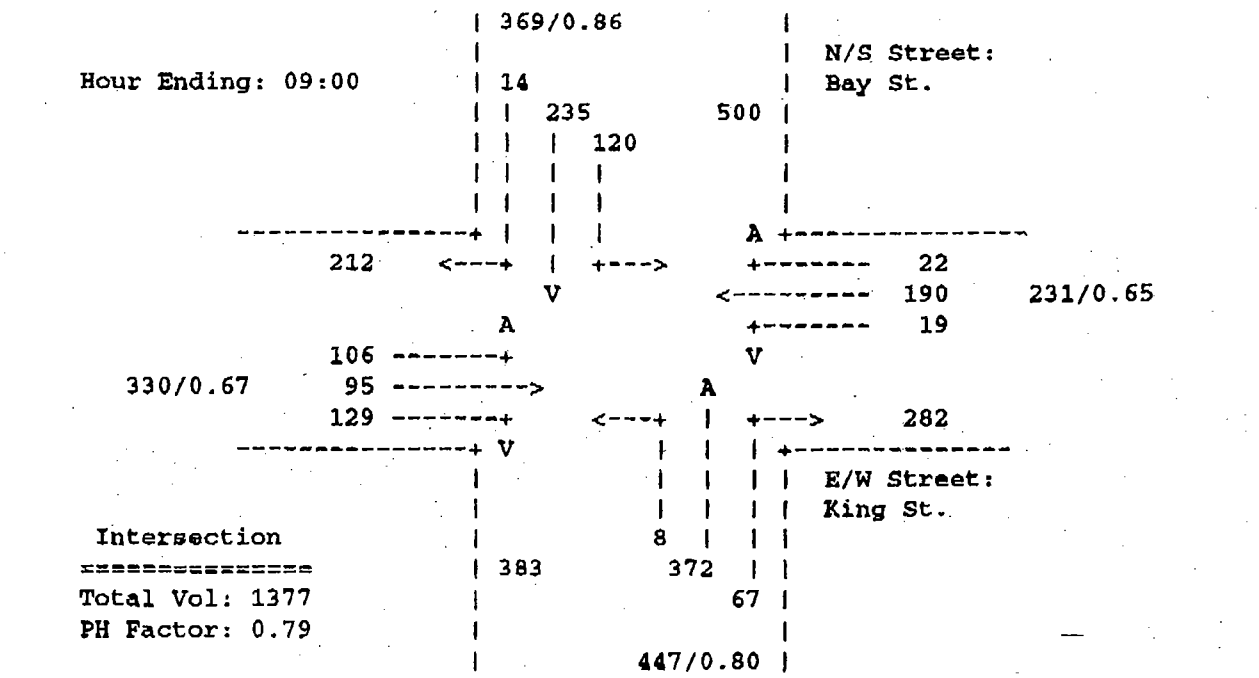
1 - Bay St. and King St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 31 | 11 | 3 | 10 | 2 | 2 | 30 | 2 | 11 | 4 | 6 | 112* |
| 07:30 | 6 | 68 | 33 | 5 | 29 | 7 | 6 | 105 | 9 | 29 | 12 | 10 | 319* |
| 07:45 | 8 | 113 | 56 | 9 | 38 | 17 | 14 | 150 | 11 | 62 | 21 | 20 | 519* |
| 08:00 | 11 | 158 | 71 | 14 | 59 | 22 | 20 | 239 | 13 | 152 | 39 | 43 | 841 |
| 08:15 | 17 | 187 | 101 | 20 | 122 | 27 | 33 | 311 | 13 | 176 | 71 | 89 | 1167 |
| 08:30 | 13 | 190 | 115 | 20 | 157 | 25 | 61 | 331 | 8 | 184 | 79 | 107 | 1290 |
| 08:45 | 15 | 202 | 110 | 22 | 175 | 18 | 62 | 336 | 6 | 184 | 87 | 111 | 1328 |
| 09:00 | 14 | 235 | 120 | 22 | 190 | 19 | 67 | 372 | 8 | 129 | 95 | 106 | 1377 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #7 SUM-IT
Tuesday COUNT DATE
5/30/02

1 - Bay St. and King St. MORNING PEAK



1 - Bay St. and King St.

HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 6 | 121 | 50 | 39 | 32 | 22 | 22 | 87 | 4 | 8 | 46 | 9 | 446* |
| 16:30 | 8 | 250 | 104 | 81 | 61 | 46 | 29 | 182 | 6 | 12 | 70 | 14 | 863* |
| 16:45 | 11 | 378 | 174 | 137 | 95 | 66 | 51 | 279 | 12 | 19 | 101 | 19 | 1342* |
| 17:00 | 11 | 469 | 206 | 180 | 114 | 75 | 56 | 369 | 16 | 27 | 128 | 22 | 1673 |
| 17:15 | 5 | 466 | 192 | 187 | 107 | 60 | 46 | 375 | 16 | 25 | 103 | 17 | 1599 |
| 17:30 | 12 | 512 | 213 | 207 | 134 | 52 | 52 | 423 | 15 | 24 | 119 | 18 | 1781 |
| 17:45 | 9 | 526 | 197 | 242 | 128 | 50 | 42 | 478 | 21 | 26 | 117 | 21 | 1857 |
| 18:00 | 10 | 532 | 209 | 284 | 145 | 49 | 48 | 499 | 22 | 25 | 121 | 28 | 1972 |

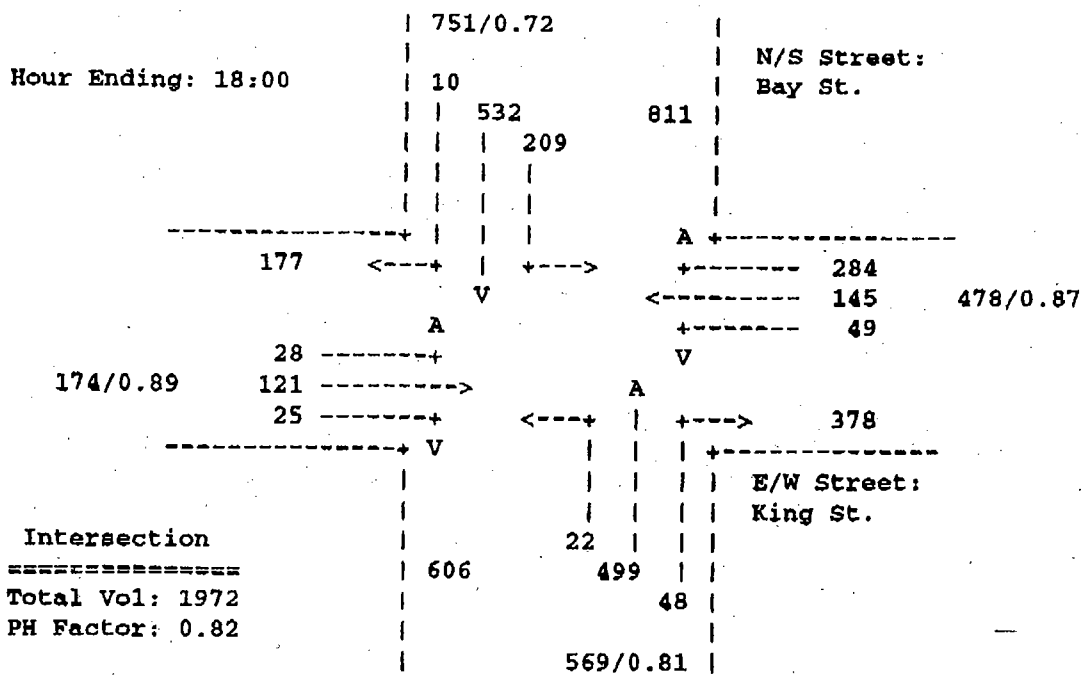
* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #7
Thursday

SUM-IT
COUNT DATE
5/30/02

1 - Bay St. and King St.

EVENING PEAK



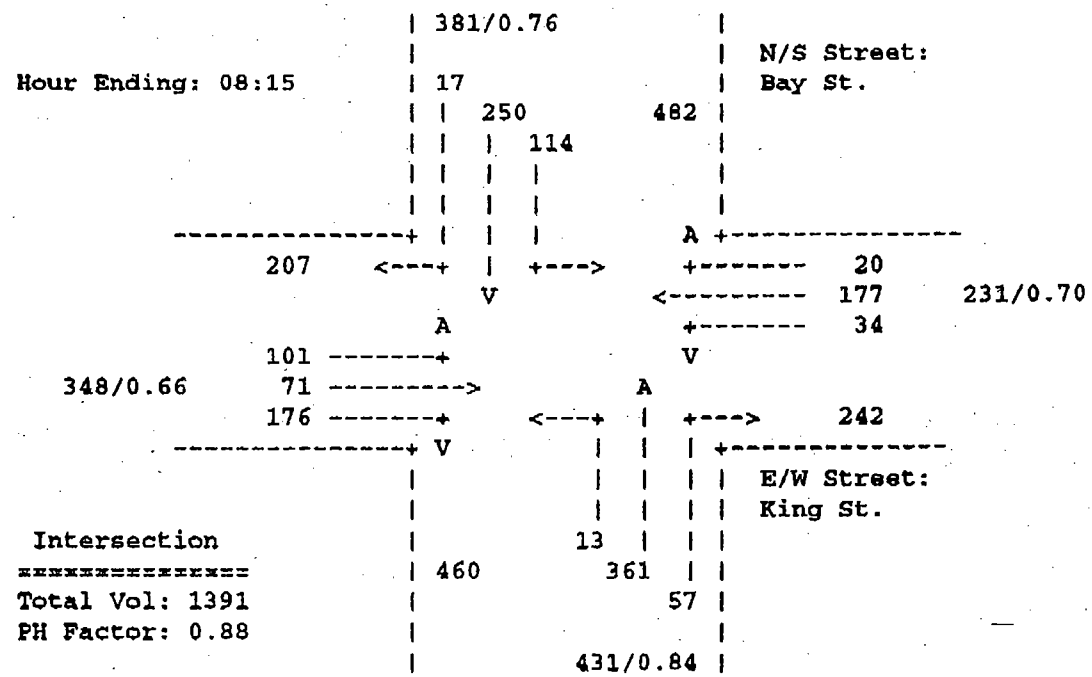
1 - Bay St. and King St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 39 | 11 | 3 | 10 | 2 | 2 | 30 | 2 | 11 | 4 | 6 | 120* |
| 07:30 | 6 | 96 | 33 | 5 | 39 | 7 | 6 | 105 | 9 | 29 | 12 | 10 | 357* |
| 07:45 | 8 | 184 | 69 | 9 | 93 | 24 | 38 | 200 | 11 | 62 | 21 | 32 | 751* |
| 08:00 | 11 | 229 | 84 | 14 | 166 | 29 | 44 | 289 | 13 | 152 | 39 | 55 | 1125 |
| 08:15 | 17 | 250 | 114 | 20 | 177 | 34 | 57 | 361 | 13 | 176 | 71 | 101 | 1391 |
| 08:30 | 13 | 238 | 115 | 20 | 157 | 32 | 61 | 331 | 8 | 184 | 79 | 107 | 1345 |
| 08:45 | 15 | 207 | 97 | 22 | 130 | 18 | 38 | 286 | 6 | 184 | 87 | 99 | 1189 |
| 09:00 | 14 | 240 | 107 | 22 | 93 | 19 | 43 | 322 | 8 | 154 | 95 | 94 | 1211 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #7 SUM-IT
Tuesday COUNT DATE
5/30/02

1 - Bay St. and King St. MORNING PEAK



1 - Walnut St. and Mission St. HOURLY SUMMARY

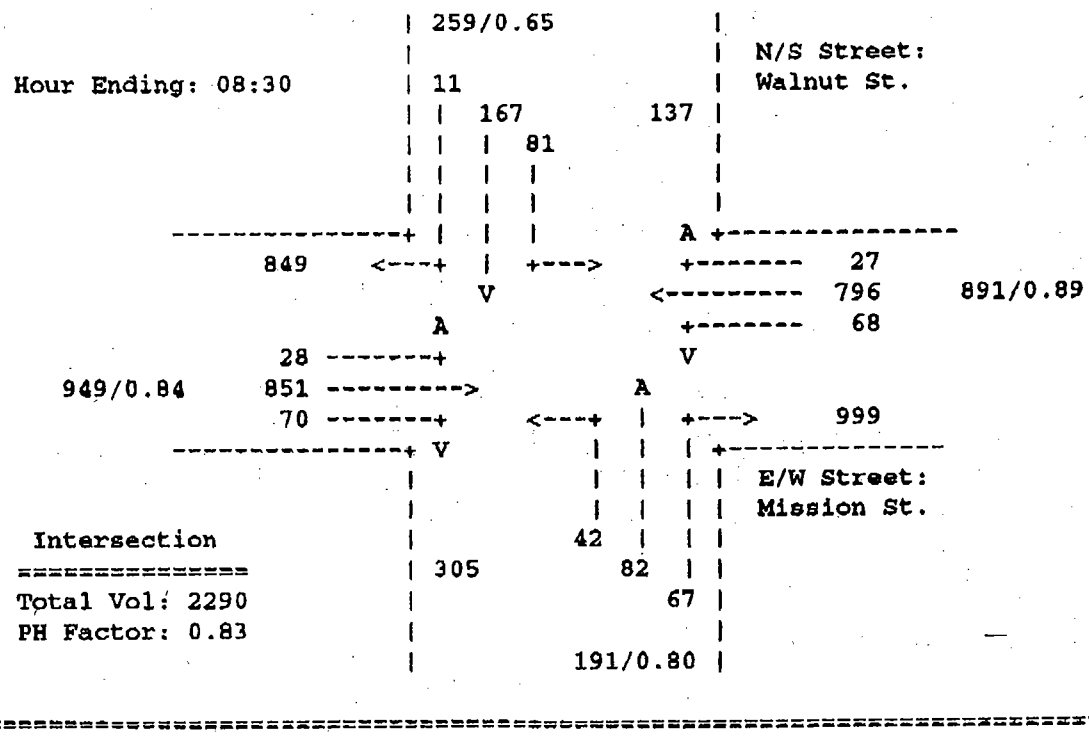
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 8 | 4 | 1 | 219 | 6 | 12 | 1 | 7 | 8 | 155 | 4 | 425* |
| 07:30 | 1 | 28 | 12 | 4 | 393 | 16 | 26 | 5 | 11 | 23 | 336 | 5 | 860* |
| 07:45 | 1 | 71 | 23 | 12 | 587 | 33 | 40 | 21 | 22 | 45 | 549 | 11 | 1415* |
| 08:00 | 5 | 140 | 50 | 24 | 795 | 63 | 58 | 51 | 34 | 66 | 795 | 26 | 2107 |
| 08:15 | 9 | 163 | 70 | 27 | 761 | 69 | 62 | 79 | 38 | 68 | 832 | 24 | 2202 |
| 08:30 | 11 | 167 | 81 | 27 | 796 | 68 | 67 | 82 | 42 | 70 | 851 | 28 | 2290 |
| 08:45 | 11 | 155 | 80 | 20 | 802 | 59 | 69 | 78 | 44 | 60 | 846 | 23 | 2247 |
| 09:00 | 9 | 104 | 62 | 13 | 796 | 32 | 75 | 54 | 41 | 53 | 852 | 11 | 2102 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #6
Thursday

SUM-IT
COUNT DATE
5/30/02

1 - Walnut St. and Mission St. MORNING PEAK



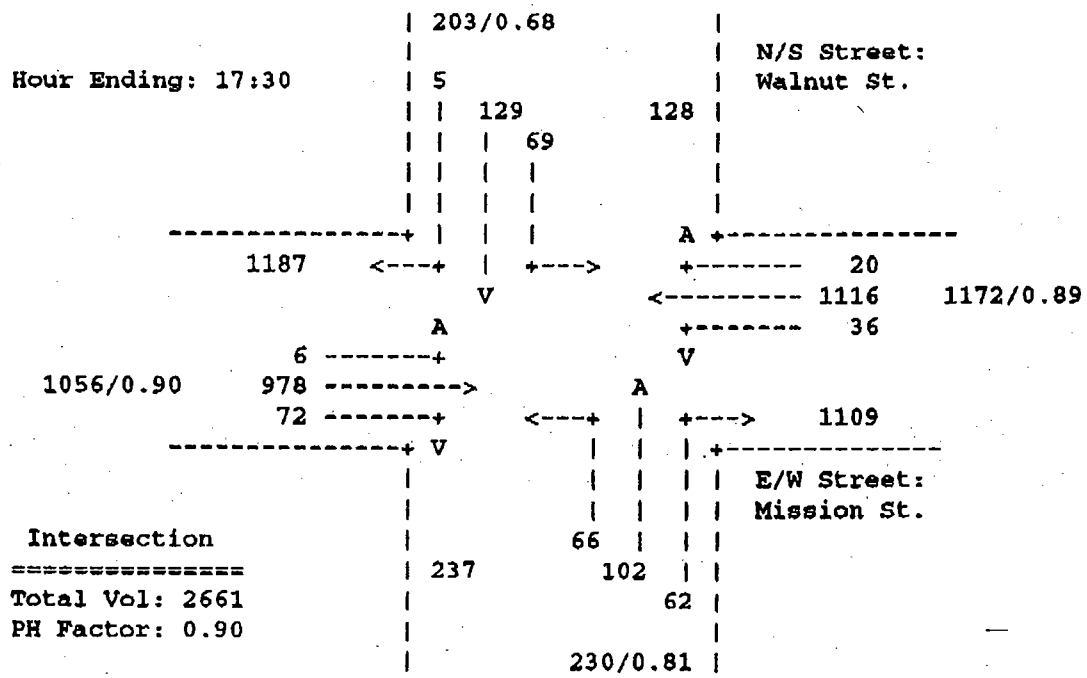
1 - Walnut St. and Mission St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 1 | 16 | 17 | 5 | 259 | 9 | 18 | 20 | 16 | 19 | 249 | 3 | 632* |
| 16:30 | 4 | 53 | 40 | 14 | 556 | 18 | 36 | 39 | 36 | 31 | 483 | 4 | 1314* |
| 16:45 | 7 | 77 | 52 | 21 | 821 | 20 | 53 | 56 | 52 | 54 | 752 | 5 | 1970* |
| 17:00 | 7 | 103 | 61 | 23 | 1083 | 30 | 69 | 76 | 64 | 75 | 988 | 7 | 2586 |
| 17:15 | 8 | 113 | 70 | 23 | 1099 | 37 | 64 | 91 | 61 | 72 | 963 | 6 | 2607 |
| 17:30 | 5 | 129 | 69 | 20 | 1116 | 36 | 62 | 102 | 66 | 72 | 978 | 6 | 2661 |
| 17:45 | 5 | 135 | 73 | 15 | 1125 | 48 | 72 | 108 | 67 | 61 | 924 | 8 | 2641 |
| 18:00 | 8 | 127 | 78 | 20 | 1153 | 46 | 77 | 110 | 67 | 46 | 916 | 9 | 2657 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #6 SUM-IT
Wednesday COUNT DATE
6/05/02

1 - Walnut St. and Mission St. EVENING PEAK



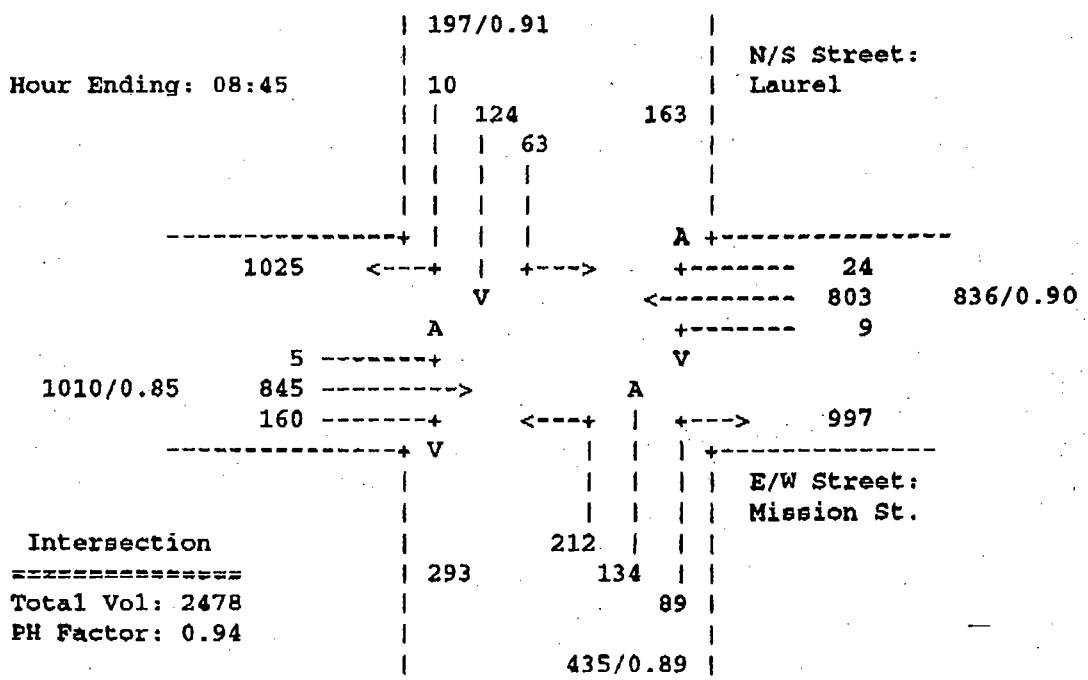
1 - Laurel and Mission St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 10 | 8 | 8 | 160 | 0 | 12 | 12 | 37 | 27 | 150 | 1 | 425* |
| 07:30 | 1 | 24 | 18 | 13 | 349 | 2 | 23 | 50 | 88 | 54 | 323 | 2 | 947* |
| 07:45 | 4 | 43 | 27 | 17 | 555 | 6 | 45 | 92 | 154 | 86 | 521 | 2 | 1552* |
| 08:00 | 4 | 74 | 47 | 19 | 740 | 9 | 65 | 135 | 213 | 142 | 761 | 3 | 2212 |
| 08:15 | 10 | 92 | 59 | 20 | 787 | 11 | 74 | 158 | 223 | 146 | 816 | 3 | 2399 |
| 08:30 | 12 | 114 | 64 | 19 | 788 | 12 | 87 | 149 | 218 | 160 | 847 | 5 | 2475 |
| 08:45 | 10 | 124 | 63 | 24 | 803 | 9 | 89 | 134 | 212 | 160 | 845 | 5 | 2478 |
| 09:00 | 12 | 120 | 55 | 31 | 818 | 10 | 84 | 123 | 216 | 153 | 822 | 6 | 2450 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #5 SUM-IT
Wednesday COUNT DATE
6/04/02

1 - Laurel and Mission St. MORNING PEAK



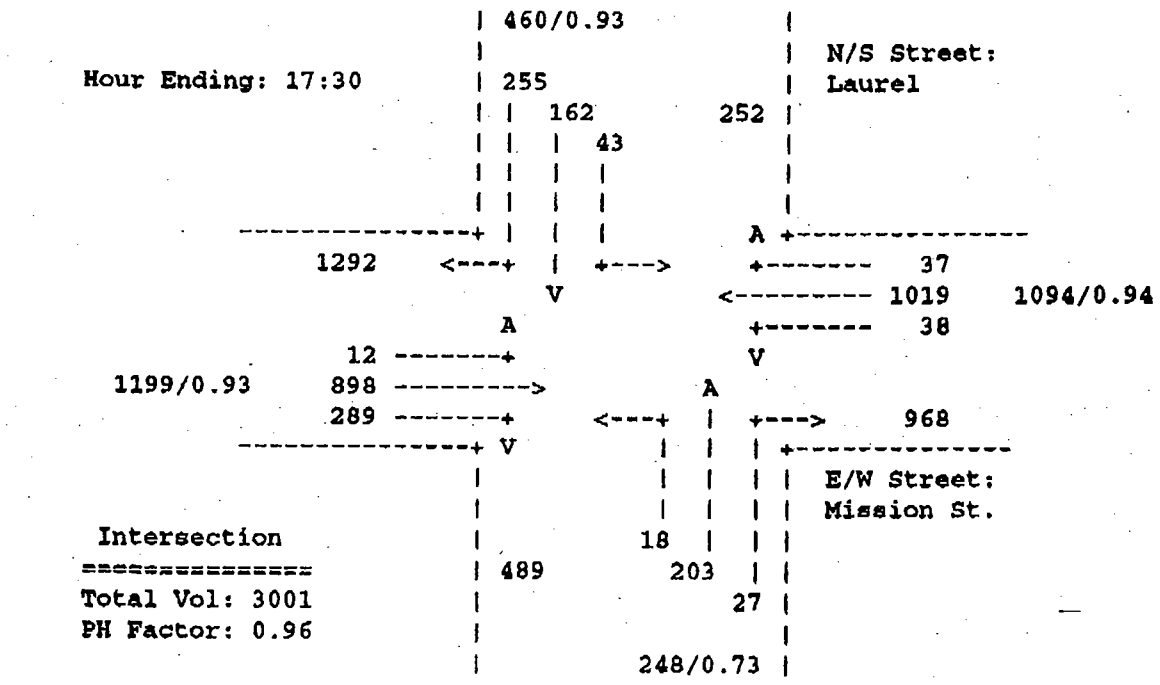
1 - Laurel and Mission St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 55 | 29 | 9 | 12 | 269 | 11 | 8 | 50 | 1 | 84 | 220 | 2 | 750* |
| 16:30 | 110 | 58 | 30 | 25 | 521 | 23 | 12 | 89 | 3 | 163 | 435 | 7 | 1476* |
| 16:45 | 172 | 98 | 41 | 32 | 789 | 33 | 17 | 130 | 7 | 238 | 678 | 12 | 2247* |
| 17:00 | 235 | 135 | 48 | 40 | 1010 | 38 | 23 | 170 | 11 | 311 | 880 | 12 | 2913 |
| 17:15 | 244 | 149 | 49 | 40 | 1009 | 39 | 26 | 170 | 12 | 297 | 895 | 12 | 2942 |
| 17:30 | 255 | 162 | 43 | 37 | 1019 | 38 | 27 | 203 | 18 | 289 | 898 | 12 | 3001 |
| 17:45 | 264 | 157 | 45 | 37 | 987 | 43 | 29 | 197 | 19 | 278 | 820 | 11 | 2887 |
| 18:00 | 272 | 156 | 48 | 36 | 1034 | 60 | 29 | 194 | 20 | 263 | 848 | 15 | 2975 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #5 SUM-IT
Tuesday COUNT DATE
6/04/02

1 - Laurel and Mission St. EVENING PEAK



1 - Bay St. and Mission St. HOURLY SUMMARY

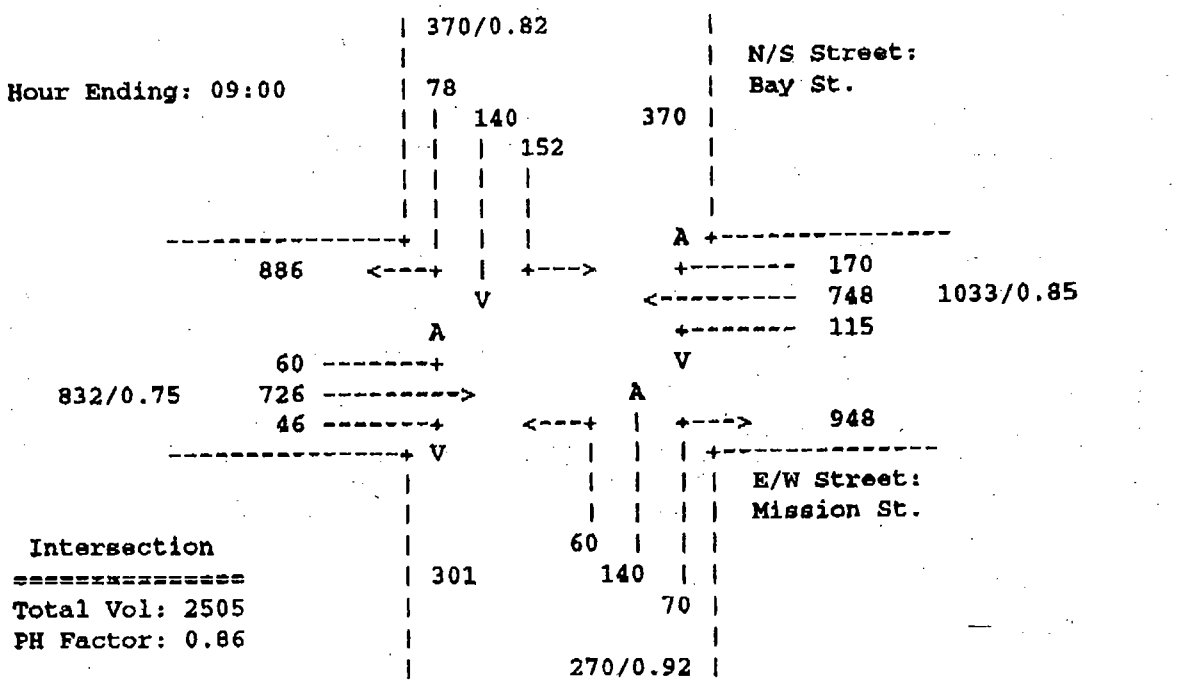
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 14 | 13 | 40 | 27 | 178 | 11 | 22 | 5 | 2 | 6 | 150 | 8 | 476* |
| 07:30 | 27 | 21 | 70 | 68 | 354 | 25 | 59 | 24 | 9 | 11 | 290 | 16 | 974* |
| 07:45 | 39 | 33 | 118 | 115 | 519 | 45 | 75 | 54 | 14 | 17 | 441 | 43 | 1513* |
| 08:00 | 56 | 56 | 165 | 174 | 678 | 69 | 99 | 101 | 31 | 24 | 613 | 71 | 2137 |
| 08:15 | 57 | 102 | 164 | 189 | 666 | 96 | 101 | 131 | 40 | 26 | 601 | 75 | 2248 |
| 08:30 | 73 | 128 | 169 | 186 | 688 | 116 | 80 | 149 | 47 | 36 | 662 | 75 | 2409 |
| 08:45 | 77 | 145 | 160 | 169 | 683 | 120 | 77 | 151 | 57 | 38 | 666 | 59 | 2402 |
| 09:00 | 78 | 140 | 152 | 170 | 748 | 115 | 70 | 140 | 60 | 46 | 726 | 60 | 2505 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #4
Thursday

SUM-IT
COUNT DATE
5/30/02

1 - Bay St. and Mission St. MORNING PEAK



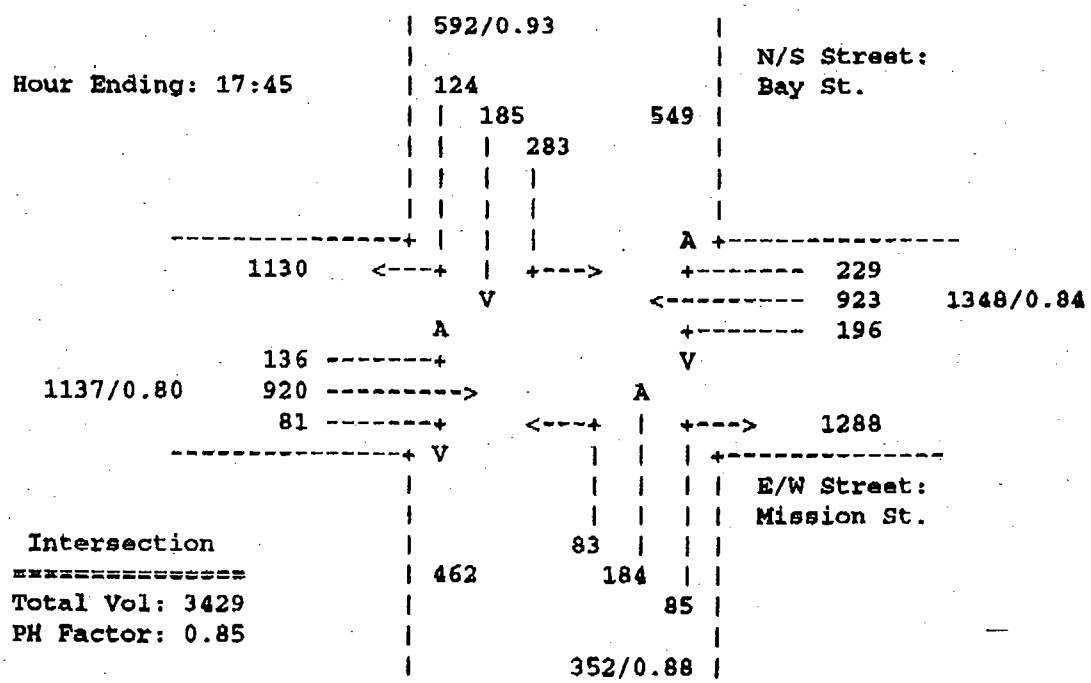
1 - Bay St. and Mission St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 40 | 41 | 50 | 35 | 189 | 40 | 30 | 40 | 15 | 18 | 225 | 19 | 742* |
| 16:30 | 65 | 83 | 111 | 66 | 395 | 72 | 46 | 67 | 28 | 43 | 451 | 53 | 1480* |
| 16:45 | 101 | 133 | 176 | 107 | 599 | 106 | 60 | 90 | 38 | 66 | 708 | 89 | 2273* |
| 17:00 | 134 | 178 | 257 | 170 | 888 | 155 | 81 | 140 | 61 | 96 | 1002 | 122 | 3284 |
| 17:15 | 128 | 183 | 264 | 180 | 898 | 156 | 64 | 147 | 69 | 95 | 982 | 124 | 3290 |
| 17:30 | 123 | 186 | 277 | 204 | 910 | 175 | 74 | 151 | 74 | 85 | 988 | 120 | 3367 |
| 17:45 | 124 | 185 | 283 | 229 | 923 | 196 | 85 | 184 | 83 | 81 | 920 | 136 | 3429 |
| 18:00 | 130 | 181 | 282 | 234 | 846 | 184 | 83 | 173 | 83 | 92 | 799 | 134 | 3221 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #4 SUM-IT
Thursday COUNT DATE
5/30/02

1 - Bay St. and Mission St. EVENING PEAK



1 - Swift and Mission/Rt.1 HOURLY SUMMARY

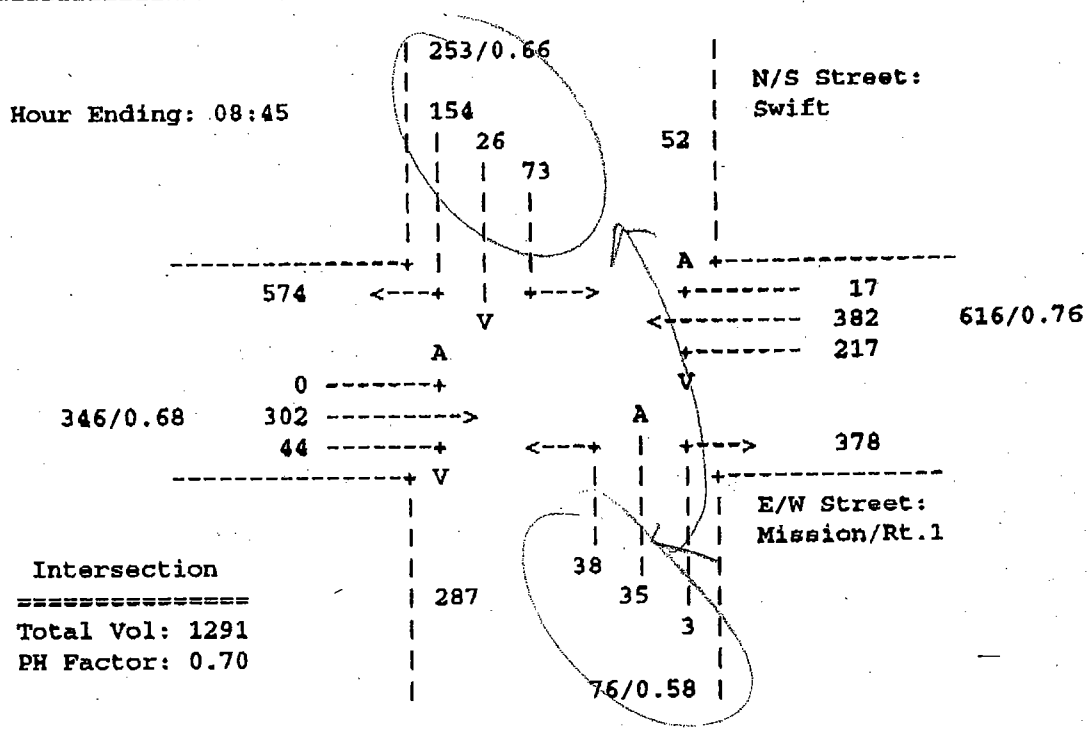
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 47 | 2 | 6 | 3 | 126 | 60 | 4 | 5 | 10 | 8 | 88 | 3 | 362* |
| 07:30 | 65 | 5 | 15 | 4 | 185 | 91 | 4 | 6 | 20 | 13 | 124 | 3 | 535* |
| 07:45 | 92 | 5 | 21 | 8 | 244 | 128 | 4 | 14 | 41 | 22 | 175 | 4 | 758* |
| 08:00 | 152 | 11 | 51 | 18 | 359 | 206 | 4 | 25 | 63 | 38 | 286 | 4 | 1217 |
| 08:15 | 138 | 16 | 55 | 16 | 307 | 183 | 0 | 28 | 56 | 38 | 260 | 1 | 1098 |
| 08:30 | 156 | 23 | 62 | 18 | 350 | 203 | 0 | 37 | 53 | 47 | 287 | 1 | 1237 |
| 08:45 | 154 | 26 | 73 | 17 | 382 | 217 | 3 | 35 | 38 | 44 | 302 | 0 | 1291 |
| 09:00 | 137 | 23 | 56 | 7 | 371 | 209 | 3 | 29 | 30 | 41 | 285 | 0 | 1191 |

* indicates partial hour total.

City of Santa Cruz - USCS Long Marine Lab #2
Wednesday

SUM-IT
COUNT DATE
6/5/02

1 - Swift and Mission/Rt.1 MORNING PEAK



1 - Swift and Mission/Rt. 1 HOURLY SUMMARY

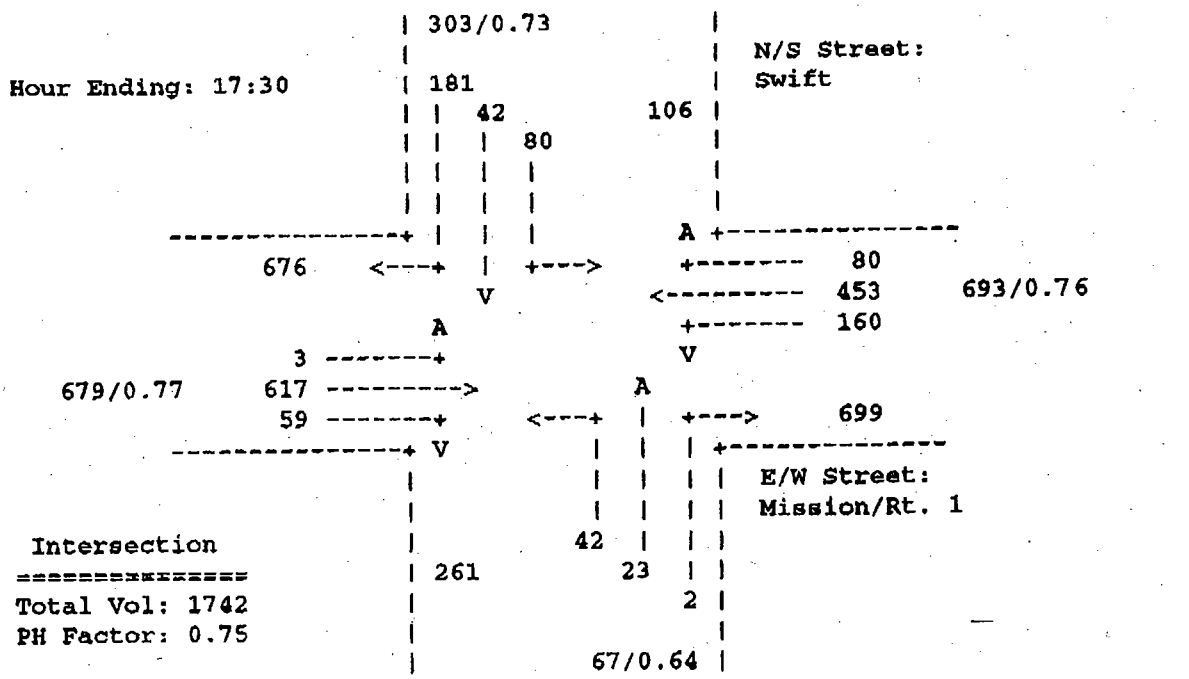
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 59 | 14 | 21 | 7 | 140 | 45 | 6 | 8 | 12 | 12 | 180 | 4 | 508* |
| 16:30 | 103 | 21 | 39 | 15 | 237 | 83 | 8 | 15 | 23 | 19 | 229 | 5 | 797* |
| 16:45 | 154 | 28 | 54 | 35 | 331 | 115 | 10 | 16 | 31 | 27 | 434 | 7 | 1242* |
| 17:00 | 196 | 30 | 73 | 47 | 447 | 157 | 10 | 20 | 42 | 44 | 557 | 8 | 1631 |
| 17:15 | 190 | 37 | 82 | 66 | 458 | 162 | 4 | 24 | 44 | 54 | 575 | 4 | 1700 |
| 17:30 | 181 | 42 | 80 | 80 | 453 | 160 | 2 | 23 | 42 | 59 | 617 | 3 | 1742 |
| 17:45 | 161 | 38 | 83 | 69 | 433 | 154 | 1 | 26 | 43 | 56 | 500 | 2 | 1566 |
| 18:00 | 161 | 40 | 82 | 72 | 425 | 137 | 1 | 36 | 44 | 44 | 463 | 3 | 1508 |

* indicates partial hour total.

City of Santa Cruz - USCS Long Marine Lab #2
Tuesday

SUM-IT
COUNT DATE
6/4/02

1 - Swift and Mission/Rt. 1 EVENING PEAK



1 - Almar Ave. and Mission St. HOURLY SUMMARY

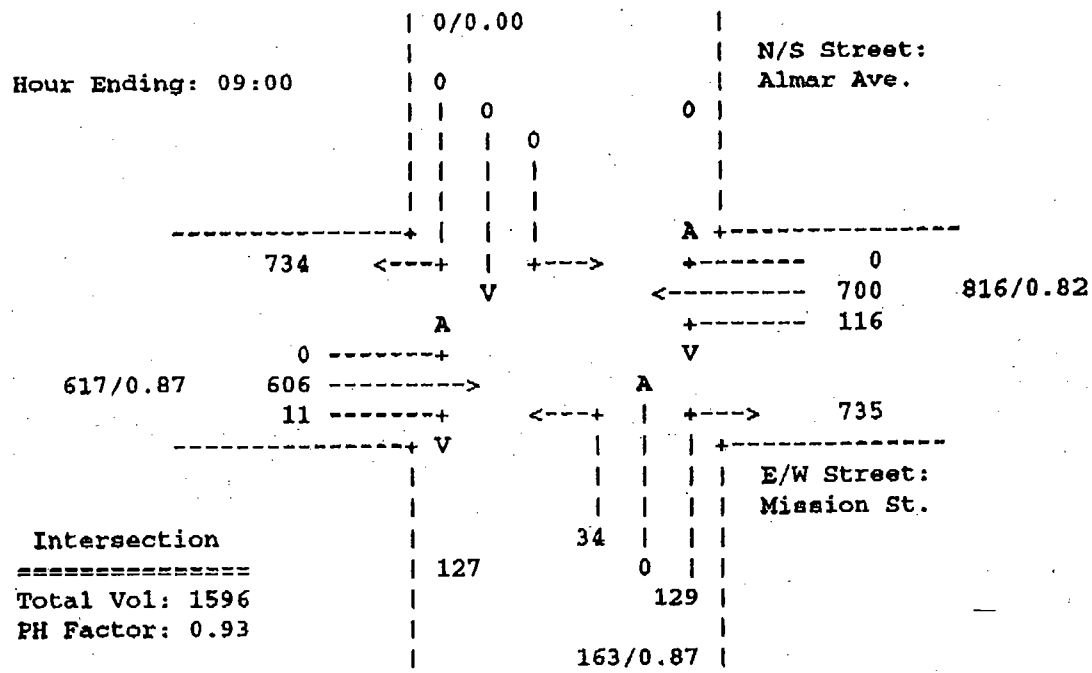
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 0 | 0 | 135 | 18 | 21 | 0 | 4 | 2 | 114 | 0 | 294* |
| 07:30 | 0 | 0 | 0 | 0 | 289 | 47 | 47 | 0 | 8 | 6 | 241 | 0 | 638* |
| 07:45 | 0 | 0 | 0 | 0 | 418 | 75 | 76 | 0 | 13 | 12 | 383 | 0 | 977* |
| 08:00 | 0 | 0 | 0 | 0 | 555 | 100 | 102 | 0 | 22 | 16 | 550 | 0 | 1345 |
| 08:15 | 0 | 0 | 0 | 0 | 559 | 117 | 115 | 0 | 29 | 16 | 601 | 0 | 1437 |
| 08:30 | 0 | 0 | 0 | 0 | 625 | 116 | 115 | 0 | 33 | 15 | 616 | 0 | 1520 |
| 08:45 | 0 | 0 | 0 | 0 | 680 | 111 | 124 | 0 | 37 | 11 | 599 | 0 | 1562 |
| 09:00 | 0 | 0 | 0 | 0 | 700 | 116 | 129 | 0 | 34 | 11 | 606 | 0 | 1596 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #3b
Wednesday

SUM-IT
COUNT DATE
6/05/02

1 - Almar Ave. and Mission St. MORNING PEAK



1 - Almar Ave. and Mission St. HOURLY SUMMARY

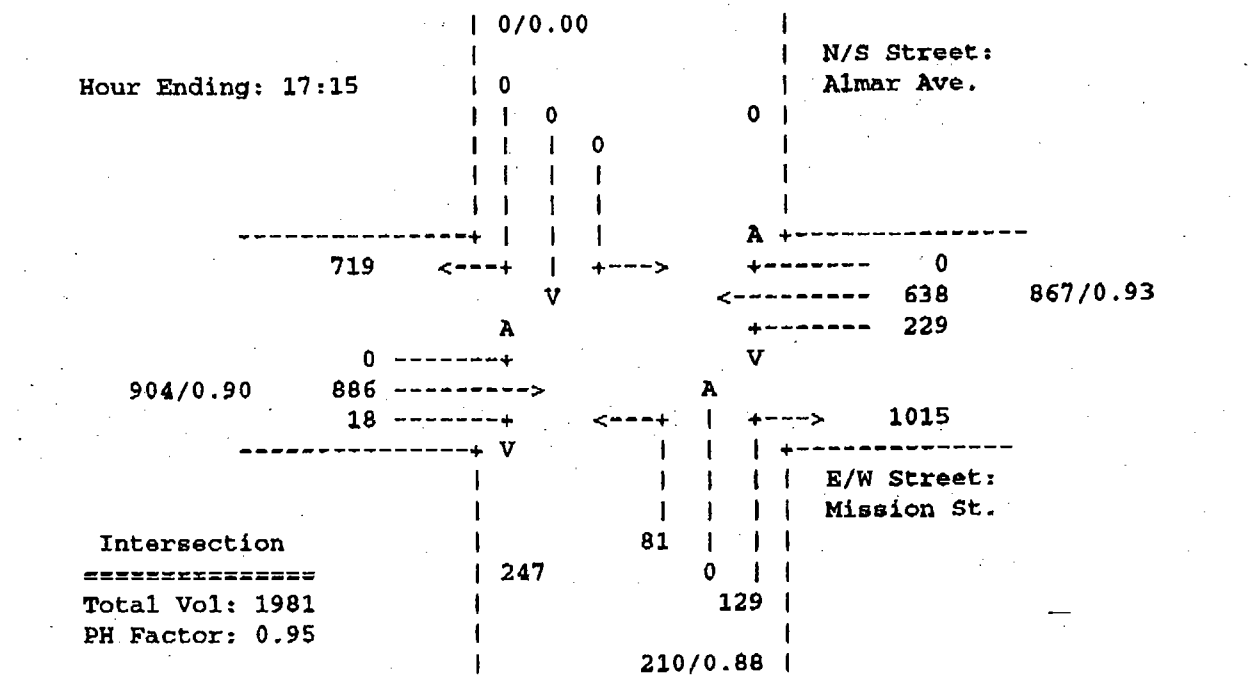
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 0 | 0 | 0 | 0 | 131 | 44 | 32 | 0 | 24 | 3 | 227 | 0 | 461* |
| 16:30 | 0 | 0 | 0 | 0 | 272 | 98 | 65 | 0 | 35 | 11 | 446 | 0 | 927* |
| 16:45 | 0 | 0 | 0 | 0 | 448 | 147 | 97 | 0 | 50 | 14 | 695 | 0 | 1451* |
| 17:00 | 0 | 0 | 0 | 0 | 610 | 217 | 122 | 0 | 84 | 18 | 898 | 0 | 1949 |
| 17:15 | 0 | 0 | 0 | 0 | 638 | 229 | 129 | 0 | 81 | 18 | 886 | 0 | 1981 |
| 17:30 | 0 | 0 | 0 | 0 | 651 | 226 | 142 | 0 | 111 | 13 | 814 | 0 | 1957 |
| 17:45 | 0 | 0 | 0 | 0 | 592 | 218 | 142 | 0 | 133 | 13 | 737 | 0 | 1835 |
| 18:00 | 0 | 0 | 0 | 0 | 553 | 209 | 153 | 0 | 117 | 10 | 738 | 0 | 1780 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #3b
Wednesday

SUM-IT
COUNT DATE
6/05/02

1 - Almar Ave. and Mission St. EVENING PEAK



1 - Younglove Ave. and Mission St. HOURLY SUMMARY

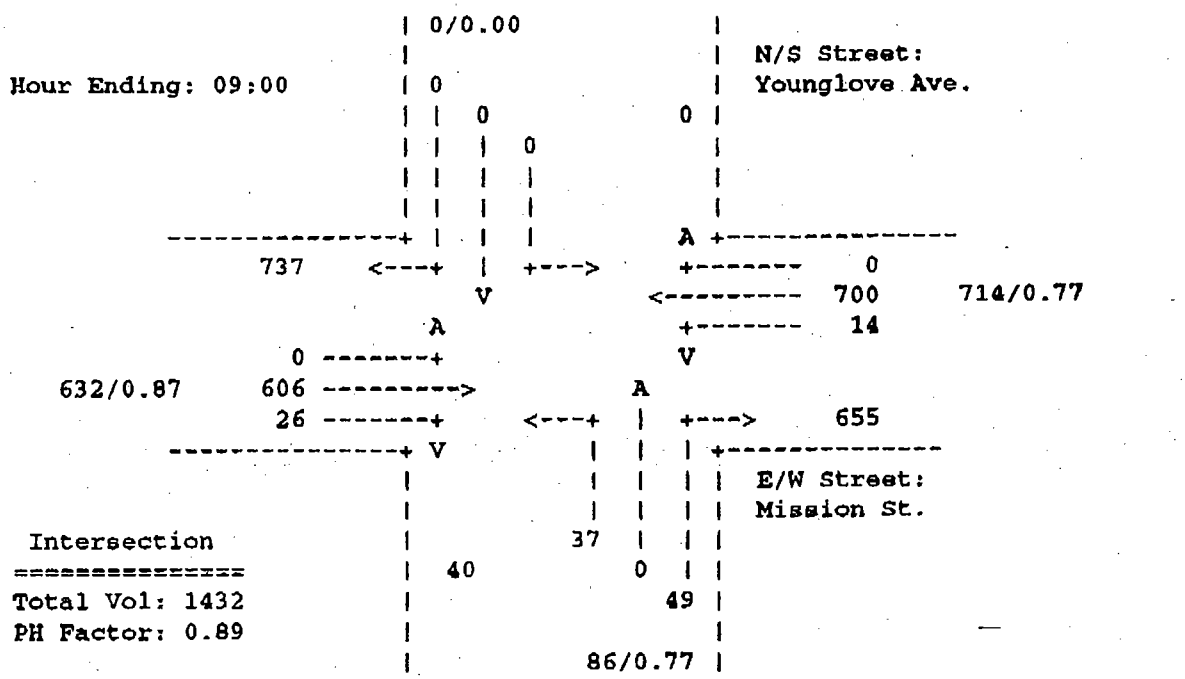
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 0 | 0 | 135 | 3 | 10 | 0 | 4 | 0 | 114 | 0 | 266* |
| 07:30 | 0 | 0 | 0 | 0 | 289 | 9 | 23 | 0 | 9 | 3 | 241 | 0 | 574* |
| 07:45 | 0 | 0 | 0 | 0 | 418 | 12 | 30 | 0 | 18 | 10 | 383 | 0 | 871* |
| 08:00 | 0 | 0 | 0 | 0 | 555 | 14 | 41 | 0 | 29 | 14 | 550 | 0 | 1203 |
| 08:15 | 0 | 0 | 0 | 0 | 559 | 16 | 52 | 0 | 32 | 21 | 601 | 0 | 1281 |
| 08:30 | 0 | 0 | 0 | 0 | 635 | 11 | 51 | 0 | 39 | 25 | 616 | 0 | 1377 |
| 08:45 | 0 | 0 | 0 | 0 | 680 | 13 | 49 | 0 | 38 | 22 | 599 | 0 | 1401 |
| 09:00 | 0 | 0 | 0 | 0 | 700 | 14 | 49 | 0 | 37 | 26 | 606 | 0 | 1432 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab - 3a
Wednesday

SUM-IT
COUNT DATE
6/05/02

1 - Younglove Ave. and Mission St. MORNING PEAK



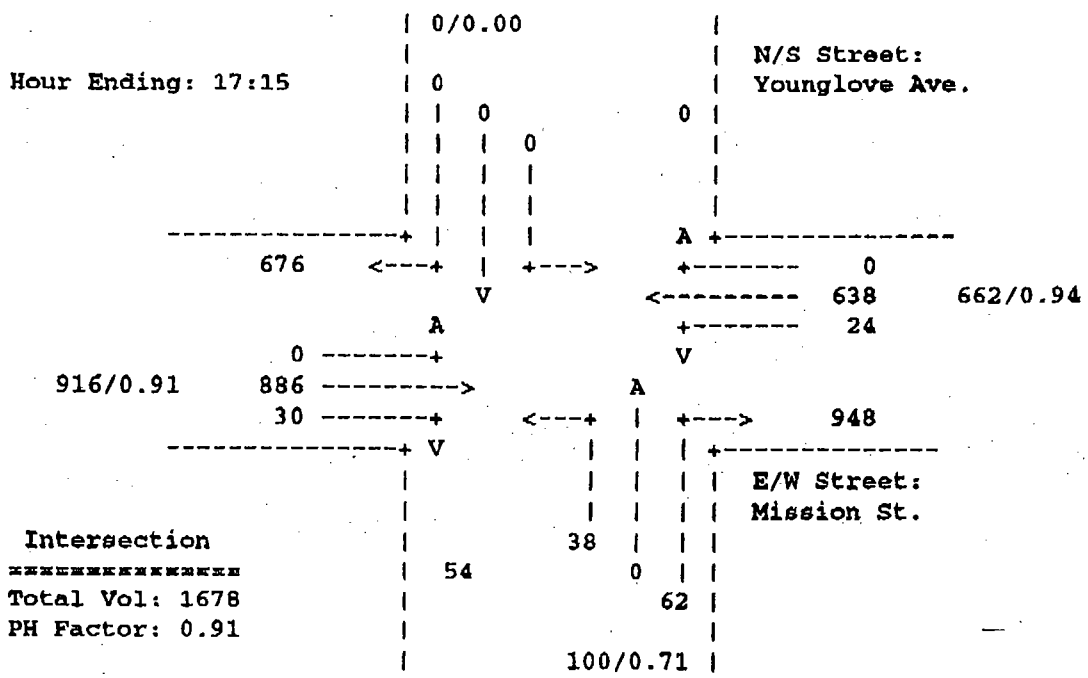
1 - Younglove Ave. and Mission St. HOURLY SUMMARY

| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 0 | 0 | 0 | 0 | 131 | 10 | 14 | 0 | 12 | 6 | 227 | 0 | 400* |
| 16:30 | 0 | 0 | 0 | 0 | 277 | 16 | 22 | 0 | 27 | 16 | 446 | 0 | 804* |
| 16:45 | 0 | 0 | 0 | 0 | 448 | 21 | 43 | 0 | 41 | 19 | 695 | 0 | 1267* |
| 17:00 | 0 | 0 | 0 | 0 | 610 | 26 | 59 | 0 | 44 | 25 | 898 | 0 | 1662 |
| 17:15 | 0 | 0 | 0 | 0 | 638 | 24 | 62 | 0 | 38 | 30 | 886 | 0 | 1678 |
| 17:30 | 0 | 0 | 0 | 0 | 646 | 26 | 67 | 0 | 29 | 23 | 814 | 0 | 1605 |
| 17:45 | 0 | 0 | 0 | 0 | 592 | 32 | 56 | 0 | 17 | 25 | 737 | 0 | 1459 |
| 18:00 | 0 | 0 | 0 | 0 | 553 | 32 | 52 | 0 | 23 | 24 | 738 | 0 | 1422 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab #3a SUM-IT
Wednesday COUNT DATE
6/05/02

1 - Younglove Ave. and Mission St. EVENING PEAK



1 - Almar Ave./Younglove Ave. and Mission St. HOURLY SUMMARY

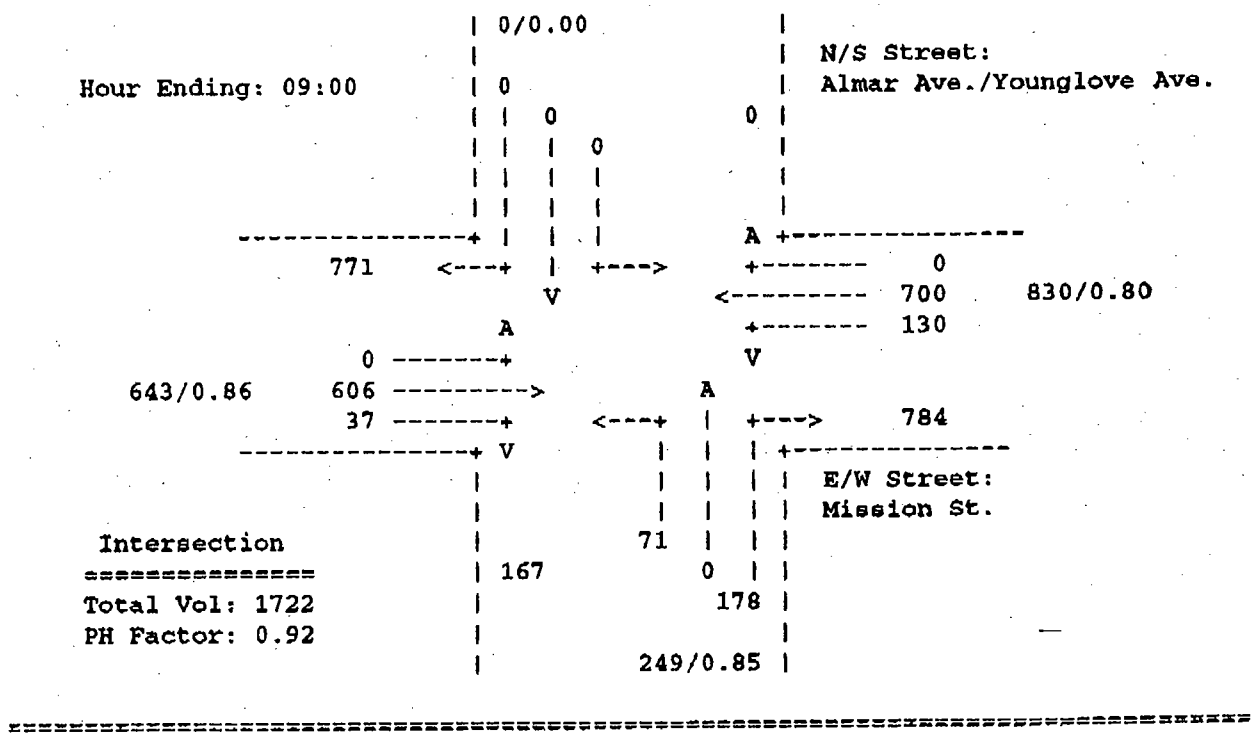
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:15 | 0 | 0 | 0 | 0 | 135 | 21 | 31 | 0 | 8 | 2 | 114 | 0 | 311* |
| 07:30 | 0 | 0 | 0 | 0 | 289 | 56 | 70 | 0 | 17 | 9 | 241 | 0 | 682* |
| 07:45 | 0 | 0 | 0 | 0 | 418 | 87 | 106 | 0 | 31 | 22 | 383 | 0 | 1047* |
| 08:00 | 0 | 0 | 0 | 0 | 555 | 114 | 143 | 0 | 51 | 30 | 550 | 0 | 1443 |
| 08:15 | 0 | 0 | 0 | 0 | 559 | 133 | 167 | 0 | 61 | 37 | 601 | 0 | 1558 |
| 08:30 | 0 | 0 | 0 | 0 | 635 | 127 | 166 | 0 | 72 | 40 | 616 | 0 | 1656 |
| 08:45 | 0 | 0 | 0 | 0 | 680 | 124 | 173 | 0 | 75 | 33 | 599 | 0 | 1684 |
| 09:00 | 0 | 0 | 0 | 0 | 700 | 130 | 178 | 0 | 71 | 37 | 606 | 0 | 1722 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab - 3c
Wednesday

SUM-IT
COUNT DATE
6/05/02

1 - Almar Ave./Younglove Ave. and Mission St. MORNING PEAK



1 - Almar Ave./Younglove Ave. and Mission St. HOURLY SUMMARY

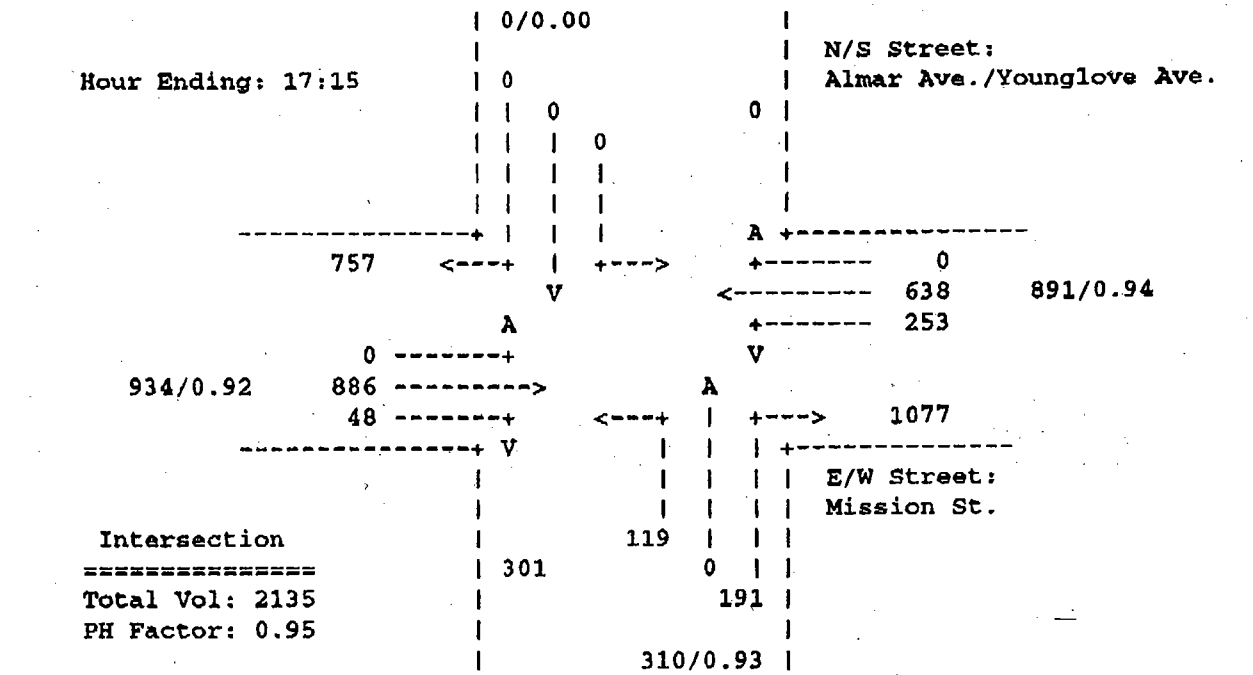
| Hour Ending | North RT | North TH | North LT | East RT | East TH | East LT | South RT | South TH | South LT | West RT | West TH | West LT | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15 | 0 | 0 | 0 | 0 | 131 | 54 | 46 | 0 | 36 | 9 | 227 | 0 | 503* |
| 16:30 | 0 | 0 | 0 | 0 | 277 | 114 | 87 | 0 | 62 | 27 | 446 | 0 | 1013* |
| 16:45 | 0 | 0 | 0 | 0 | 448 | 168 | 140 | 0 | 91 | 33 | 695 | 0 | 1575* |
| 17:00 | 0 | 0 | 0 | 0 | 610 | 243 | 181 | 0 | 128 | 43 | 898 | 0 | 2103 |
| 17:15 | 0 | 0 | 0 | 0 | 638 | 253 | 191 | 0 | 119 | 48 | 886 | 0 | 2135 |
| 17:30 | 0 | 0 | 0 | 0 | 646 | 252 | 209 | 0 | 140 | 36 | 814 | 0 | 2097 |
| 17:45 | 0 | 0 | 0 | 0 | 592 | 250 | 198 | 0 | 150 | 38 | 737 | 0 | 1965 |
| 18:00 | 0 | 0 | 0 | 0 | 553 | 241 | 205 | 0 | 140 | 34 | 738 | 0 | 1911 |

* indicates partial hour total.

City of Santa Cruz - UCSC Long Marine Lab - 3c
Wednesday

SUM-IT
COUNT DATE
6/05/02

1 - Almar Ave./Younglove Ave. and Mission St. EVENING PEAK



CITY OF SANTA CRUZ

TRAFFIC RESEARCH ASSOCIATES

Site Code : 000000000001
Start Date: 05/15/2001
File I.D. : WESTERN
Page : 1

Street name :WESTERN DR.- MONARCH WY. TO WESTERN CT. Direction 1

| Begin | Tues. | SB | | NB | | Combined | | Wed. | SB | | NB | | Combined | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | 05/15 | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. | 05/16 | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. |
| 12:00 | | 4 | 42 | 5 | 40 | 9 | 82 | | 3 | 27 | 5 | 43 | 8 | 70 |
| 12:15 | | 9 | 29 | 3 | 29 | 12 | 58 | | 8 | 38 | 2 | 45 | 10 | 83 |
| 12:30 | | 1 | 30 | 1 | 35 | 2 | 65 | | 7 | 42 | 5 | 45 | 12 | 87 |
| 12:45 | | 4 | 27 | 4 | 42 | 8 | 69 | | 6 | 45 | 6 | 32 | 12 | 77 |
| 01:00 | | 5 | 27 | 3 | 42 | 8 | 69 | | 5 | 19 | 1 | 35 | 6 | 54 |
| 01:15 | | 3 | 55 | 1 | 31 | 4 | 86 | | 4 | 32 | 3 | 34 | 7 | 66 |
| 01:30 | | 4 | 32 | 3 | 37 | 7 | 69 | | 2 | 30 | 3 | 42 | 5 | 72 |
| 01:45 | | 4 | 42 | 2 | 45 | 6 | 87 | | 4 | 37 | 5 | 38 | 9 | 75 |
| 02:00 | | 3 | 52 | 4 | 30 | 7 | 82 | | 2 | 55 | 2 | 32 | 4 | 87 |
| 02:15 | | 4 | 32 | 0 | 24 | 4 | 56 | | 6 | 48 | 1 | 31 | 7 | 79 |
| 02:30 | | 1 | 35 | 1 | 37 | 2 | 72 | | 3 | 52 | 1 | 34 | 4 | 86 |
| 02:45 | | 2 | 35 | 0 | 41 | 2 | 76 | | 1 | 40 | 3 | 34 | 4 | 74 |
| 03:00 | | 2 | 37 | 3 | 37 | 5 | 74 | | 1 | 35 | 1 | 46 | 2 | 81 |
| 03:15 | | 1 | 37 | 2 | 35 | 3 | 72 | | 2 | 37 | 1 | 47 | 3 | 84 |
| 03:30 | | 0 | 44 | 2 | 57 | 2 | 101 | | 1 | 44 | 2 | 38 | 3 | 82 |
| 03:45 | | 0 | 41 | 0 | 56 | 0 | 97 | | 1 | 49 | 0 | 45 | 1 | 94 |
| 04:00 | | 0 | 50 | 0 | 42 | 0 | 92 | | 0 | 30 | 1 | 45 | 1 | 75 |
| 04:15 | | 1 | 40 | 1 | 48 | 2 | 88 | | 1 | 32 | 1 | 31 | 2 | 63 |
| 04:30 | | 2 | 31 | 0 | 41 | 2 | 72 | | 2 | 28 | 1 | 45 | 3 | 73 |
| 04:45 | | 0 | 35 | 3 | 48 | 3 | 83 | | 0 | 41 | 0 | 57 | 0 | 98 |
| 05:00 | | 2 | 52 | 3 | 51 | 5 | 103 | | 2 | 66 | 1 | 60 | 3 | 126 |
| 05:15 | | 0 | 60 | 0 | 53 | 0 | 113 | | 0 | 45 | 1 | 58 | 1 | 103 |
| 05:30 | | 5 | 40 | 6 | 48 | 11 | 88 | | 6 | 45 | 4 | 45 | 10 | 90 |
| 05:45 | | 4 | 64 | 1 | 53 | 5 | 117 | | 8 | 39 | 1 | 35 | 9 | 74 |
| 06:00 | | 3 | 52 | 1 | 47 | 4 | 99 | | 5 | 46 | 2 | 48 | 7 | 94 |
| 06:15 | | 4 | 43 | 9 | 34 | 13 | 77 | | 11 | 40 | 9 | 46 | 20 | 86 |
| 06:30 | | 8 | 45 | 3 | 43 | 11 | 88 | | 4 | 48 | 3 | 49 | 7 | 97 |
| 06:45 | | 8 | 32 | 11 | 39 | 19 | 71 | | 10 | 45 | 10 | 52 | 20 | 97 |
| 07:00 | | 10 | 38 | 12 | 39 | 22 | 77 | | 3 | 46 | 10 | 39 | 13 | 85 |
| 07:15 | | 11 | 46 | 19 | 34 | 30 | 80 | | 16 | 38 | 23 | 35 | 39 | 73 |
| 07:30 | | 24 | 29 | 41 | 36 | 65 | 65 | | 25 | 38 | 26 | 46 | 51 | 84 |
| 07:45 | | 19 | 41 | 58 | 40 | 77 | 81 | | 32 | 28 | 37 | 37 | 69 | 65 |
| 08:00 | | 39 | 30 | 33 | 36 | 72 | 66 | | 37 | 26 | 44 | 30 | 81 | 56 |
| 08:15 | | 40 | 28 | 49 | 26 | 89 | 54 | | 37 | 28 | 62 | 20 | 99 | 48 |
| 08:30 | | 31 | 24 | 37 | 24 | 68 | 48 | | 39 | 21 | 57 | 44 | 96 | 65 |
| 08:45 | | 25 | 35 | 39 | 18 | 64 | 53 | | 23 | 34 | 56 | 25 | 79 | 59 |
| 09:00 | | 22 | 18 | 41 | 31 | 63 | 49 | | 31 | 32 | 48 | 18 | 79 | 50 |
| 09:15 | | 21 | 24 | 44 | 27 | 65 | 51 | | 24 | 19 | 54 | 16 | 78 | 35 |
| 09:30 | | 21 | 29 | 41 | 17 | 62 | 46 | | 25 | 10 | 32 | 15 | 57 | 25 |
| 09:45 | | 20 | 21 | 41 | 21 | 61 | 42 | | 21 | 15 | 40 | 15 | 61 | 30 |
| 10:00 | | 30 | 9 | 26 | 20 | 56 | 29 | | 12 | 23 | 25 | 18 | 37 | 41 |
| 10:15 | | 28 | 22 | 31 | 9 | 59 | 31 | | 26 | 25 | 27 | 10 | 53 | 35 |
| 10:30 | | 20 | 11 | 28 | 18 | 48 | 29 | | 18 | 12 | 48 | 8 | 66 | 20 |
| 10:45 | | 28 | 8 | 19 | 8 | 47 | 16 | | 30 | 14 | 43 | 9 | 73 | 23 |
| 11:00 | | 22 | 13 | 27 | 6 | 49 | 19 | | 31 | 8 | 24 | 11 | 55 | 19 |
| 11:15 | | 22 | 6 | 31 | 7 | 53 | 13 | | 27 | 5 | 28 | 13 | 55 | 18 |
| 11:30 | | 23 | 5 | 55 | 4 | 78 | 9 | | 29 | 9 | 29 | 9 | 58 | 18 |
| 11:45 | | 31 | 13 | 51 | 6 | 82 | 19 | | 27 | 7 | 25 | 6 | 52 | 13 |
| Totals | | 571 | 1591 | 795 | 1592 | 1366 | 3183 | | 618 | 1573 | 813 | 1616 | 1431 | 3189 |
| Day Totals | | | 2162 | | 2387 | | 4549 | | | 2191 | | 2429 | | 4620 |
| % Total | | 12.5% | 34.9% | 17.4% | 35.0% | | | | 13.3% | 34.0% | 17.6% | 34.9% | | |
| Peaks | | 08:00 | 05:00 | 07:30 | 05:00 | 07:45 | 05:00 | | 07:45 | 04:45 | 08:15 | 04:30 | 08:00 | 04:45 |
| Volume | | 135 | 216 | 181 | 205 | 306 | 421 | | 145 | 197 | 223 | 220 | 355 | 417 |
| P.H.F. | | .84 | .84 | .78 | .96 | .85 | .89 | | .92 | .74 | .89 | .91 | .89 | .82 |

CITY OF SANTA CRUZ

TRAFFIC RESEARCH ASSOCIATES

Site Code : 000000000001
Start Date: 05/15/2001
File I.D. : WESTERN
Page : 2

Street name :WESTERN DR.- MONARCH WY. TO WESTERN CT. Direction 1

| Begin | Thur. | SB | | NB | | Combined | | Fri. | SB | | NB | | Combined | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | 05/17 | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. | 05/18 | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. |
| 12:00 | | 9 | 36 | 6 | 27 | 15 | 63 | | * | * | * | * | * | * |
| 12:15 | | 2 | 39 | 8 | 37 | 10 | 76 | | * | * | * | * | * | * |
| 12:30 | | 6 | 26 | 4 | 32 | 10 | 58 | | * | * | * | * | * | * |
| 12:45 | | 8 | 30 | 4 | 38 | 12 | 68 | | * | * | * | * | * | * |
| 01:00 | | 7 | 24 | 1 | 38 | 8 | 62 | | * | * | * | * | * | * |
| 01:15 | | 1 | 37 | 1 | 41 | 2 | 78 | | * | * | * | * | * | * |
| 01:30 | | 2 | 31 | 3 | 39 | 5 | 70 | | * | * | * | * | * | * |
| 01:45 | | 5 | 27 | 3 | 36 | 8 | 63 | | * | * | * | * | * | * |
| 02:00 | | 1 | 46 | 8 | 29 | 9 | 75 | | * | * | * | * | * | * |
| 02:15 | | 5 | 41 | 2 | 30 | 7 | 71 | | * | * | * | * | * | * |
| 02:30 | | 0 | 38 | 3 | 39 | 3 | 77 | | * | * | * | * | * | * |
| 02:45 | | 0 | 36 | 3 | 31 | 3 | 67 | | * | * | * | * | * | * |
| 03:00 | | 0 | 34 | 1 | 41 | 1 | 75 | | * | * | * | * | * | * |
| 03:15 | | 0 | 48 | 2 | 41 | 2 | 89 | | * | * | * | * | * | * |
| 03:30 | | 1 | 42 | 2 | 49 | 3 | 91 | | * | * | * | * | * | * |
| 03:45 | | 1 | 39 | 0 | 36 | 1 | 75 | | * | * | * | * | * | * |
| 04:00 | | 2 | 45 | 1 | 26 | 3 | 71 | | * | * | * | * | * | * |
| 04:15 | | 0 | 46 | 0 | 30 | 0 | 76 | | * | * | * | * | * | * |
| 04:30 | | 0 | 51 | 0 | 47 | 0 | 98 | | * | * | * | * | * | * |
| 04:45 | | 2 | 32 | 0 | 53 | 2 | 85 | | * | * | * | * | * | * |
| 05:00 | | 2 | 49 | 0 | 51 | 2 | 100 | | * | * | * | * | * | * |
| 05:15 | | 1 | 62 | 1 | 46 | 2 | 108 | | * | * | * | * | * | * |
| 05:30 | | 6 | 64 | 5 | 57 | 11 | 121 | | * | * | * | * | * | * |
| 05:45 | | 2 | 50 | 3 | 55 | 5 | 105 | | * | * | * | * | * | * |
| 06:00 | | 7 | 39 | 1 | 43 | 8 | 82 | | * | * | * | * | * | * |
| 06:15 | | 9 | 49 | 9 | 50 | 18 | 99 | | * | * | * | * | * | * |
| 06:30 | | 7 | 41 | 3 | 49 | 10 | 90 | | * | * | * | * | * | * |
| 06:45 | | 8 | 37 | 7 | 51 | 15 | 88 | | * | * | * | * | * | * |
| 07:00 | | 11 | 26 | 15 | 34 | 26 | 60 | | * | * | * | * | * | * |
| 07:15 | | 22 | 42 | 26 | 33 | 48 | 75 | | * | * | * | * | * | * |
| 07:30 | | 21 | 37 | 39 | 24 | 60 | 61 | | * | * | * | * | * | * |
| 07:45 | | 43 | 20 | 55 | 32 | 98 | 52 | | * | * | * | * | * | * |
| 08:00 | | 39 | 42 | 35 | 34 | 74 | 76 | | * | * | * | * | * | * |
| 08:15 | | 34 | 26 | 48 | 30 | 82 | 56 | | * | * | * | * | * | * |
| 08:30 | | 43 | 23 | 45 | 19 | 88 | 42 | | * | * | * | * | * | * |
| 08:45 | | 34 | 27 | 45 | 20 | 79 | 47 | | * | * | * | * | * | * |
| 09:00 | | 24 | 18 | 37 | 19 | 61 | 37 | | * | * | * | * | * | * |
| 09:15 | | 30 | 17 | 38 | 23 | 68 | 40 | | * | * | * | * | * | * |
| 09:30 | | 28 | 21 | 36 | 26 | 64 | 47 | | * | * | * | * | * | * |
| 09:45 | | 24 | 25 | 54 | 18 | 78 | 43 | | * | * | * | * | * | * |
| 10:00 | | 30 | 28 | 23 | 15 | 53 | 43 | | * | * | * | * | * | * |
| 10:15 | | 23 | 12 | 22 | 14 | 45 | 26 | | * | * | * | * | * | * |
| 10:30 | | 23 | 10 | 36 | 15 | 59 | 25 | | * | * | * | * | * | * |
| 10:45 | | 28 | 23 | 21 | 9 | 49 | 32 | | * | * | * | * | * | * |
| 11:00 | | 32 | 11 | 24 | 14 | 56 | 25 | | * | * | * | * | * | * |
| 11:15 | | 23 | 13 | 34 | 13 | 57 | 26 | | * | * | * | * | * | * |
| 11:30 | | 23 | 10 | 46 | 6 | 69 | 16 | | * | * | * | * | * | * |
| 11:45 | | 30 | 7 | 34 | 7 | 64 | 14 | | * | * | * | * | * | * |
| Totals | | 659 | 1577 | 794 | 1547 | 1453 | 3124 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Day Totals | | | 2236 | | 2341 | | 4577 | | | 0 | | 0 | | 0 |
| % Total | | 14.4% | 34.4% | 17.3% | 33.8% | | | | * | * | * | * | | |
| Peaks | | 07:45 | 05:00 | 07:45 | 05:00 | 07:45 | 05:00 | | | | | | | |
| Volume | | 159 | 225 | 183 | 209 | 342 | 434 | | | | | | | |
| P.H.F. | | .92 | .87 | .83 | .91 | .87 | .89 | | | | | | | |

Avg = 4582

CITY OF SANTA CRUZ

TRAFFIC RESEARCH ASSOCIATES

Site Code : 000000000002
Start Date: 05/15/2001
File I.D. : BAY

Street name :BAY ST.- ESCALONA DR. TO KENNETH ST. Direction 1 

| Begin | Tues. | SB | | NB | | Combined | | Wed. | SB | | NB | | Combined | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | 05/15 | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. | 05/16 | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. |
| 12:00 | | 30 | 187 | 31 | 105 | 61 | 292 | | 47 | 165 | 23 | 118 | 70 | 283 |
| 12:15 | | 35 | 180 | 31 | 85 | 66 | 265 | | 33 | 198 | 32 | 115 | 65 | 313 |
| 12:30 | | 24 | 126 | 17 | 96 | 41 | 222 | | 29 | 181 | 21 | 99 | 50 | 280 |
| 12:45 | | 25 | 125 | 21 | 129 | 46 | 254 | | 25 | 181 | 13 | 126 | 38 | 307 |
| 01:00 | | 25 | 141 | 9 | 130 | 34 | 271 | | 15 | 164 | 15 | 117 | 30 | 281 |
| 01:15 | | 14 | 145 | 5 | 134 | 19 | 279 | | 17 | 169 | 17 | 103 | 34 | 272 |
| 01:30 | | 20 | 131 | 6 | 130 | 26 | 261 | | 13 | 170 | 14 | 126 | 27 | 296 |
| 01:45 | | 15 | 152 | 6 | 128 | 21 | 280 | | 17 | 206 | 12 | 109 | 29 | 315 |
| 02:00 | | 9 | 202 | 4 | 94 | 13 | 296 | | 14 | 242 | 15 | 84 | 29 | 326 |
| 02:15 | | 9 | 161 | 4 | 87 | 13 | 248 | | 14 | 280 | 10 | 79 | 24 | 359 |
| 02:30 | | 9 | 168 | 3 | 98 | 12 | 266 | | 4 | 267 | 4 | 89 | 8 | 356 |
| 02:45 | | 2 | 164 | 1 | 96 | 3 | 260 | | 8 | 241 | 8 | 122 | 16 | 363 |
| 03:00 | | 7 | 190 | 2 | 99 | 9 | 289 | | 9 | 153 | 5 | 132 | 14 | 285 |
| 03:15 | | 5 | 176 | 4 | 121 | 9 | 297 | | 11 | 296 | 3 | 120 | 14 | 416 |
| 03:30 | | 9 | 207 | 6 | 136 | 15 | 343 | | 5 | 278 | 5 | 100 | 10 | 378 |
| 03:45 | | 5 | 247 | 4 | 113 | 9 | 360 | | 8 | 241 | 3 | 95 | 11 | 336 |
| 04:00 | | 8 | 326 | 5 | 88 | 13 | 414 | | 7 | 208 | 4 | 100 | 11 | 308 |
| 04:15 | | 9 | 230 | 5 | 77 | 14 | 307 | | 11 | 220 | 6 | 105 | 17 | 325 |
| 04:30 | | 5 | 181 | 4 | 95 | 9 | 276 | | 6 | 194 | 1 | 145 | 7 | 339 |
| 04:45 | | 8 | 188 | 8 | 109 | 16 | 297 | | 5 | 260 | 4 | 177 | 9 | 437 |
| 05:00 | | 2 | 228 | 5 | 136 | 7 | 364 | | 7 | 302 | 3 | 121 | 10 | 423 |
| 05:15 | | 16 | 243 | 5 | 121 | 21 | 364 | | 6 | 277 | 3 | 124 | 9 | 401 |
| 05:30 | | 15 | 224 | 11 | 149 | 26 | 373 | | 8 | 210 | 11 | 114 | 19 | 324 |
| 05:45 | | 19 | 312 | 32 | 140 | 51 | 452 | | 18 | 213 | 26 | 114 | 44 | 327 |
| 06:00 | | 20 | 262 | 24 | 109 | 44 | 371 | | 18 | 276 | 28 | 97 | 46 | 373 |
| 06:15 | | 25 | 189 | 34 | 127 | 59 | 316 | | 30 | 255 | 43 | 111 | 73 | 366 |
| 06:30 | | 36 | 181 | 39 | 128 | 75 | 309 | | 34 | 217 | 47 | 130 | 81 | 347 |
| 06:45 | | 53 | 163 | 33 | 133 | 86 | 296 | | 57 | 273 | 46 | 166 | 103 | 439 |
| 07:00 | | 66 | 177 | 48 | 101 | 114 | 278 | | 82 | 210 | 49 | 112 | 131 | 322 |
| 07:15 | | 85 | 194 | 59 | 84 | 144 | 278 | | 74 | 191 | 58 | 111 | 132 | 302 |
| 07:30 | | 103 | 159 | 109 | 107 | 212 | 266 | | 123 | 188 | 91 | 118 | 214 | 306 |
| 07:45 | | 121 | 175 | 140 | 100 | 261 | 275 | | 148 | 146 | 140 | 87 | 288 | 233 |
| 08:00 | | 138 | 191 | 150 | 104 | 288 | 295 | | 126 | 186 | 118 | 83 | 244 | 269 |
| 08:15 | | 131 | 145 | 115 | 77 | 246 | 222 | | 142 | 161 | 107 | 104 | 249 | 265 |
| 08:30 | | 115 | 166 | 110 | 112 | 225 | 278 | | 124 | 137 | 116 | 97 | 240 | 234 |
| 08:45 | | 114 | 141 | 112 | 89 | 226 | 230 | | 119 | 124 | 147 | 107 | 266 | 231 |
| 09:00 | | 102 | 135 | 101 | 105 | 203 | 240 | | 127 | 149 | 149 | 92 | 276 | 241 |
| 09:15 | | 109 | 130 | 117 | 92 | 226 | 222 | | 130 | 161 | 144 | 90 | 274 | 251 |
| 09:30 | | 103 | 141 | 163 | 85 | 266 | 226 | | 126 | 124 | 87 | 60 | 213 | 184 |
| 09:45 | | 122 | 105 | 160 | 78 | 282 | 183 | | 110 | 116 | 96 | 75 | 206 | 191 |
| 10:00 | | 135 | 94 | 100 | 65 | 235 | 159 | | 112 | 161 | 86 | 66 | 198 | 227 |
| 10:15 | | 116 | 79 | 87 | 50 | 203 | 129 | | 88 | 117 | 97 | 47 | 185 | 164 |
| 10:30 | | 114 | 66 | 94 | 55 | 208 | 121 | | 111 | 74 | 127 | 50 | 238 | 124 |
| 10:45 | | 95 | 62 | 68 | 35 | 163 | 97 | | 144 | 54 | 136 | 42 | 280 | 96 |
| 11:00 | | 88 | 69 | 94 | 41 | 182 | 110 | | 152 | 76 | 63 | 28 | 215 | 104 |
| 11:15 | | 120 | 53 | 98 | 35 | 218 | 88 | | 122 | 44 | 58 | 25 | 180 | 69 |
| 11:30 | | 144 | 34 | 139 | 44 | 283 | 78 | | 113 | 55 | 67 | 32 | 180 | 87 |
| 11:45 | | 163 | 57 | 143 | 22 | 306 | 79 | | 119 | 53 | 102 | 38 | 221 | 91 |
| Totals | | 2743 | 7802 | 2566 | 4674 | 5309 | 12476 | | 2868 | 8864 | 2460 | 4702 | 5328 | 13566 |
| Day Totals | | 10545 | | 7240 | | 17785 | | | 11732 | | 7162 | | 18894 | |
| % Total | | 15.4% | 43.8% | 14.4% | 26.2% | | | | 15.1% | 46.9% | 13.0% | 24.8% | | |
| Peaks | | 11:00 | 05:15 | 09:00 | 05:00 | 07:45 | 05:15 | | 07:45 | 04:45 | 08:30 | 04:30 | 08:30 | 04:30 |
| Volume | | 515 | 1041 | 541 | 546 | 1020 | 1560 | | 540 | 1049 | 556 | 567 | 1056 | 1600 |
| P.H.F. | | .78 | .83 | .82 | .91 | .88 | .86 | | .91 | .86 | .93 | .80 | .95 | .91 |

CITY OF SANTA CRUZ

TRAFFIC RESEARCH ASSOCIATES

Site Code : 000000000002
Start Date: 05/15/2001
File I.D. : BAY
Page : 2

Street name :BAY ST.- ESCALONA DR. TO KENNETH ST. Direction 1

| Begin Time | Thur. 05/17 SB A.M. | SB P.M. | NB A.M. | NB P.M. | Combined A.M. | Combined P.M. | Fri. 05/18 SB A.M. | SB P.M. | NB A.M. | NB P.M. | Combined A.M. | Combined P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | 64 | 331 | 26 | 90 | 90 | 421 | * | * | * | * | * | * |
| 12:15 | 37 | 195 | 37 | 90 | 74 | 285 | * | * | * | * | * | * |
| 12:30 | 45 | 174 | 20 | 77 | 65 | 251 | * | * | * | * | * | * |
| 12:45 | 39 | 171 | 16 | 104 | 55 | 275 | * | * | * | * | * | * |
| 01:00 | 22 | 146 | 16 | 115 | 38 | 261 | * | * | * | * | * | * |
| 01:15 | 18 | 162 | 13 | 114 | 31 | 276 | * | * | * | * | * | * |
| 01:30 | 18 | 160 | 7 | 116 | 25 | 276 | * | * | * | * | * | * |
| 01:45 | 12 | 206 | 15 | 124 | 27 | 330 | * | * | * | * | * | * |
| 02:00 | 11 | 282 | 9 | 73 | 20 | 355 | * | * | * | * | * | * |
| 02:15 | 6 | 240 | 6 | 79 | 12 | 319 | * | * | * | * | * | * |
| 02:30 | 3 | 176 | 7 | 95 | 10 | 271 | * | * | * | * | * | * |
| 02:45 | 10 | 186 | 4 | 89 | 14 | 275 | * | * | * | * | * | * |
| 03:00 | 8 | 212 | 6 | 85 | 14 | 297 | * | * | * | * | * | * |
| 03:15 | 7 | 216 | 4 | 93 | 11 | 309 | * | * | * | * | * | * |
| 03:30 | 12 | 251 | 7 | 119 | 19 | 370 | * | * | * | * | * | * |
| 03:45 | 13 | 302 | 2 | 101 | 15 | 403 | * | * | * | * | * | * |
| 04:00 | 8 | 310 | 5 | 83 | 13 | 393 | * | * | * | * | * | * |
| 04:15 | 6 | 256 | 2 | 93 | 8 | 349 | * | * | * | * | * | * |
| 04:30 | 9 | 236 | 3 | 108 | 12 | 344 | * | * | * | * | * | * |
| 04:45 | 13 | 251 | 3 | 101 | 16 | 352 | * | * | * | * | * | * |
| 05:00 | 4 | 299 | 6 | 119 | 10 | 418 | * | * | * | * | * | * |
| 05:15 | 9 | 239 | 1 | 120 | 10 | 359 | * | * | * | * | * | * |
| 05:30 | 10 | 237 | 15 | 153 | 25 | 390 | * | * | * | * | * | * |
| 05:45 | 26 | 269 | 28 | 163 | 54 | 432 | * | * | * | * | * | * |
| 06:00 | 27 | 296 | 35 | 118 | 62 | 414 | * | * | * | * | * | * |
| 06:15 | 31 | 218 | 47 | 126 | 78 | 344 | * | * | * | * | * | * |
| 06:30 | 29 | 205 | 37 | 123 | 66 | 328 | * | * | * | * | * | * |
| 06:45 | 57 | 210 | 42 | 124 | 99 | 334 | * | * | * | * | * | * |
| 07:00 | 74 | 187 | 47 | 89 | 121 | 276 | * | * | * | * | * | * |
| 07:15 | 90 | 239 | 50 | 95 | 140 | 334 | * | * | * | * | * | * |
| 07:30 | 132 | 188 | 100 | 107 | 232 | 295 | * | * | * | * | * | * |
| 07:45 | 165 | 176 | 122 | 139 | 287 | 315 | * | * | * | * | * | * |
| 08:00 | 127 | 174 | 126 | 101 | 253 | 275 | * | * | * | * | * | * |
| 08:15 | 133 | 190 | 112 | 93 | 245 | 283 | * | * | * | * | * | * |
| 08:30 | 145 | 136 | 99 | 82 | 244 | 218 | * | * | * | * | * | * |
| 08:45 | 141 | 111 | 95 | 91 | 236 | 202 | * | * | * | * | * | * |
| 09:00 | 110 | 164 | 92 | 81 | 202 | 245 | * | * | * | * | * | * |
| 09:15 | 111 | 138 | 95 | 84 | 206 | 222 | * | * | * | * | * | * |
| 09:30 | 104 | 155 | 145 | 71 | 249 | 226 | * | * | * | * | * | * |
| 09:45 | 151 | 111 | 150 | 98 | 301 | 209 | * | * | * | * | * | * |
| 10:00 | 170 | 148 | 77 | 56 | 247 | 204 | * | * | * | * | * | * |
| 10:15 | 108 | 134 | 70 | 56 | 178 | 190 | * | * | * | * | * | * |
| 10:30 | 124 | 102 | 70 | 52 | 194 | 154 | * | * | * | * | * | * |
| 10:45 | 120 | 114 | 74 | 40 | 194 | 154 | * | * | * | * | * | * |
| 11:00 | 135 | 107 | 87 | 45 | 222 | 152 | * | * | * | * | * | * |
| 11:15 | 145 | 91 | 105 | 35 | 250 | 126 | * | * | * | * | * | * |
| 11:30 | 161 | 86 | 130 | 25 | 291 | 111 | * | * | * | * | * | * |
| 11:45 | 212 | 53 | 137 | 27 | 349 | 80 | * | * | * | * | * | * |
| Totals | 3212 | 9240 | 2402 | 4462 | 5614 | 13702 | 0 | 0 | 0 | 0 | 0 | 0 |
| Day Totals | 12452 | | 6864 | | 19316 | | 0 | | 0 | | 0 | |
| % Total | 16.6% | 47.8% | 12.4% | 23.1% | | | * | * | * | * | | |
| Peaks | 11:00 | 03:30 | 09:00 | 05:30 | 11:00 | 05:00 | | | | | | |
| Volume | 653 | 1119 | 482 | 560 | 1112 | 1599 | | | | | | |
| P.H.F. | .77 | .90 | .80 | .85 | .79 | .92 | | | | | | |

Avg 18665

CITY OF SANTA CRUZ

TRAFFIC RESEARCH ASSOCIATES

Site Code : 000000000003
Start Date: 05/15/2001
File I.D. : DELAWARE


Street name :DELAWARE AVE.- SURFSIDE AVE. TO SEASIDE ST. Direction 1

| Begin | Tues. | WB | | EB | | Combined | | Wed. | WB | | EB | | Combined | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | 05/15 | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. | 05/16 | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. |
| 12:00 | | 4 | 43 | 3 | 66 | 7 | 109 | | 2 | 46 | 6 | 44 | 8 | 90 |
| 12:15 | | 4 | 48 | 3 | 45 | 7 | 93 | | 5 | 55 | 1 | 50 | 6 | 105 |
| 12:30 | | 0 | 45 | 6 | 51 | 6 | 96 | | 2 | 45 | 5 | 62 | 7 | 107 |
| 12:45 | | 2 | 48 | 3 | 56 | 5 | 104 | | 3 | 48 | 4 | 50 | 7 | 98 |
| 01:00 | | 1 | 35 | 6 | 32 | 7 | 67 | | 1 | 62 | 3 | 60 | 4 | 122 |
| 01:15 | | 0 | 52 | 5 | 33 | 5 | 85 | | 3 | 61 | 5 | 45 | 8 | 106 |
| 01:30 | | 1 | 43 | 1 | 44 | 2 | 87 | | 3 | 36 | 5 | 41 | 8 | 77 |
| 01:45 | | 0 | 54 | 2 | 36 | 2 | 90 | | 2 | 45 | 1 | 54 | 3 | 99 |
| 02:00 | | 0 | 43 | 0 | 48 | 0 | 91 | | 2 | 28 | 0 | 55 | 2 | 83 |
| 02:15 | | 0 | 43 | 1 | 40 | 1 | 83 | | 0 | 47 | 4 | 65 | 4 | 112 |
| 02:30 | | 1 | 34 | 0 | 71 | 1 | 105 | | 3 | 47 | 0 | 61 | 3 | 108 |
| 02:45 | | 0 | 51 | 1 | 62 | 1 | 113 | | 1 | 43 | 0 | 77 | 1 | 120 |
| 03:00 | | 0 | 47 | 0 | 80 | 0 | 127 | | 0 | 46 | 0 | 67 | 0 | 113 |
| 03:15 | | 2 | 56 | 0 | 60 | 2 | 116 | | 2 | 56 | 1 | 56 | 3 | 112 |
| 03:30 | | 5 | 38 | 2 | 91 | 7 | 129 | | 6 | 76 | 0 | 95 | 6 | 171 |
| 03:45 | | 5 | 53 | 1 | 68 | 6 | 121 | | 6 | 48 | 1 | 65 | 7 | 113 |
| 04:00 | | 0 | 37 | 0 | 71 | 0 | 108 | | 1 | 53 | 0 | 72 | 1 | 125 |
| 04:15 | | 0 | 40 | 1 | 81 | 1 | 121 | | 0 | 50 | 0 | 63 | 0 | 113 |
| 04:30 | | 2 | 36 | 2 | 100 | 4 | 136 | | 2 | 52 | 1 | 85 | 3 | 137 |
| 04:45 | | 3 | 55 | 1 | 74 | 4 | 129 | | 2 | 53 | 0 | 97 | 2 | 150 |
| 05:00 | | 6 | 49 | 3 | 86 | 9 | 135 | | 5 | 49 | 2 | 99 | 7 | 148 |
| 05:15 | | 13 | 60 | 3 | 75 | 16 | 135 | | 10 | 58 | 2 | 73 | 12 | 131 |
| 05:30 | | 9 | 48 | 2 | 67 | 11 | 115 | | 11 | 46 | 4 | 64 | 15 | 110 |
| 05:45 | | 13 | 43 | 6 | 48 | 19 | 91 | | 7 | 50 | 4 | 70 | 11 | 120 |
| 06:00 | | 9 | 47 | 5 | 72 | 14 | 119 | | 11 | 39 | 4 | 76 | 15 | 115 |
| 06:15 | | 8 | 30 | 5 | 57 | 13 | 87 | | 11 | 40 | 9 | 47 | 20 | 87 |
| 06:30 | | 23 | 25 | 8 | 37 | 31 | 62 | | 19 | 33 | 9 | 50 | 28 | 83 |
| 06:45 | | 24 | 36 | 12 | 44 | 36 | 80 | | 22 | 40 | 13 | 45 | 35 | 85 |
| 07:00 | | 26 | 27 | 16 | 39 | 42 | 66 | | 24 | 33 | 10 | 38 | 34 | 71 |
| 07:15 | | 30 | 35 | 31 | 36 | 61 | 71 | | 25 | 30 | 26 | 33 | 51 | 63 |
| 07:30 | | 57 | 32 | 42 | 30 | 99 | 62 | | 53 | 24 | 36 | 25 | 89 | 49 |
| 07:45 | | 81 | 25 | 53 | 25 | 134 | 50 | | 74 | 26 | 55 | 22 | 129 | 48 |
| 08:00 | | 97 | 25 | 32 | 30 | 129 | 55 | | 95 | 23 | 38 | 25 | 133 | 48 |
| 08:15 | | 69 | 26 | 49 | 22 | 118 | 48 | | 74 | 36 | 60 | 22 | 134 | 58 |
| 08:30 | | 50 | 20 | 42 | 29 | 92 | 49 | | 75 | 24 | 49 | 30 | 124 | 54 |
| 08:45 | | 63 | 22 | 58 | 16 | 121 | 38 | | 57 | 10 | 41 | 13 | 98 | 23 |
| 09:00 | | 58 | 19 | 43 | 16 | 101 | 35 | | 44 | 28 | 47 | 24 | 91 | 52 |
| 09:15 | | 27 | 22 | 34 | 21 | 61 | 43 | | 46 | 20 | 49 | 15 | 95 | 35 |
| 09:30 | | 30 | 22 | 41 | 27 | 71 | 49 | | 27 | 20 | 39 | 17 | 66 | 37 |
| 09:45 | | 32 | 20 | 30 | 22 | 62 | 42 | | 37 | 16 | 28 | 14 | 65 | 30 |
| 10:00 | | 34 | 17 | 45 | 12 | 79 | 29 | | 29 | 16 | 42 | 11 | 71 | 27 |
| 10:15 | | 37 | 12 | 24 | 15 | 61 | 27 | | 28 | 12 | 24 | 16 | 52 | 28 |
| 10:30 | | 29 | 10 | 36 | 10 | 65 | 20 | | 25 | 8 | 32 | 14 | 57 | 22 |
| 10:45 | | 24 | 10 | 39 | 6 | 63 | 16 | | 36 | 5 | 31 | 13 | 67 | 18 |
| 11:00 | | 27 | 7 | 39 | 7 | 66 | 14 | | 18 | 14 | 34 | 6 | 52 | 20 |
| 11:15 | | 34 | 8 | 50 | 7 | 84 | 15 | | 28 | 5 | 31 | 7 | 59 | 12 |
| 11:30 | | 40 | 6 | 49 | 7 | 89 | 13 | | 24 | 2 | 49 | 4 | 73 | 6 |
| 11:45 | | 34 | 3 | 66 | 6 | 100 | 9 | | 47 | 5 | 43 | 9 | 90 | 14 |
| Totals | | 1014 | 1607 | 901 | 2078 | 1915 | 3685 | | 1008 | 1709 | 848 | 2146 | 1856 | 3855 |
| Day Totals | | | 2621 | | 2979 | | 5600 | | | 2717 | | 2994 | | 5711 |
| % Total | | 18.1% | 28.7% | 16.0% | 37.1% | | | | 17.6% | 29.9% | 14.8% | 37.5% | | |
| Peaks | | 07:30 | 04:45 | 11:00 | 04:15 | 07:30 | 04:30 | | 07:45 | 03:15 | 07:45 | 04:30 | 07:45 | 04:30 |
| Volume | | 304 | 212 | 204 | 341 | 480 | 535 | | 318 | 233 | 202 | 354 | 520 | 566 |
| P.H.F. | | .78 | .88 | .77 | .85 | .89 | .98 | | .83 | .76 | .84 | .89 | .97 | .94 |

CITY OF SANTA CRUZ

TRAFFIC RESEARCH ASSOCIATES

Site Code : 000000000003
Start Date: 05/15/2001
File I.D. : DELAWARE
Page : 2

Street name :DELAWARE AVE.- SURFSIDE AVE. TO SEASIDE ST. Direction 1

| Begin Time | Thur. 05/17 | WB A.M. | WB P.M. | EB A.M. | EB P.M. | Combined A.M. | Combined P.M. | Fri. 05/18 | WB A.M. | WB P.M. | EB A.M. | EB P.M. | Combined A.M. | Combined P.M. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 2 | 52 | 5 | 41 | 7 | 93 | | * | * | * | * | * | * |
| 12:15 | | 6 | 38 | 2 | 49 | 8 | 87 | | * | * | * | * | * | * |
| 12:30 | | 4 | 35 | 5 | 38 | 9 | 73 | | * | * | * | * | * | * |
| 12:45 | | 1 | 52 | 3 | 58 | 4 | 110 | | * | * | * | * | * | * |
| 01:00 | | 3 | 42 | 4 | 51 | 7 | 93 | | * | * | * | * | * | * |
| 01:15 | | 2 | 54 | 4 | 38 | 6 | 92 | | * | * | * | * | * | * |
| 01:30 | | 0 | 44 | 2 | 51 | 2 | 95 | | * | * | * | * | * | * |
| 01:45 | | 2 | 47 | 3 | 32 | 5 | 79 | | * | * | * | * | * | * |
| 02:00 | | 1 | 41 | 1 | 49 | 2 | 90 | | * | * | * | * | * | * |
| 02:15 | | 0 | 41 | 3 | 59 | 3 | 100 | | * | * | * | * | * | * |
| 02:30 | | 1 | 35 | 1 | 95 | 2 | 130 | | * | * | * | * | * | * |
| 02:45 | | 0 | 65 | 0 | 74 | 0 | 139 | | * | * | * | * | * | * |
| 03:00 | | 0 | 51 | 1 | 79 | 1 | 130 | | * | * | * | * | * | * |
| 03:15 | | 3 | 41 | 0 | 55 | 3 | 96 | | * | * | * | * | * | * |
| 03:30 | | 8 | 43 | 0 | 104 | 8 | 147 | | * | * | * | * | * | * |
| 03:45 | | 4 | 39 | 1 | 79 | 5 | 118 | | * | * | * | * | * | * |
| 04:00 | | 0 | 43 | 1 | 69 | 1 | 112 | | * | * | * | * | * | * |
| 04:15 | | 0 | 37 | 2 | 59 | 2 | 96 | | * | * | * | * | * | * |
| 04:30 | | 4 | 49 | 0 | 103 | 4 | 152 | | * | * | * | * | * | * |
| 04:45 | | 4 | 48 | 1 | 71 | 5 | 119 | | * | * | * | * | * | * |
| 05:00 | | 7 | 50 | 0 | 102 | 7 | 152 | | * | * | * | * | * | * |
| 05:15 | | 9 | 42 | 4 | 89 | 13 | 131 | | * | * | * | * | * | * |
| 05:30 | | 16 | 50 | 7 | 72 | 23 | 122 | | * | * | * | * | * | * |
| 05:45 | | 8 | 54 | 5 | 55 | 13 | 109 | | * | * | * | * | * | * |
| 06:00 | | 11 | 40 | 8 | 81 | 19 | 121 | | * | * | * | * | * | * |
| 06:15 | | 14 | 38 | 8 | 57 | 22 | 95 | | * | * | * | * | * | * |
| 06:30 | | 14 | 44 | 10 | 54 | 24 | 98 | | * | * | * | * | * | * |
| 06:45 | | 24 | 46 | 9 | 46 | 33 | 92 | | * | * | * | * | * | * |
| 07:00 | | 25 | 35 | 17 | 32 | 42 | 67 | | * | * | * | * | * | * |
| 07:15 | | 34 | 32 | 32 | 46 | 66 | 78 | | * | * | * | * | * | * |
| 07:30 | | 47 | 28 | 44 | 31 | 91 | 59 | | * | * | * | * | * | * |
| 07:45 | | 73 | 25 | 49 | 22 | 122 | 47 | | * | * | * | * | * | * |
| 08:00 | | 103 | 20 | 38 | 17 | 141 | 37 | | * | * | * | * | * | * |
| 08:15 | | 81 | 16 | 59 | 26 | 140 | 42 | | * | * | * | * | * | * |
| 08:30 | | 67 | 24 | 43 | 22 | 110 | 46 | | * | * | * | * | * | * |
| 08:45 | | 53 | 17 | 39 | 16 | 92 | 33 | | * | * | * | * | * | * |
| 09:00 | | 39 | 31 | 35 | 19 | 74 | 50 | | * | * | * | * | * | * |
| 09:15 | | 50 | 13 | 36 | 20 | 86 | 33 | | * | * | * | * | * | * |
| 09:30 | | 42 | 16 | 36 | 18 | 78 | 34 | | * | * | * | * | * | * |
| 09:45 | | 35 | 21 | 29 | 17 | 64 | 38 | | * | * | * | * | * | * |
| 10:00 | | 29 | 20 | 38 | 10 | 67 | 30 | | * | * | * | * | * | * |
| 10:15 | | 38 | 10 | 43 | 10 | 81 | 20 | | * | * | * | * | * | * |
| 10:30 | | 31 | 9 | 38 | 12 | 69 | 21 | | * | * | * | * | * | * |
| 10:45 | | 29 | 14 | 29 | 12 | 58 | 26 | | * | * | * | * | * | * |
| 11:00 | | 40 | 5 | 34 | 9 | 74 | 14 | | * | * | * | * | * | * |
| 11:15 | | 46 | 9 | 44 | 9 | 90 | 18 | | * | * | * | * | * | * |
| 11:30 | | 35 | 10 | 31 | 3 | 66 | 13 | | * | * | * | * | * | * |
| 11:45 | | 28 | 5 | 42 | 9 | 70 | 14 | | * | * | * | * | * | * |
| Totals | | 1073 | 1621 | 846 | 2170 | 1919 | 3791 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Day Totals | | | 2694 | | 3016 | | 5710 | | | 0 | | 0 | | 0 |
| % Total | | 18.7% | 28.3% | 14.8% | 38.0% | | | | * | * | * | * | | |
| Peaks | | 07:45 | 02:45 | 07:30 | 04:30 | 07:45 | 04:30 | | | | | | | |
| Volume | | 324 | 200 | 190 | 365 | 513 | 554 | | | | | | | |
| P.H.F. | | .78 | .76 | .80 | .88 | .90 | .91 | | | | | | | |

Avg = 5674

MARKS TRAFFIC DATA SERVICE



CITY OF SANTA CRUZ

DELAWARE ST. W/O NATURAL BRIDGES DR.
Site Code:
delaware

| Start Time | 14-Jan-02 Mon | EB | | WB | | 15-Jan-02 Tue | EB | | WB | | 16-Jan-02 Wed | EB | | WB | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A.M. | P.M. | A.M. | P.M. | | A.M. | P.M. | A.M. | P.M. | | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. |
| 12:00 | | * | * | * | * | | 1 | 34 | 0 | 40 | | 0 | 42 | 0 | 51 | 1 | 167 |
| 12:15 | | * | * | * | * | | 0 | 17 | 0 | 20 | | 0 | 26 | 0 | 30 | 0 | 93 |
| 12:30 | | * | * | * | * | | 0 | 13 | 0 | 25 | | 1 | 23 | 1 | 30 | 2 | 91 |
| 12:45 | | * | * | * | * | | 0 | 26 | 1 | 43 | | 0 | 26 | 0 | 31 | 1 | 126 |
| 01:00 | | * | * | * | * | | 1 | 31 | 1 | 33 | | 0 | 22 | 1 | 30 | 3 | 116 |
| 01:15 | | * | * | * | * | | 0 | 24 | 0 | 34 | | 0 | 20 | 0 | 28 | 0 | 106 |
| 01:30 | | * | * | * | * | | 1 | 24 | 1 | 19 | | 1 | 28 | 0 | 30 | 3 | 101 |
| 01:45 | | * | * | * | * | | 0 | 21 | 0 | 29 | | 2 | 32 | 2 | 21 | 4 | 103 |
| 02:00 | | * | * | * | * | | 0 | 15 | 1 | 27 | | 1 | 27 | 1 | 29 | 3 | 98 |
| 02:15 | | * | * | * | * | | 1 | 23 | 1 | 25 | | 0 | 16 | 0 | 16 | 2 | 80 |
| 02:30 | | * | * | * | * | | 0 | 21 | 0 | 27 | | 0 | 24 | 0 | 20 | 0 | 92 |
| 02:45 | | * | * | * | * | | 0 | 19 | 0 | 29 | | 0 | 29 | 0 | 29 | 0 | 106 |
| 03:00 | | * | * | * | * | | 0 | 25 | 0 | 33 | | 0 | 26 | 0 | 31 | 0 | 115 |
| 03:15 | | * | * | * | * | | 0 | 16 | 0 | 15 | | 1 | 19 | 0 | 24 | 1 | 74 |
| 03:30 | | * | * | * | * | | 0 | 23 | 0 | 30 | | 1 | 22 | 0 | 27 | 1 | 102 |
| 03:45 | | * | * | * | * | | 0 | 24 | 1 | 27 | | 0 | 22 | 0 | 22 | 1 | 95 |
| 04:00 | | * | * | * | * | | 1 | 16 | 0 | 24 | | 0 | 14 | 0 | 27 | 1 | 81 |
| 04:15 | | * | * | * | * | | 0 | 13 | 0 | 16 | | 0 | 17 | 0 | 25 | 0 | 71 |
| 04:30 | | * | * | * | * | | 0 | 13 | 0 | 17 | | 1 | 21 | 1 | 23 | 2 | 74 |
| 04:45 | | * | * | * | * | | 2 | 18 | 0 | 25 | | 2 | 29 | 2 | 28 | 6 | 100 |
| 05:00 | | * | * | * | * | | 1 | 23 | 1 | 16 | | 1 | 55 | 1 | 24 | 4 | 118 |
| 05:15 | | * | * | * | * | | 0 | 21 | 0 | 20 | | 0 | 34 | 2 | 32 | 2 | 107 |
| 05:30 | | * | * | * | * | | 0 | 26 | 3 | 27 | | 1 | 23 | 1 | 19 | 5 | 95 |
| 05:45 | | * | * | * | * | | 3 | 22 | 5 | 25 | | 1 | 16 | 4 | 15 | 13 | 78 |
| 06:00 | | * | * | * | * | | 1 | 20 | 2 | 22 | | 5 | 15 | 5 | 28 | 13 | 85 |
| 06:15 | | * | * | * | * | | 6 | 13 | 8 | 19 | | 4 | 20 | 5 | 19 | 23 | 71 |
| 06:30 | | * | * | * | * | | 8 | 14 | 4 | 15 | | 7 | 15 | 2 | 11 | 21 | 55 |
| 06:45 | | * | * | * | * | | 7 | 13 | 5 | 9 | | 4 | 12 | 7 | 12 | 23 | 46 |
| 07:00 | | * | * | * | * | | 0 | 14 | 9 | 11 | | 3 | 6 | 8 | 30 | 18 | 61 |
| 07:15 | | * | * | * | * | | 11 | 12 | 25 | 11 | | 5 | 12 | 14 | 22 | 55 | 57 |
| 07:30 | | * | * | * | * | | 10 | 9 | 21 | 5 | | 7 | 5 | 13 | 8 | 51 | 27 |
| 07:45 | | * | * | * | * | | 12 | 11 | 29 | 13 | | 12 | 1 | 25 | 3 | 78 | 28 |
| 08:00 | | * | * | * | * | | 11 | 10 | 31 | 12 | | 9 | 3 | 24 | 7 | 75 | 32 |
| 08:15 | | * | * | * | * | | 6 | 7 | 25 | 13 | | 12 | 13 | 29 | 12 | 72 | 45 |
| 08:30 | | * | * | * | * | | 3 | 11 | 23 | 8 | | 16 | 19 | 28 | 16 | 70 | 54 |
| 08:45 | | * | * | * | * | | 13 | 9 | 32 | 10 | | 9 | 22 | 31 | 17 | 85 | 58 |
| 09:00 | | * | * | * | * | | 14 | 9 | 22 | 4 | | 16 | 12 | 24 | 14 | 76 | 39 |
| 09:15 | | * | * | * | * | | 12 | 3 | 19 | 9 | | 14 | 15 | 22 | 16 | 67 | 43 |
| 09:30 | | * | * | * | * | | 20 | 11 | 32 | 8 | | 16 | 8 | 15 | 13 | 83 | 40 |
| 09:45 | | * | * | * | * | | 16 | 8 | 37 | 11 | | 12 | 6 | 29 | 11 | 94 | 36 |
| 10:00 | | * | * | * | * | | 21 | 5 | 50 | 4 | | 12 | 7 | 29 | 5 | 112 | 21 |
| 10:15 | | * | * | * | * | | 12 | 3 | 25 | 3 | | 12 | 3 | 28 | 4 | 77 | 13 |
| 10:30 | | * | * | * | * | | 16 | 1 | 21 | 1 | | 13 | 3 | 24 | 5 | 74 | 10 |
| 10:45 | | * | * | * | * | | 23 | 2 | 24 | 5 | | 24 | 2 | 41 | 2 | 112 | 11 |
| 11:00 | | * | * | * | * | | 21 | 1 | 23 | 1 | | 12 | 0 | 21 | 1 | 77 | 3 |
| 11:15 | | * | * | * | * | | 57 | 0 | 29 | 0 | | 18 | 1 | 21 | 1 | 125 | 2 |
| 11:30 | | * | * | * | * | | 14 | 1 | 17 | 0 | | 14 | 0 | 22 | 1 | 67 | 2 |
| 11:45 | | * | * | * | * | | 19 | 0 | 28 | 0 | | 21 | 4 | 39 | 1 | 107 | 5 |
| Total | | 0 | 0 | 0 | 0 | | 344 | 695 | 556 | 620 | | 290 | 817 | 520 | 901 | 1710 | 3233 |
| Percentage | | 0.0% | 0.0% | 0.0% | 0.0% | | 33.1% | 66.9% | 40.4% | 59.6% | | 26.2% | 73.8% | 36.6% | 63.4% | 34.6% | 65.4% |
| Day Total | | | | | | | 1039 | | 1376 | | | 1107 | | 1421 | | 4943 | |

TO: LESLEY
ALBERT

FROM: MIETEK
@ MTDS

MARKS TRAFFIC DATA SERVICE



CITY OF SANTA CRUZ

DELAWARE ST. W/O NATURAL BRIDGES DR.
Site Code:
delaware

| Start | 17-Jan-02 | EB | | WB | | 18-Jan-02 | EB | | WB | | 19-Jan-02 | EB | | WB | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | Thu | A.M. | P.M. | A.M. | P.M. | Fri | A.M. | P.M. | A.M. | P.M. | Sat | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. |
| 12:00 | | 1 | 25 | 2 | 2 | | * | * | * | * | | * | * | * | * | 3 | 27 |
| 12:15 | | 0 | 18 | 0 | 0 | | * | * | * | * | | * | * | * | * | 0 | 18 |
| 12:30 | | 1 | 22 | 1 | 1 | | * | * | * | * | | * | * | * | * | 2 | 23 |
| 12:45 | | 0 | 31 | 1 | 1 | | * | * | * | * | | * | * | * | * | 1 | 32 |
| 01:00 | | 0 | 21 | 0 | 0 | | * | * | * | * | | * | * | * | * | 0 | 21 |
| 01:15 | | 0 | 22 | 0 | 0 | | * | * | * | * | | * | * | * | * | 0 | 22 |
| 01:30 | | 0 | 22 | 0 | 0 | | * | * | * | * | | * | * | * | * | 0 | 22 |
| 01:45 | | 3 | 21 | 3 | 3 | | * | * | * | * | | * | * | * | * | 6 | 24 |
| 02:00 | | 0 | 16 | 0 | 0 | | * | * | * | * | | * | * | * | * | 0 | 16 |
| 02:15 | | 0 | 11 | 0 | 0 | | * | * | * | * | | * | * | * | * | 0 | 11 |
| 02:30 | | 1 | 21 | 1 | 1 | | * | * | * | * | | * | * | * | * | 2 | 22 |
| 02:45 | | 0 | 23 | 1 | 1 | | * | * | * | * | | * | * | * | * | 1 | 24 |
| 03:00 | | 1 | 18 | 1 | 1 | | * | * | * | * | | * | * | * | * | 2 | 19 |
| 03:15 | | 0 | 23 | 1 | 1 | | * | * | * | * | | * | * | * | * | 1 | 24 |
| 03:30 | | 0 | 23 | 0 | 0 | | * | * | * | * | | * | * | * | * | 0 | 23 |
| 03:45 | | 3 | 21 | 2 | 2 | | * | * | * | * | | * | * | * | * | 5 | 23 |
| 04:00 | | 0 | 20 | 0 | 0 | | * | * | * | * | | * | * | * | * | 0 | 20 |
| 04:15 | | 1 | 15 | 1 | 1 | | * | * | * | * | | * | * | * | * | 2 | 16 |
| 04:30 | | 1 | 21 | 0 | 0 | | * | * | * | * | | * | * | * | * | 1 | 21 |
| 04:45 | | 0 | 28 | 1 | 1 | | * | * | * | * | | * | * | * | * | 1 | 29 |
| 05:00 | | 0 | 23 | 0 | 0 | | * | * | * | * | | * | * | * | * | 0 | 23 |
| 05:15 | | 1 | 27 | 0 | 0 | | * | * | * | * | | * | * | * | * | 1 | 27 |
| 05:30 | | 2 | 39 | 1 | 1 | | * | * | * | * | | * | * | * | * | 3 | 40 |
| 05:45 | | 4 | 30 | 5 | 5 | | * | * | * | * | | * | * | * | * | 9 | 35 |
| 06:00 | | 4 | 25 | 1 | 1 | | * | * | * | * | | * | * | * | * | 5 | 26 |
| 06:15 | | 2 | 15 | 0 | 0 | | * | * | * | * | | * | * | * | * | 2 | 15 |
| 06:30 | | 5 | 13 | 6 | 6 | | * | * | * | * | | * | * | * | * | 11 | 19 |
| 06:45 | | 8 | 16 | 11 | 11 | | * | * | * | * | | * | * | * | * | 19 | 27 |
| 07:00 | | 7 | 9 | 8 | 8 | | * | * | * | * | | * | * | * | * | 15 | 17 |
| 07:15 | | 4 | 11 | 20 | 20 | | * | * | * | * | | * | * | * | * | 24 | 31 |
| 07:30 | | 8 | 9 | 18 | 18 | | * | * | * | * | | * | * | * | * | 26 | 27 |
| 07:45 | | 15 | 3 | 26 | 26 | | * | * | * | * | | * | * | * | * | 41 | 29 |
| 08:00 | | 7 | 4 | 27 | 27 | | * | * | * | * | | * | * | * | * | 34 | 31 |
| 08:15 | | 19 | 7 | 40 | 40 | | * | * | * | * | | * | * | * | * | 59 | 47 |
| 08:30 | | 10 | 7 | 30 | 30 | | * | * | * | * | | * | * | * | * | 40 | 37 |
| 08:45 | | 16 | 4 | 37 | 37 | | * | * | * | * | | * | * | * | * | 53 | 41 |
| 09:00 | | 15 | 2 | 16 | 16 | | * | * | * | * | | * | * | * | * | 31 | 18 |
| 09:15 | | 11 | 4 | 29 | 29 | | * | * | * | * | | * | * | * | * | 40 | 33 |
| 09:30 | | 15 | 5 | 29 | 29 | | * | * | * | * | | * | * | * | * | 44 | 34 |
| 09:45 | | 19 | 7 | 22 | 22 | | * | * | * | * | | * | * | * | * | 41 | 29 |
| 10:00 | | 14 | 7 | 23 | 23 | | * | * | * | * | | * | * | * | * | 37 | 30 |
| 10:15 | | 18 | 4 | 31 | 31 | | * | * | * | * | | * | * | * | * | 49 | 35 |
| 10:30 | | 20 | 4 | 25 | 25 | | * | * | * | * | | * | * | * | * | 45 | 29 |
| 10:45 | | 20 | 3 | 22 | 22 | | * | * | * | * | | * | * | * | * | 42 | 25 |
| 11:00 | | 9 | 2 | 15 | 15 | | * | * | * | * | | * | * | * | * | 24 | 17 |
| 11:15 | | 15 | 3 | 26 | 26 | | * | * | * | * | | * | * | * | * | 41 | 29 |
| 11:30 | | 22 | 1 | 25 | 25 | | * | * | * | * | | * | * | * | * | 47 | 26 |
| 11:45 | | 26 | 0 | 37 | 37 | | * | * | * | * | | * | * | * | * | 63 | 37 |
| Total | | 328 | 706 | 545 | 545 | | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 873 | 1251 |
| Percentage | | 31.7% | 68.3% | 50.0% | 50.0% | | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% | 0.0% | 0.0% | 0.0% | 41.1% | 58.9% |
| Day Total | | 1034 | | 1090 | | | 0 | | 0 | | | 0 | | 0 | | 2124 | |
| Combined Total | | 1034 | | 1090 | | | 1039 | | 1376 | | | 1107 | | 1421 | | 7067 | |

# APPENDIX D-2

## APPROVED AND PENDING PROJECT TRIP GENERATION ESTIMATES

# Estimated Trip Generation

## Background Projects

Marine Science Campus CLRDP EIR

### Projects Under Construction

| | | | AM | | | PM | | |
|---|---|---|---|---|---|---|---|---|
| **Location** | **Type** | **Units/Sqft** | **In** | **Out** | **Total** | **In** | **Out** | **Total** |
| 1008 Soquel | SRO | 15 | 5 | 15 | 20 | 12 | 7 | 19 |
| 500 Ocean | Motel | 34 | 10 | 7 | 17 | 20 | 18 | 38 |
| 208 Bay | Condos | 10 | 1 | 7 | 8 | 6 | 3 | 9 |
| 505 El Rancho | SFD/TH | 11 | 4 | 13 | 17 | 9 | 6 | 15 |
| 401 Pacific | SRO | 72 | 15 | 45 | 60 | 51 | 29 | 80 |
| 101 Pacific | Apt | 108 | 9 | 48 | 57 | 52 | 25 | 77 |
| 2901 Mission | Indust | 16,408 | 19 | 4 | 23 | 5 | 14 | 19 |

### Approved Projects

| | | | AM | | | PM | | |
|---|---|---|---|---|---|---|---|---|
| **Location** | **Type** | **Units/Sqft** | **In** | **Out** | **Total** | **In** | **Out** | **Total** |
| 1280 Shaffer | Apt | 206 | 17 | 89 | 106 | 87 | 43 | 130 |
| 175 Belvedere | Apt | 6 | 1 | 5 | 6 | 15 | 7 | 22 |
| 927 Soquel | SRO | 24 | 7 | 19 | 26 | 19 | 11 | 30 |
| | Retail | 2,360 | 10 | 7 | 17 | 25 | 28 | 53 |
| 502-06 Soquel | Apt | 34 | 3 | 17 | 20 | 25 | 12 | 37 |
| | Comm | 3,641 | 12 | 1 | 13 | 14 | 69 | 83 |
| 719 Water | Comm | 28,507 | 46 | 30 | 76 | 132 | 142 | 274 |
| 1375 Pacific | Comm | 90,442 | 92 | 58 | 150 | 282 | 306 | 588 |
| 125 River | Office | 104,500 | 100 | 64 | 164 | 3110 | 336 | 646 |
| | Retail | 6,500 | 19 | 12 | 31 | 50 | 53 | 103 |
| 2027 Pacific | Comm | 3,720 | 14 | 8 | 22 | 34 | 38 | 72 |
| 1111A River | Live/Work | 7 | 2 | 5 | 7 | 16 | 8 | 24 |
| 133 Leibrant | SFR | 48 | 11 | 32 | 43 | 35 | 20 | 55 |
| 630 Water | Apt | 53 | 5 | 25 | 30 | 32 | 15 | 47 |
| | Office | 1,000 | 4 | 1 | 5 | 14 | 66 | 80 |
| 211 Gault | Sen. Housing | 37 | 3 | 19 | 22 | 26 | 13 | 39 |
| 215 Beach | Motel | 110 | 29 | 19 | 48 | 33 | 28 | 61 |
| 119-125 Blaine | Studio | 13 | 5 | 14 | 19 | 11 | 6 | 17 |
| 2050 Pacific | Condo | 69 | 6 | 32 | 38 | 30 | 15 | 45 |
| 615 Market | Townhome | 50 | 5 | 25 | 30 | 23 | 12 | 35 |
| 120 Campbell | SFR | 2 | 0 | 2 | 2 | 2 | 0 | 2 |
| 115 Coral | Shelter | 30 | 8 | 22 | 30 | 23 | 13 | 36 |
| 115 Dubois | SRO | 49 | 11 | 33 | 44 | 36 | 20 | 56 |
| 230 Fern | Light Indust | 18,870 | 15 | 2 | 17 | 2 | 16 | 18 |
| 219 Grandview | Townhomes | 20 | 1 | 8 | 9 | 11 | 5 | 16 |
| 230 Grandview | Condos | 21 | 2 | 7 | 9 | 11 | 6 | 17 |
| 195 Harvey | Light Indust | 17,212 | 14 | 2 | 16 | 2 | 15 | 17 |
| | Apt | 14 | 2 | 8 | 10 | 18 | 8 | 26 |
| 2050 Pacific | Retail | 6,500 | 19 | 12 | 31 | 50 | 53 | 103 |
| | Office | 104,500 | 170 | 23 | 193 | 33 | 163 | 196 |

# APPENDIX D-3

## LOS CALCULATION SHEETS

Marine Science Center

November 2003

Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

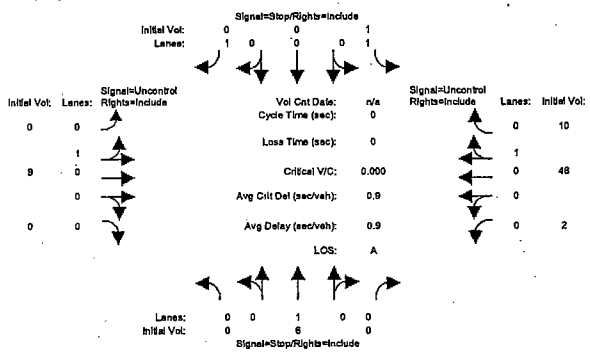
| Intersection | | Existing AM | | | | Ex + Ph 1 AM | | | | Ex + Ph 1 + Ph 2 AM | | | | | | ??? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LOS | Avg Del (sec) | Crit V/C | Avg Crit Del (sec) | LOS | Avg Del (sec) | Crit V/C | Avg Crit Del (sec) | LOS | Avg Del (sec) | Crit V/C | Crit V/C Change | Avg Crit Del (sec) | Avg Crit Del Change | LOS | Avg Del (sec) | Crit V/C | Avg Crit Del (sec) |
| #1 | Delaware/Shaffer [N/S:Shaffer E/W:Delaware] | A | 0.9 | 0.000 | 0.9 | B | 0.4 | 0.000 | 0.4 | B | 0.2 | 0.000 | + 0.000 | 0.2 | - 0.1 | ? | xx.x | x.xxx | xx.x |
| #2 | Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware] | A | 7.9 | 0.194 | 7.9 | A | 8.4 | 0.275 | 8.4 | A | 9.4 | 0.378 | + 0.103 | 9.4 | + 0.9 | ? | xx.x | x.xxx | xx.x |
| #3 | Delaware/Swanton [N/S: Swanton E/W: Delaware] | A | 3.9 | 0.000 | 3.9 | B | 3.7 | 0.000 | 3.7 | B | 3.4 | 0.000 | + 0.000 | 3.4 | - 0.2 | ? | xx.x | x.xxx | xx.x |
| #4 | Bay/Laguna [N/S:Laguna E/W: Bay] | B | 4.0 | 0.000 | 4.0 | B | 4.1 | 0.000 | 4.1 | B | 4.2 | 0.000 | + 0.000 | 4.2 | + 0.1 | ? | xx.x | x.xxx | xx.x |
| #5 | SR 1/Shaffer [N/S: Shaffer E/w: SR 1] | B | 2.3 | 0.000 | 2.3 | B | 2.3 | 0.000 | 2.3 | B | 2.3 | 0.000 | + 0.000 | 2.3 | + 0.0 | ? | xx.x | x.xxx | xx.x |
| #6 | Delaware/Swift [N/S: Swift E/W: Delaware] | B | 11.0 | 0.438 | 11.0 | B | 12.0 | 0.496 | 12.0 | B | 13.8 | 0.595 | + 0.099 | 13.8 | + 1.9 | ? | xx.x | x.xxx | xx.x |
| #7 | Delaware/Almar [N/S: Almar E/W: Delaware] | A | 9.3 | 0.354 | 9.3 | A | 9.7 | 0.384 | 9.7 | B | 10.2 | 0.422 | + 0.038 | 10.2 | + 0.5 | ? | xx.x | x.xxx | xx.x |
| #8 | SR 1/Western [N/S: Western E/w: SR 1] | C | 22.1 | 0.350 | 25.9 | C | 22.6 | 0.367 | 26.8 | C | 23.1 | 0.386 | + 0.019 | 27.6 | + 0.9 | ? | xx.x | x.xxx | xx.x |
| #9 | SR 1/Swift [N/S: Swift E/w: SR 1] | C | 21.2 | 0.316 | 29.6 | C | 21.1 | 0.332 | 29.6 | C | 20.9 | 0.351 | + 0.019 | 29.5 | - 0.1 | ? | xx.x | x.xxx | xx.x |
| #10 | Mission/Almar [N/S: Almar E/w: Mission] | C | 21.7 | 0.396 | 29.3 | C | 22.3 | 0.421 | 30.4 | C | 23.1 | 0.455 | + 0.035 | 31.6 | + 1.2 | ? | xx.x | x.xxx | xx.x |
| #11 | Mission/Bay [N/S: Bay E/w: Mission] | C | 31.8 | 0.672 | 30.7 | C | 32.1 | 0.695 | 31.4 | C | 32.7 | 0.725 | + 0.030 | 32.6 | + 1.2 | ? | xx.x | x.xxx | xx.x |
| #12 | Laurel/California [N/S: California E/w: Laurel] | C | 20.3 | 0.442 | 23.8 | C | 20.4 | 0.447 | 24.0 | C | 20.6 | 0.452 | + 0.005 | 24.1 | + 0.2 | ? | xx.x | x.xxx | xx.x |
| #13 | Mission/Laurel [N/S: Laurel E/w: Mission] | C | 22.1 | 0.570 | 22.3 | C | 22.0 | 0.579 | 22.2 | C | 21.9 | 0.594 | + 0.015 | 22.0 | - 0.2 | ? | xx.x | x.xxx | xx.x |
| #14 | Mission/Walnut [N/S: Walnut E/w: Mission] | C | 22.9 | 0.539 | 24.8 | C | 22.6 | 0.547 | 24.6 | C | 22.3 | 0.561 | + 0.014 | 24.3 | - 0.3 | ? | xx.x | x.xxx | xx.x |
| #15 | Mission/Union [N/S: Union E/w: Mission] | C | 24.8 | 0.641 | 24.8 | C | 24.9 | 0.649 | 24.6 | C | 24.9 | 0.662 | + 0.013 | 24.4 | - 0.3 | ? | xx.x | x.xxx | xx.x |
| #16 | Mission/Chestnut [N/S: Chestnut E/w: Mission] | D | 40.0 | 0.976 | 52.1 | D | 41.5 | 0.986 | 54.4 | D | 44.0 | 1.002 | + 0.016 | 58.4 | + 4.0 | ? | xx.x | x.xxx | xx.x |
| #17 | Mission/River [N/S: River E/w: Mission] | C | 35.0 | 0.860 | 46.4 | D | 35.1 | 0.865 | 46.6 | D | 35.3 | 0.874 | + 0.009 | 47.1 | + 0.5 | ? | xx.x | x.xxx | xx.x |
| #18 | Western/Meder [N/S: Western E/w: Meder] | A | 8.1 | 0.233 | 8.1 | A | 8.2 | 0.239 | 8.2 | A | 8.3 | 0.250 | + 0.011 | 8.3 | + 0.1 | ? | xx.x | x.xxx | xx.x |
| #19 | High/Western [N/S: Western E/w: High] | D | 4.2 | 0.000 | 4.2 | D | 4.4 | 0.000 | 4.4 | D | 4.6 | 0.000 | + 0.000 | 4.6 | + 0.2 | ? | xx.x | x.xxx | xx.x |
| #20 | High/Bay [N/S: Bay E/w: High] | B | 18.1 | 0.424 | 19.3 | B | 18.1 | 0.424 | 19.3 | B | 18.2 | 0.425 | + 0.001 | 19.4 | + 0.0 | ? | xx.x | x.xxx | xx.x |
| #21 | Bay/Iowa [N/S: Bay E/w: Iowa] | B | 12.2 | 0.284 | 10.5 | B | 12.2 | 0.285 | 10.5 | B | 12.1 | 0.285 | + 0.001 | 10.4 | - 0.0 | ? | xx.x | x.xxx | xx.x |
| #22 | Bay/Escalona [N/S: Bay E/w: Escalana] | C | 4.6 | 0.000 | 4.6 | C | 4.7 | 0.000 | 4.7 | C | 4.7 | 0.000 | + 0.000 | 4.7 | + 0.1 | ? | xx.x | x.xxx | xx.x |
| #23 | Bay/King [N/S: Bay E/w: King] | B | 19.3 | 0.575 | 22.9 | B | 19.3 | 0.576 | 22.9 | B | 19.3 | 0.578 | + 0.002 | 22.9 | + 0.0 | ? | xx.x | x.xxx | xx.x |
| #24 | Empire Grade/Heller [N/S: Heller E/w: Empire Grade] | B | 3.2 | 0.000 | 3.2 | B | 3.2 | 0.000 | 3.2 | B | 3.2 | 0.000 | + 0.000 | 3.2 | + 0.0 | ? | xx.x | x.xxx | xx.x |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

## Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 10 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 10 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 10 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 10 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 10 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | 6.6 | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | xxxxx | 4.1 | xxxxx | 3.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | 69 | xxxxx | 67 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 9 | xxxx | xxxxx |
| Potent Cap.: | xxxx | 810 | xxxxx | 911 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1591 | xxxx | xxxxx |
| Move Cap.: | xxxx | 809 | xxxxx | 905 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1591 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | 9.5 | xxxxx | 9.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.3 | xxxx | xxxxx |
| LOS by Move: | * | A | * | A | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | 9.5 | | | 9.0 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | A | | | A | | | * | | | * | | |



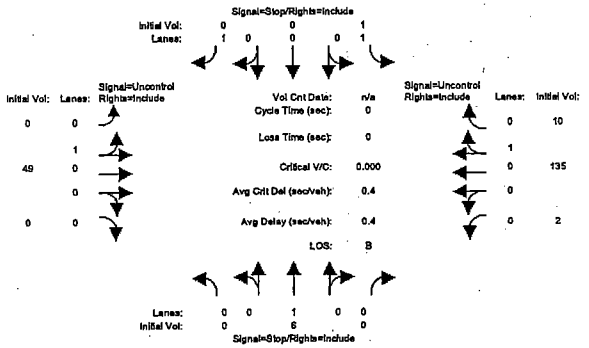


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]



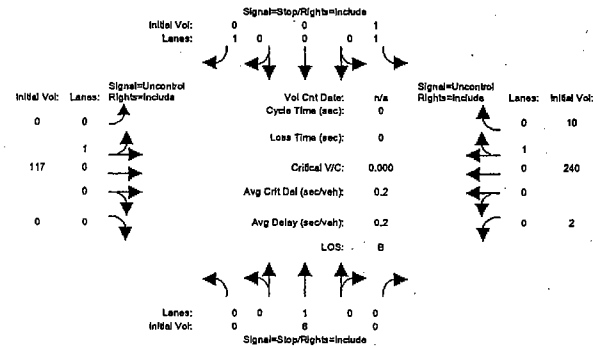

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 10 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 10 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 89 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 49 | 0 | 2 | 135 | 10 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 49 | 0 | 2 | 135 | 10 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 49 | 0 | 2 | 135 | 10 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | 6.6 | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | xxxxx | 4.1 | xxxxx | 3.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | 198 | xxxxx | 196 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 49 | xxxx | xxxxx |
| Potent Cap.: | xxxx | 687 | xxxxx | 750 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1539 | xxxx | xxxxx |
| Move Cap.: | xxxx | 686 | xxxxx | 744 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1539 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | 10.3 | xxxxx | 9.8 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.3 | xxxx | xxxxx |
| LOS by Move: | * | B | * | A | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | 10.3 | | | 9.8 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | A | | | * | | | * | | |

Marina Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 10 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 10 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 108 | 0 | 0 | 194 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 117 | 0 | 2 | 240 | 10 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 117 | 0 | 2 | 240 | 10 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 117 | 0 | 2 | 240 | 10 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | 6.6 | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | xxxxx | 4.1 | xxxxx | 3.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | 371 | xxxxx | 369 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 117 | xxxx | xxxxx |
| Potent Cap.: | xxxx | 549 | xxxxx | 577 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1453 | xxxx | xxxxx |
| Move Cap.: | xxxx | 549 | xxxxx | 571 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1453 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | 11.6 | xxxxx | 11.3 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.5 | xxxx | xxxxx |
| LOS by Move: | * | B | * | B | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | 11.6 | | | 11.3 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | B | | | * | | | * | | |



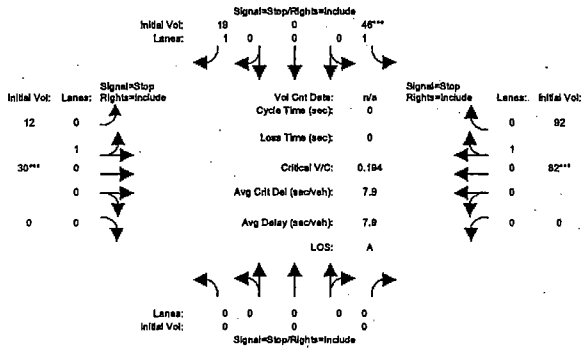


Marina Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing AM

## Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]



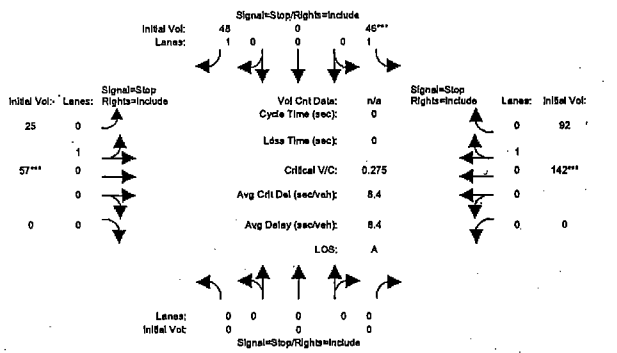

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 30 | 0 | 0 | 82 | 92 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 30 | 0 | 0 | 82 | 92 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 30 | 0 | 0 | 82 | 92 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 30 | 0 | 0 | 82 | 92 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 30 | 0 | 0 | 82 | 92 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 30 | 0 | 0 | 82 | 92 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.29 | 0.71 | 0.00 | 0.00 | 0.47 | 0.53 |
| Final Sat.: | 0 | 0 | 0 | 641 | 0 | 817 | 227 | 567 | 0 | 0 | 423 | 474 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.07 | xxxx | 0.02 | 0.05 | 0.05 | xxxx | xxxx | 0.19 | 0.19 |
| Crit Moves: | | | | **** | | | | **** | | | **** | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 8.5 | 0.0 | 7.0 | 7.7 | 7.7 | 0.0 | 0.0 | 7.9 | 7.9 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 8.5 | 0.0 | 7.0 | 7.7 | 7.7 | 0.0 | 0.0 | 7.9 | 7.9 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | 8.1 | | | 7.7 | | | 7.9 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 8.1 | | | 7.7 | | | 7.9 | | |
| LOS by Appr: | * | | | A | | | A | | | A | | |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 AM

Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 30 | 0 | 0 | 82 | 92 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 30 | 0 | 0 | 82 | 92 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 29 | 13 | 27 | 0 | 0 | 60 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 46 | 0 | 48 | 25 | 57 | 0 | 0 | 142 | 92 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 46 | 0 | 48 | 25 | 57 | 0 | 0 | 142 | 92 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 46 | 0 | 48 | 25 | 57 | 0 | 0 | 142 | 92 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 46 | 0 | 48 | 25 | 57 | 0 | 0 | 142 | 92 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.30 | 0.70 | 0.00 | 0.00 | 0.61 | 0.39 |
| Final Sat.: | 0 | 0 | 0 | 611 | 0 | 765 | 233 | 532 | 0 | 0 | 517 | 335 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.08 | xxxx | 0.06 | 0.11 | 0.11 | xxxx | xxxx | 0.27 | 0.27 |
| Crit Moves: | | | | **** | | | | **** | | | **** | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 8.8 | 0.0 | 7.4 | 8.1 | 8.1 | 0.0 | 0.0 | 8.7 | 8.7 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 8.8 | 0.0 | 7.4 | 8.1 | 8.1 | 0.0 | 0.0 | 8.7 | 8.7 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | 8.1 | | | 8.1 | | | 8.7 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 8.1 | | | 8.1 | | | 8.7 | | |
| LOS by Appr: | * | | | A | | | A | | | A | | |



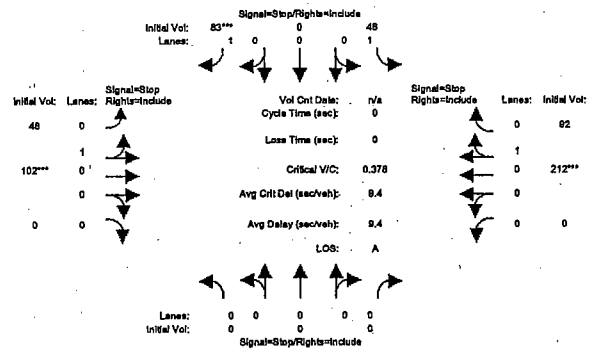


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]



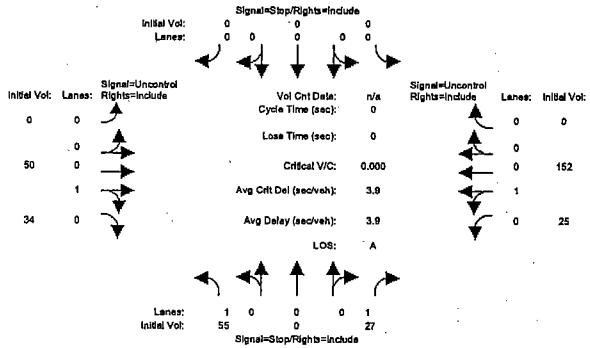

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 30 | 0 | 0 | 82 | 92 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 30 | 0 | 0 | 82 | 92 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 64 | 36 | 72 | 0 | 0 | 130 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 46 | 0 | 83 | 48 | 102 | 0 | 0 | 212 | 92 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 46 | 0 | 83 | 48 | 102 | 0 | 0 | 212 | 92 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 46 | 0 | 83 | 48 | 102 | 0 | 0 | 212 | 92 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 46 | 0 | 83 | 48 | 102 | 0 | 0 | 212 | 92 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.32 | 0.68 | 0.00 | 0.00 | 0.70 | 0.30 |
| Final Sat.: | 0 | 0 | 0 | 572 | 0 | 705 | 234 | 498 | 0 | 0 | 561 | 244 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.08 | xxxx | 0.12 | 0.20 | 0.20 | xxxx | xxxx | 0.38 | 0.38 |
| Crit Moves: | | | | | | **** | | **** | | | **** | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 9.2 | 0.0 | 8.1 | 9.0 | 9.0 | 0.0 | 0.0 | 9.9 | 9.9 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 9.2 | 0.0 | 8.1 | 9.0 | 9.0 | 0.0 | 0.0 | 9.9 | 9.9 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | 8.5 | | | 9.0 | | | 9.9 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 8.5 | | | 9.0 | | | 9.9 | | |
| LOS by Appr: | * | | | A | | | A | | | A | | |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 50 | 34 | 25 | 152 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 50 | 34 | 25 | 152 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 50 | 34 | 25 | 152 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 50 | 34 | 25 | 152 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 50 | 34 | 25 | 152 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 269 | xxxx | 67 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 84 | xxxx | xxxxx |
| Potent Cap.: | 720 | xxxx | 997 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1494 | xxxx | xxxxx |
| Move Cap.: | 711 | xxxx | 997 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1494 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 10.5 | xxxx | 8.7 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.5 | xxxx | xxxxx |
| LOS by Move: | B | * | A | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.5 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 9.9 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | A | | | * | | | * | | | * | | |



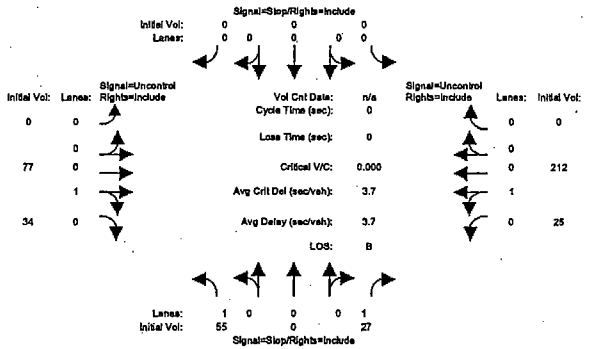


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 AM

Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]



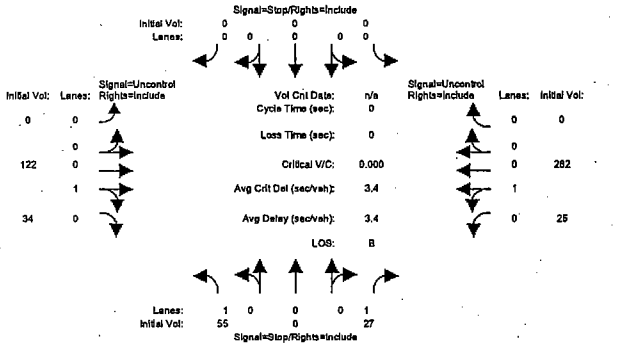

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 50 | 34 | 25 | 152 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 50 | 34 | 25 | 152 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 0 | 60 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 77 | 34 | 25 | 212 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 77 | 34 | 25 | 212 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 77 | 34 | 25 | 212 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 356 | xxxx | 94 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 111 | xxxx | xxxxx |
| Potent Cap.: | 642 | xxxx | 963 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1460 | xxxx | xxxxx |
| Move Cap.: | 634 | xxxx | 963 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1460 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 11.2 | xxxx | 8.8 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.5 | xxxx | xxxxx |
| LOS by Move: | B | * | A | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.5 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 10.4 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 50 | 34 | 25 | 152 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 50 | 34 | 25 | 152 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 0 | 130 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 122 | 34 | 25 | 282 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 122 | 34 | 25 | 282 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 122 | 34 | 25 | 282 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 471 | xxxx | 139 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 156 | xxxx | xxxxx |
| Potent Cap.: | 551 | xxxx | 909 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1406 | xxxx | xxxxx |
| Move Cap.: | 544 | xxxx | 909 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1406 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 12.4 | xxxx | 9.1 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.6 | xxxx | xxxxx |
| LOS by Move: | B | * | A | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.6 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 11.3 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |





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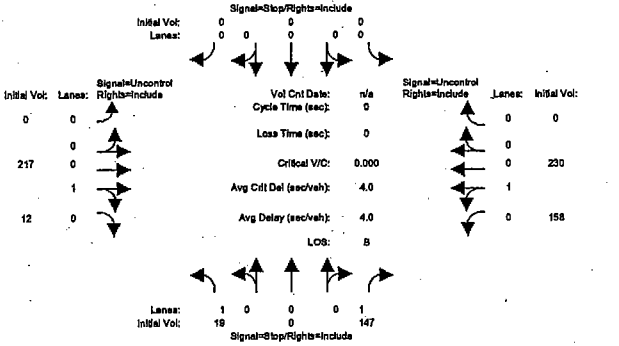
## Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 19 | 0 | 147 | 0 | 0 | 0 | 0 | 217 | 12 | 158 | 230 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 19 | 0 | 147 | 0 | 0 | 0 | 0 | 217 | 12 | 158 | 230 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 19 | 0 | 147 | 0 | 0 | 0 | 0 | 217 | 12 | 158 | 230 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 19 | 0 | 147 | 0 | 0 | 0 | 0 | 217 | 12 | 158 | 230 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 19 | 0 | 147 | 0 | 0 | 0 | 0 | 217 | 12 | 158 | 230 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 769 | xxxx | 223 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 229 | xxxx | xxxxx |
| Potent Cap.: | 372 | xxxx | 822 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1351 | xxxx | xxxxx |
| Move Cap.: | 336 | xxxx | 822 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1351 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 16.4 | xxxx | 10.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 11.0 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |

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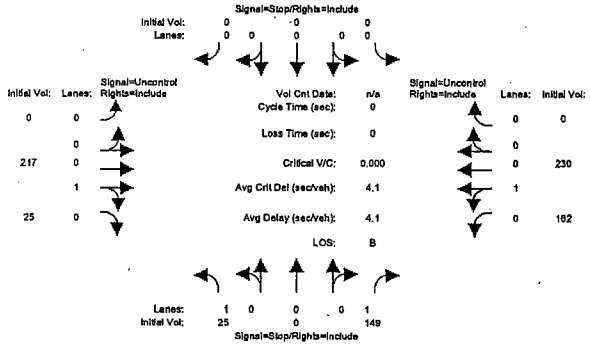
Ex + Ph 1 AM

Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 19 | 0 | 147 | 0 | 0 | 0 | 0 | 217 | 12 | 158 | 230 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 19 | 0 | 147 | 0 | 0 | 0 | 0 | 217 | 12 | 158 | 230 | 0 |
| Added Vol: | 6 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 13 | 4 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 25 | 0 | 149 | 0 | 0 | 0 | 0 | 217 | 25 | 162 | 230 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 25 | 0 | 149 | 0 | 0 | 0 | 0 | 217 | 25 | 162 | 230 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 25 | 0 | 149 | 0 | 0 | 0 | 0 | 217 | 25 | 162 | 230 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 784 | xxxx | 230 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 242 | xxxx | xxxxx |
| Potent Cap.: | 365 | xxxx | 815 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1336 | xxxx | xxxxx |
| Move Cap.: | 328 | xxxx | 815 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1336 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 16.9 | xxxx | 10.4 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.1 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.1 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 11.3 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |





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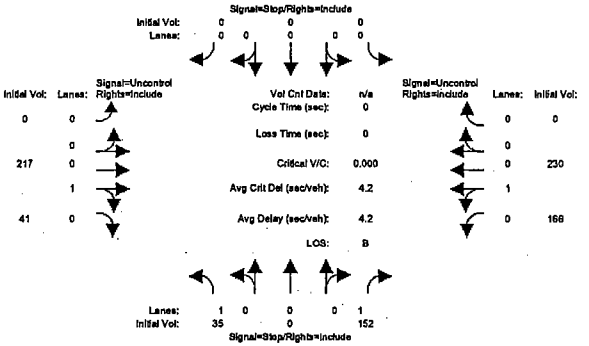
Ex + Ph 1 + Ph 2 AM

Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 19 | 0 | 147 | 0 | 0 | 0 | 0 | 217 | 12 | 158 | 230 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 19 | 0 | 147 | 0 | 0 | 0 | 0 | 217 | 12 | 158 | 230 | 0 |
| Added Vol: | 16 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 29 | 8 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 35 | 0 | 152 | 0 | 0 | 0 | 0 | 217 | 41 | 166 | 230 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 35 | 0 | 152 | 0 | 0 | 0 | 0 | 217 | 41 | 166 | 230 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 35 | 0 | 152 | 0 | 0 | 0 | 0 | 217 | 41 | 166 | 230 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 800 | xxxx | 238 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 258 | xxxx | xxxxx |
| Potent Cap.: | 357 | xxxx | 806 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1318 | xxxx | xxxxx |
| Move Cap.: | 319 | xxxx | 806 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1318 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 17.7 | xxxx | 10.5 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.1 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.1 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 11.8 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |

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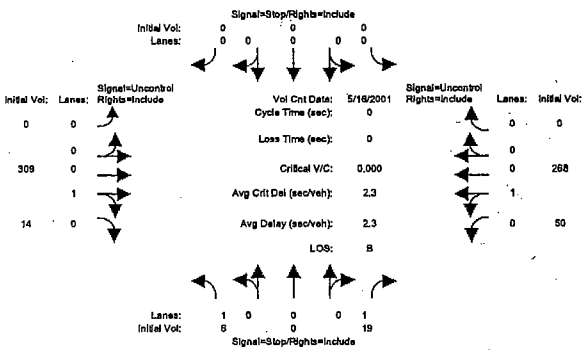
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 16 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 6 | 0 | 19 | 0 | 0 | 0 | 0 | 309 | 14 | 50 | 268 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 6 | 0 | 19 | 0 | 0 | 0 | 0 | 309 | 14 | 50 | 268 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 6 | 0 | 19 | 0 | 0 | 0 | 0 | 309 | 14 | 50 | 268 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 6 | 0 | 19 | 0 | 0 | 0 | 0 | 309 | 14 | 50 | 268 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 6 | 0 | 19 | 0 | 0 | 0 | 0 | 309 | 14 | 50 | 268 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 684 | xxxx | 316 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 323 | xxxx | xxxxx |
| Potent Cap.: | 417 | xxxx | 729 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1248 | xxxx | xxxxx |
| Move Cap.: | 404 | xxxx | 729 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1248 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 14.0 | xxxx | 10.1 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx |
| LOS by Move: | B | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 11.0 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |





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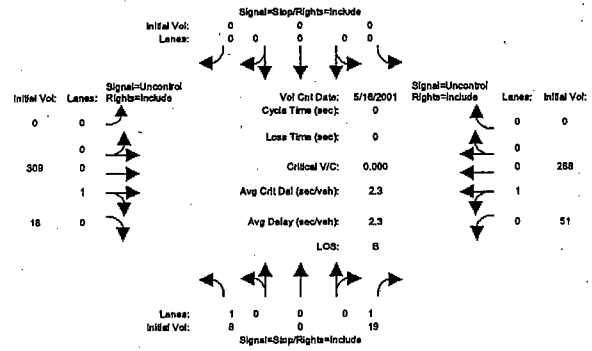
Ex + Ph 1 AM

Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 16 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 6 | 0 | 19 | 0 | 0 | 0 | 0 | 309 | 14 | 50 | 268 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 6 | 0 | 19 | 0 | 0 | 0 | 0 | 309 | 14 | 50 | 268 | 0 |
| Added Vol: | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 8 | 0 | 19 | 0 | 0 | 0 | 0 | 309 | 18 | 51 | 268 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 8 | 0 | 19 | 0 | 0 | 0 | 0 | 309 | 18 | 51 | 268 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 8 | 0 | 19 | 0 | 0 | 0 | 0 | 309 | 18 | 51 | 268 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 688 | xxxx | 318 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 327 | xxxx | xxxxx |
| Potent Cap.: | 415 | xxxx | 727 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1244 | xxxx | xxxxx |
| Move Cap.: | 402 | xxxx | 727 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1244 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 14.1 | xxxx | 10.1 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx |
| LOS by Move: | B | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 11.3 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |

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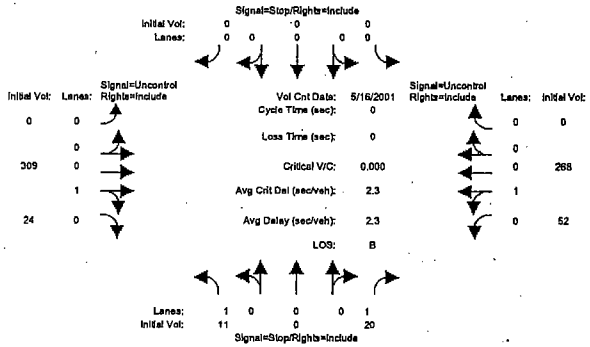
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 16 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 6 | 0 | 19 | 0 | 0 | 0 | 0 | 309 | 14 | 50 | 268 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 6 | 0 | 19 | 0 | 0 | 0 | 0 | 309 | 14 | 50 | 268 | 0 |
| Added Vol: | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 2 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 11 | 0 | 20 | 0 | 0 | 0 | 0 | 309 | 24 | 52 | 268 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 11 | 0 | 20 | 0 | 0 | 0 | 0 | 309 | 24 | 52 | 268 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 11 | 0 | 20 | 0 | 0 | 0 | 0 | 309 | 24 | 52 | 268 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 693 | xxxx | 321 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 333 | xxxx | xxxxx |
| Potent Cap.: | 412 | xxxx | 724 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1238 | xxxx | xxxxx |
| Move Cap.: | 399 | xxxx | 724 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1238 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 14.3 | xxxx | 10.1 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx |
| LOS by Move: | B | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 11.6 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |





Marine Science Center

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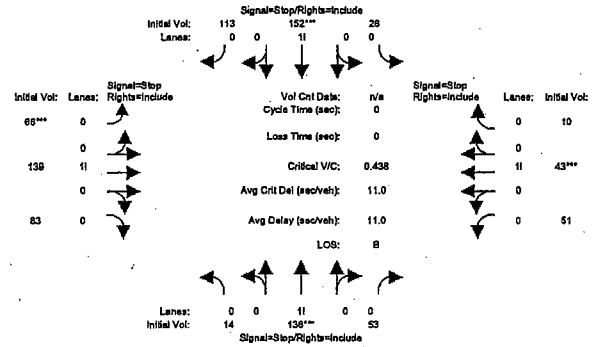
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing AM

Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 14 | 136 | 53 | 26 | 152 | 113 | 66 | 139 | 83 | 51 | 43 | 10 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 14 | 136 | 53 | 26 | 152 | 113 | 66 | 139 | 83 | 51 | 43 | 10 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 14 | 136 | 53 | 26 | 152 | 113 | 66 | 139 | 83 | 51 | 43 | 10 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 14 | 136 | 53 | 26 | 152 | 113 | 66 | 139 | 83 | 51 | 43 | 10 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 14 | 136 | 53 | 26 | 152 | 113 | 66 | 139 | 83 | 51 | 43 | 10 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 14 | 136 | 53 | 26 | 152 | 113 | 66 | 139 | 83 | 51 | 43 | 10 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.07 | 0.67 | 0.26 | 0.09 | 0.52 | 0.39 | 0.23 | 0.48 | 0.29 | 0.49 | 0.41 | 0.10 |
| Final Sat.: | 45 | 433 | 169 | 61 | 356 | 264 | 151 | 317 | 189 | 284 | 240 | 56 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.31 | 0.31 | 0.31 | 0.43 | 0.43 | 0.43 | 0.44 | 0.44 | 0.44 | 0.18 | 0.18 | 0.18 |
| Crit Moves: | | **** | | | **** | | **** | | | | **** | |
| Delay/Veh: | 10.3 | 10.3 | 10.3 | 11.3 | 11.3 | 11.3 | 11.7 | 11.7 | 11.7 | 9.7 | 9.7 | 9.7 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.3 | 10.3 | 10.3 | 11.3 | 11.3 | 11.3 | 11.7 | 11.7 | 11.7 | 9.7 | 9.7 | 9.7 |
| LOS by Move: | B | B | B | B | B | B | B | B | B | A | A | A |
| ApproachDel: | | 10.3 | | | 11.3 | | | 11.7 | | | 9.7 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.3 | | | 11.3 | | | 11.7 | | | 9.7 | |
| LOS by Appr: | | B | | | B | | | B | | | A | |

Marine Science Center

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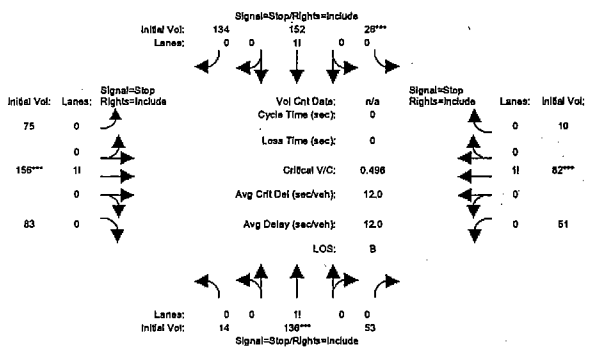
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 14 | 136 | 53 | 26 | 152 | 113 | 66 | 139 | 83 | 51 | 43 | 10 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 14 | 136 | 53 | 26 | 152 | 113 | 66 | 139 | 83 | 51 | 43 | 10 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 21 | 9 | 17 | 0 | 0 | 39 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 14 | 136 | 53 | 26 | 152 | 134 | 75 | 156 | 83 | 51 | 82 | 10 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 14 | 136 | 53 | 26 | 152 | 134 | 75 | 156 | 83 | 51 | 82 | 10 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 14 | 136 | 53 | 26 | 152 | 134 | 75 | 156 | 83 | 51 | 82 | 10 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 14 | 136 | 53 | 26 | 152 | 134 | 75 | 156 | 83 | 51 | 82 | 10 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.07 | 0.67 | 0.26 | 0.08 | 0.49 | 0.43 | 0.24 | 0.50 | 0.26 | 0.36 | 0.57 | 0.07 |
| Final Sat.: | 42 | 407 | 158 | 54 | 318 | 280 | 151 | 315 | 168 | 201 | 323 | 39 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.33 | 0.33 | 0.33 | 0.48 | 0.48 | 0.48 | 0.50 | 0.50 | 0.50 | 0.25 | 0.25 | 0.25 |
| Crit Moves: | | **** | | **** | | | | **** | | | **** | |
| Delay/Veh: | 10.9 | 10.9 | 10.9 | 12.4 | 12.4 | 12.4 | 12.9 | 12.9 | 12.9 | 10.5 | 10.5 | 10.5 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.9 | 10.9 | 10.9 | 12.4 | 12.4 | 12.4 | 12.9 | 12.9 | 12.9 | 10.5 | 10.5 | 10.5 |
| LOS by Move: | B | B | B | B | B | B | B | B | B | B | B | B |
| ApproachDel: | | 10.9 | | | 12.4 | | | 12.9 | | | 10.5 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.9 | | | 12.4 | | | 12.9 | | | 10.5 | |
| LOS by Appr: | | B | | | B | | | B | | | B | |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Marine Science Center

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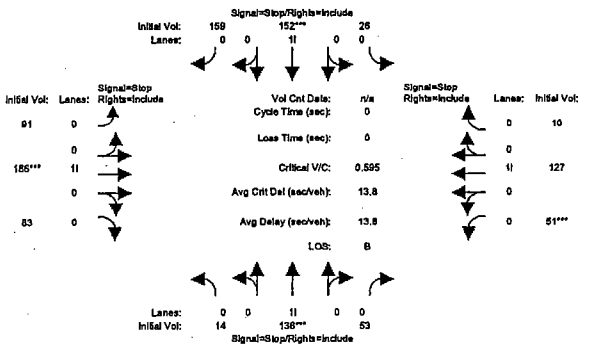
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 14 | 136 | 53 | 26 | 152 | 113 | 66 | 139 | 83 | 51 | 43 | 10 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 14 | 136 | 53 | 26 | 152 | 113 | 66 | 139 | 83 | 51 | 43 | 10 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 46 | 25 | 47 | 0 | 0 | 84 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 14 | 136 | 53 | 26 | 152 | 159 | 91 | 186 | 83 | 51 | 127 | 10 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 14 | 136 | 53 | 26 | 152 | 159 | 91 | 186 | 83 | 51 | 127 | 10 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 14 | 136 | 53 | 26 | 152 | 159 | 91 | 186 | 83 | 51 | 127 | 10 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 14 | 136 | 53 | 26 | 152 | 159 | 91 | 186 | 83 | 51 | 127 | 10 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.07 | 0.67 | 0.26 | 0.08 | 0.45 | 0.47 | 0.25 | 0.52 | 0.23 | 0.27 | 0.68 | 0.05 |
| Final Sat.: | 38 | 371 | 145 | 47 | 276 | 289 | 153 | 313 | 140 | 146 | 363 | 29 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.37 | 0.37 | 0.37 | 0.55 | 0.55 | 0.55 | 0.59 | 0.59 | 0.59 | 0.35 | 0.35 | 0.35 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Delay/Veh: | 11.8 | 11.8 | 11.8 | 14.3 | 14.3 | 14.3 | 15.6 | 15.6 | 15.6 | 11.8 | 11.8 | 11.8 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 11.8 | 11.8 | 11.8 | 14.3 | 14.3 | 14.3 | 15.6 | 15.6 | 15.6 | 11.8 | 11.8 | 11.8 |
| LOS by Move: | B | B | B | B | B | B | C | C | C | B | B | B |
| ApproachDel: | | 11.8 | | | 14.3 | | | 15.6 | | | 11.8 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 11.8 | | | 14.3 | | | 15.6 | | | 11.8 | |
| LOS by Appr: | | B | | | B | | | C | | | B | |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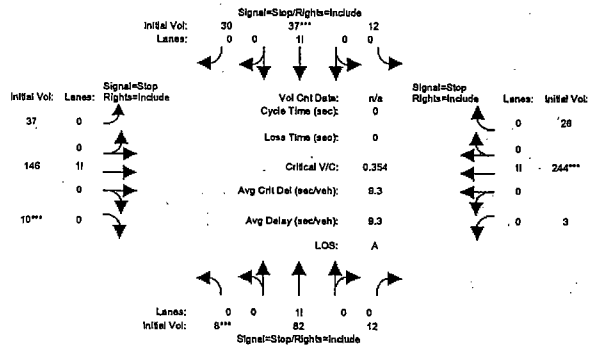
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing AM

## Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 146 | 10 | 3 | 244 | 26 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 146 | 10 | 3 | 244 | 26 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 146 | 10 | 3 | 244 | 26 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 146 | 10 | 3 | 244 | 26 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 146 | 10 | 3 | 244 | 26 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 146 | 10 | 3 | 244 | 26 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.08 | 0.80 | 0.12 | 0.15 | 0.47 | 0.38 | 0.19 | 0.76 | 0.05 | 0.01 | 0.89 | 0.10 |
| Final Sat.: | 52 | 535 | 78 | 102 | 316 | 256 | 143 | 563 | 39 | 8 | 690 | 74 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.15 | 0.15 | 0.15 | 0.12 | 0.12 | 0.12 | 0.26 | 0.26 | 0.26 | 0.35 | 0.35 | 0.35 |
| Crit Moves: | **** | | | | **** | | | | **** | | **** | |
| Delay/Veh: | 8.8 | 8.8 | 8.8 | 8.5 | 8.5 | 8.5 | 9.2 | 9.2 | 9.2 | 9.8 | 9.8 | 9.8 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 8.8 | 8.8 | 8.8 | 8.5 | 8.5 | 8.5 | 9.2 | 9.2 | 9.2 | 9.8 | 9.8 | 9.8 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | | 8.8 | | | 8.5 | | | 9.2 | | | 9.8 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 8.8 | | | 8.5 | | | 9.2 | | | 9.8 | |
| LOS by Appr: | | A | | | A | | | A | | | A | |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Marine Science Center

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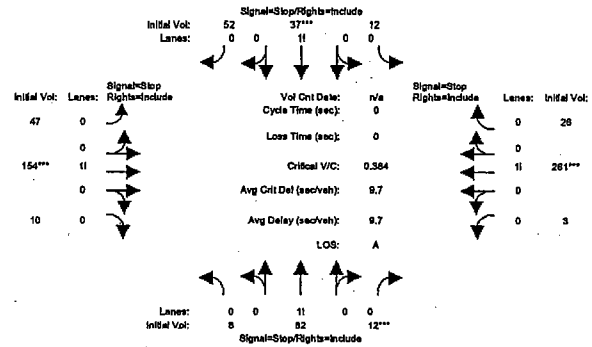
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 146 | 10 | 3 | 244 | 26 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 146 | 10 | 3 | 244 | 26 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 22 | 10 | 8 | 0 | 0 | 17 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 8 | 82 | 12 | 12 | 37 | 52 | 47 | 154 | 10 | 3 | 261 | 26 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 8 | 82 | 12 | 12 | 37 | 52 | 47 | 154 | 10 | 3 | 261 | 26 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 8 | 82 | 12 | 12 | 37 | 52 | 47 | 154 | 10 | 3 | 261 | 26 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 8 | 82 | 12 | 12 | 37 | 52 | 47 | 154 | 10 | 3 | 261 | 26 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.08 | 0.80 | 0.12 | 0.12 | 0.37 | 0.51 | 0.22 | 0.73 | 0.05 | 0.01 | 0.90 | 0.09 |
| Final Sat.: | 50 | 517 | 76 | 80 | 245 | 345 | 162 | 530 | 34 | 8 | 679 | 68 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.16 | 0.16 | 0.16 | 0.15 | 0.15 | 0.15 | 0.29 | 0.29 | 0.29 | 0.38 | 0.38 | 0.38 |
| Crit Moves: | | | **** | | **** | | | **** | | | **** | |
| Delay/Veh: | 9.0 | 9.0 | 9.0 | 8.7 | 8.7 | 8.7 | 9.6 | 9.6 | 9.6 | 10.3 | 10.3 | 10.3 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.0 | 9.0 | 9.0 | 8.7 | 8.7 | 8.7 | 9.6 | 9.6 | 9.6 | 10.3 | 10.3 | 10.3 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | B | B | B |
| ApproachDel: | | 9.0 | | | 8.7 | | | 9.6 | | | 10.3 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 9.0 | | | 8.7 | | | 9.6 | | | 10.3 | |
| LOS by Appr: | | A | | | A | | | A | | | B | |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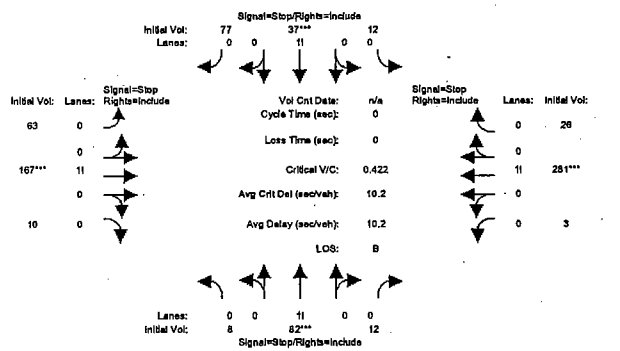
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 146 | 10 | 3 | 244 | 26 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 146 | 10 | 3 | 244 | 26 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 47 | 26 | 21 | 0 | 0 | 37 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 8 | 82 | 12 | 12 | 37 | 77 | 63 | 167 | 10 | 3 | 281 | 26 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 8 | 82 | 12 | 12 | 37 | 77 | 63 | 167 | 10 | 3 | 281 | 26 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 8 | 82 | 12 | 12 | 37 | 77 | 63 | 167 | 10 | 3 | 281 | 26 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 8 | 82 | 12 | 12 | 37 | 77 | 63 | 167 | 10 | 3 | 281 | 26 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.08 | 0.80 | 0.12 | 0.10 | 0.29 | 0.61 | 0.26 | 0.70 | 0.04 | 0.01 | 0.91 | 0.08 |
| Final Sat.: | 48 | 496 | 73 | 63 | 193 | 401 | 186 | 492 | 29 | 7 | 665 | 62 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.17 | 0.17 | 0.17 | 0.19 | 0.19 | 0.19 | 0.34 | 0.34 | 0.34 | 0.42 | 0.42 | 0.42 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Delay/Veh: | 9.2 | 9.2 | 9.2 | 9.0 | 9.0 | 9.0 | 10.2 | 10.2 | 10.2 | 10.9 | 10.9 | 10.9 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.2 | 9.2 | 9.2 | 9.0 | 9.0 | 9.0 | 10.2 | 10.2 | 10.2 | 10.9 | 10.9 | 10.9 |
| LOS by Move: | A | A | A | A | A | A | B | B | B | B | B | B |
| ApproachDel: | | 9.2 | | | 9.0 | | | 10.2 | | | 10.9 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 9.2 | | | 9.0 | | | 10.2 | | | 10.9 | |
| LOS by Appr: | | A | | | A | | | B | | | B | |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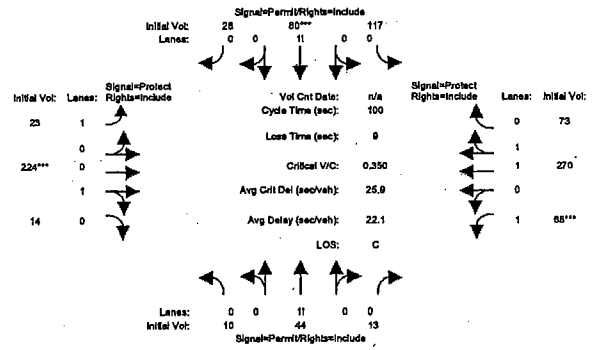
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

## Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 10 | 44 | 13 | 117 | 80 | 28 | 23 | 224 | 14 | 68 | 270 | 73 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 10 | 44 | 13 | 117 | 80 | 28 | 23 | 224 | 14 | 68 | 270 | 73 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 10 | 44 | 13 | 117 | 80 | 28 | 23 | 224 | 14 | 68 | 270 | 73 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 10 | 44 | 13 | 117 | 80 | 28 | 23 | 224 | 14 | 68 | 270 | 73 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 10 | 44 | 13 | 117 | 80 | 28 | 23 | 224 | 14 | 68 | 270 | 73 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 10 | 44 | 13 | 117 | 80 | 28 | 23 | 224 | 14 | 68 | 270 | 73 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.92 | 0.92 | 0.92 | 0.78 | 0.78 | 0.78 | 0.93 | 0.97 | 0.97 | 0.93 | 0.90 | 0.90 |
| Lanes: | 0.15 | 0.66 | 0.19 | 0.52 | 0.36 | 0.12 | 1.00 | 0.94 | 0.06 | 1.00 | 1.57 | 0.43 |
| Final Sat.: | 260 | 1142 | 337 | 773 | 528 | 185 | 1769 | 1737 | 109 | 1769 | 2696 | 729 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.04 | 0.04 | 0.15 | 0.15 | 0.15 | 0.01 | 0.13 | 0.13 | 0.04 | 0.10 | 0.10 |
| Crit Moves: | | | | | **** | | | **** | | | **** | |
| Green/Cycle: | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.05 | 0.37 | 0.37 | 0.11 | 0.42 | 0.42 |
| Volume/Cap: | 0.09 | 0.09 | 0.09 | 0.35 | 0.35 | 0.35 | 0.24 | 0.35 | 0.35 | 0.35 | 0.24 | 0.24 |
| Delay/Veh: | 16.8 | 16.8 | 16.8 | 19.3 | 19.3 | 19.3 | 46.5 | 23.2 | 23.2 | 42.3 | 18.6 | 18.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 16.8 | 16.8 | 16.8 | 19.3 | 19.3 | 19.3 | 46.5 | 23.2 | 23.2 | 42.3 | 18.6 | 18.6 |
| DesignQueue: | 0 | 1 | 0 | 4 | 3 | 1 | 1 | 8 | 1 | 3 | 9 | 2 |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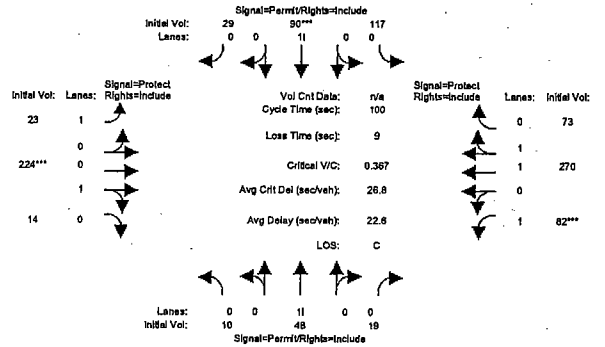
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 10 | 44 | 13 | 117 | 80 | 28 | 23 | 224 | 14 | 68 | 270 | 73 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 10 | 44 | 13 | 117 | 80 | 28 | 23 | 224 | 14 | 68 | 270 | 73 |
| Added Vol: | 0 | 4 | 6 | 0 | 10 | 1 | 0 | 0 | 0 | 14 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 10 | 48 | 19 | 117 | 90 | 29 | 23 | 224 | 14 | 82 | 270 | 73 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 10 | 48 | 19 | 117 | 90 | 29 | 23 | 224 | 14 | 82 | 270 | 73 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 10 | 48 | 19 | 117 | 90 | 29 | 23 | 224 | 14 | 82 | 270 | 73 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 10 | 48 | 19 | 117 | 90 | 29 | 23 | 224 | 14 | 82 | 270 | 73 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.91 | 0.91 | 0.79 | 0.79 | 0.79 | 0.93 | 0.97 | 0.97 | 0.93 | 0.90 | 0.90 |
| Lanes: | 0.13 | 0.62 | 0.25 | 0.50 | 0.38 | 0.12 | 1.00 | 0.94 | 0.06 | 1.00 | 1.57 | 0.43 |
| Final Sat.: | 225 | 1081 | 428 | 740 | 569 | 183 | 1769 | 1737 | 109 | 1769 | 2696 | 729 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.04 | 0.04 | 0.16 | 0.16 | 0.16 | 0.01 | 0.13 | 0.13 | 0.05 | 0.10 | 0.10 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.05 | 0.35 | 0.35 | 0.13 | 0.42 | 0.42 |
| Volume/Cap: | 0.10 | 0.10 | 0.10 | 0.37 | 0.37 | 0.37 | 0.24 | 0.37 | 0.37 | 0.37 | 0.24 | 0.24 |
| Delay/Veh: | 17.0 | 17.0 | 17.0 | 19.5 | 19.5 | 19.5 | 46.5 | 24.5 | 24.5 | 41.0 | 18.6 | 18.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 17.0 | 17.0 | 17.0 | 19.5 | 19.5 | 19.5 | 46.5 | 24.5 | 24.5 | 41.0 | 18.6 | 18.6 |
| DesignQueue: | 0 | 2 | 1 | 4 | 3 | 1 | 1 | 8 | 1 | 4 | 9 | 2 |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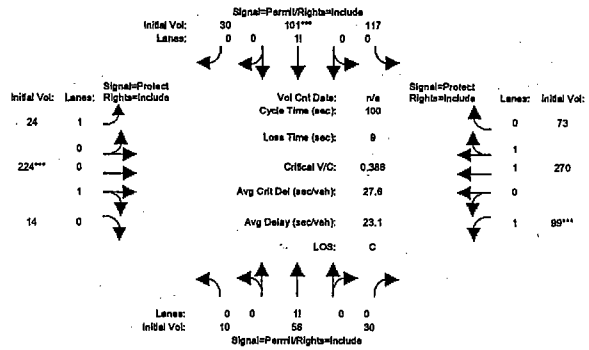
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 10 | 44 | 13 | 117 | 80 | 28 | 23 | 224 | 14 | 68 | 270 | 73 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 10 | 44 | 13 | 117 | 80 | 28 | 23 | 224 | 14 | 68 | 270 | 73 |
| Added Vol: | 0 | 12 | 17 | 0 | 21 | 2 | 1 | 0 | 0 | 31 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 10 | 56 | 30 | 117 | 101 | 30 | 24 | 224 | 14 | 99 | 270 | 73 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 10 | 56 | 30 | 117 | 101 | 30 | 24 | 224 | 14 | 99 | 270 | 73 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 10 | 56 | 30 | 117 | 101 | 30 | 24 | 224 | 14 | 99 | 270 | 73 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 10 | 56 | 30 | 117 | 101 | 30 | 24 | 224 | 14 | 99 | 270 | 73 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.91 | 0.91 | 0.91 | 0.78 | 0.78 | 0.93 | 0.97 | 0.97 | 0.93 | 0.90 | 0.90 |
| Lanes: | 0.10 | 0.59 | 0.31 | 0.47 | 0.41 | 0.12 | 1.00 | 0.94 | 0.06 | 1.00 | 1.57 | 0.43 |
| Final Sat.: | 180 | 1008 | 540 | 704 | 607 | 180 | 1769 | 1737 | 109 | 1769 | 2696 | 729 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.06 | 0.06 | 0.17 | 0.17 | 0.17 | 0.01 | 0.13 | 0.13 | 0.06 | 0.10 | 0.10 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.06 | 0.33 | 0.33 | 0.15 | 0.42 | 0.42 |
| Volume/Cap: | 0.13 | 0.13 | 0.13 | 0.39 | 0.39 | 0.39 | 0.24 | 0.39 | 0.39 | 0.39 | 0.24 | 0.24 |
| Delay/Veh: | 17.2 | 17.2 | 17.2 | 19.8 | 19.8 | 19.8 | 46.3 | 25.9 | 25.9 | 39.7 | 18.6 | 18.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 17.2 | 17.2 | 17.2 | 19.8 | 19.8 | 19.8 | 46.3 | 25.9 | 25.9 | 39.7 | 18.6 | 18.6 |
| DesignQueue: | 0 | 2 | 1 | 4 | 3 | 1 | 1 | 9 | 1 | 5 | 9 | 2 |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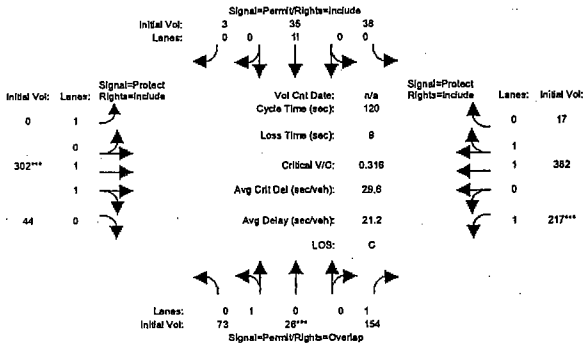
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

## Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 73 | 26 | 154 | 38 | 35 | 3 | 0 | 302 | 44 | 217 | 382 | 17 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 73 | 26 | 154 | 38 | 35 | 3 | 0 | 302 | 44 | 217 | 382 | 17 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 73 | 26 | 154 | 38 | 35 | 3 | 0 | 302 | 44 | 217 | 382 | 17 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 73 | 26 | 154 | 38 | 35 | 3 | 0 | 302 | 44 | 217 | 382 | 17 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 73 | 26 | 154 | 38 | 35 | 3 | 0 | 302 | 44 | 217 | 382 | 17 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 73 | 26 | 154 | 38 | 35 | 3 | 0 | 302 | 44 | 217 | 382 | 17 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.74 | 0.74 | 0.83 | 0.82 | 0.82 | 0.82 | 1.00 | 0.91 | 0.91 | 0.93 | 0.93 | 0.93 |
| Lanes: | 0.74 | 0.26 | 1.00 | 0.50 | 0.46 | 0.04 | 1.00 | 1.75 | 0.25 | 1.00 | 1.91 | 0.09 |
| Final Sat.: | 1038 | 370 | 1583 | 775 | 714 | 61 | 1900 | 3029 | 441 | 1769 | 3367 | 150 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.07 | 0.10 | 0.05 | 0.05 | 0.05 | 0.00 | 0.10 | 0.10 | 0.12 | 0.11 | 0.11 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.22 | 0.22 | 0.61 | 0.22 | 0.22 | 0.22 | 0.00 | 0.32 | 0.32 | 0.39 | 0.70 | 0.70 |
| Volume/Cap: | 0.32 | 0.32 | 0.16 | 0.22 | 0.22 | 0.22 | 0.00 | 0.32 | 0.32 | 0.32 | 0.16 | 0.16 |
| Delay/Veh: | 39.6 | 39.6 | 10.2 | 38.5 | 38.5 | 38.5 | 0.0 | 31.4 | 31.4 | 25.9 | 6.0 | 6.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 39.6 | 39.6 | 10.2 | 38.5 | 38.5 | 38.5 | 0.0 | 31.4 | 31.4 | 25.9 | 6.0 | 6.0 |
| DesignQueue: | 4 | 1 | 4 | 2 | 2 | 0 | 0 | 14 | 2 | 9 | 8 | 0 |





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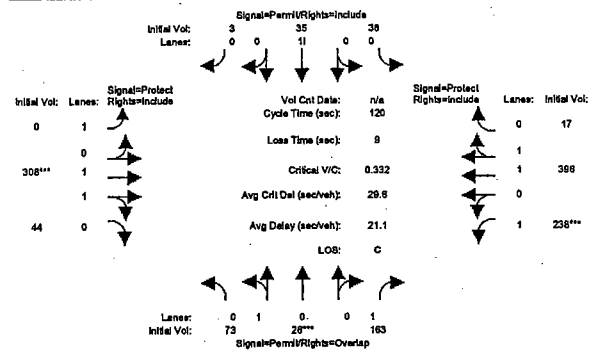
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 73 | 26 | 154 | 38 | 35 | 3 | 0 | 302 | 44 | 217 | 382 | 17 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 73 | 26 | 154 | 38 | 35 | 3 | 0 | 302 | 44 | 217 | 382 | 17 |
| Added Vol: | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 6 | 0 | 21 | 14 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 73 | 26 | 163 | 38 | 35 | 3 | 0 | 308 | 44 | 238 | 396 | 17 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 73 | 26 | 163 | 38 | 35 | 3 | 0 | 308 | 44 | 238 | 396 | 17 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 73 | 26 | 163 | 38 | 35 | 3 | 0 | 308 | 44 | 238 | 396 | 17 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 73 | 26 | 163 | 38 | 35 | 3 | 0 | 308 | 44 | 238 | 396 | 17 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.74 | 0.74 | 0.83 | 0.82 | 0.82 | 0.82 | 1.00 | 0.91 | 0.91 | 0.93 | 0.93 | 0.93 |
| Lanes: | 0.74 | 0.26 | 1.00 | 0.50 | 0.46 | 0.04 | 1.00 | 1.75 | 0.25 | 1.00 | 1.92 | 0.08 |
| Final Sat.: | 1032 | 368 | 1583 | 774 | 713 | 61 | 1900 | 3037 | 434 | 1769 | 3372 | 145 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.07 | 0.10 | 0.05 | 0.05 | 0.05 | 0.00 | 0.10 | 0.10 | 0.13 | 0.12 | 0.12 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.21 | 0.21 | 0.62 | 0.21 | 0.21 | 0.21 | 0.00 | 0.31 | 0.31 | 0.41 | 0.71 | 0.71 |
| Volume/Cap: | 0.33 | 0.33 | 0.17 | 0.23 | 0.23 | 0.23 | 0.00 | 0.33 | 0.33 | 0.33 | 0.17 | 0.17 |
| Delay/Veh: | 40.6 | 40.6 | 9.8 | 39.4 | 39.4 | 39.4 | 0.0 | 32.4 | 32.4 | 24.7 | 5.7 | 5.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 40.6 | 40.6 | 9.8 | 39.4 | 39.4 | 39.4 | 0.0 | 32.4 | 32.4 | 24.7 | 5.7 | 5.7 |
| DesignQueue: | 4 | 1 | 4 | 2 | 2 | 0 | 0 | 15 | 2 | 10 | 8 | 0 |

Marine Science Center

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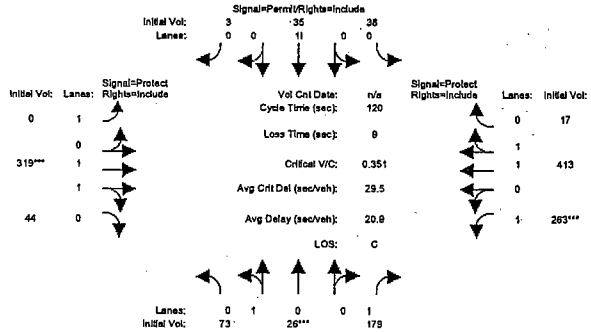
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 73 | 26 | 154 | 38 | 35 | 3 | 0 | 302 | 44 | 217 | 382 | 17 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 73 | 26 | 154 | 38 | 35 | 3 | 0 | 302 | 44 | 217 | 382 | 17 |
| Added Vol: | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 17 | 0 | 46 | 31 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 73 | 26 | 179 | 38 | 35 | 3 | 0 | 319 | 44 | 263 | 413 | 17 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 73 | 26 | 179 | 38 | 35 | 3 | 0 | 319 | 44 | 263 | 413 | 17 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 73 | 26 | 179 | 38 | 35 | 3 | 0 | 319 | 44 | 263 | 413 | 17 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 73 | 26 | 179 | 38 | 35 | 3 | 0 | 319 | 44 | 263 | 413 | 17 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.73 | 0.73 | 0.83 | 0.81 | 0.81 | 0.81 | 1.00 | 0.91 | 0.91 | 0.93 | 0.93 | 0.93 |
| Lanes: | 0.74 | 0.26 | 1.00 | 0.50 | 0.46 | 0.04 | 1.00 | 1.76 | 0.24 | 1.00 | 1.92 | 0.08 |
| Final Sat.: | 1026 | 365 | 1583 | 773 | 712 | 61 | 1900 | 3053 | 421 | 1769 | 3378 | 139 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.07 | 0.11 | 0.05 | 0.05 | 0.05 | 0.00 | 0.10 | 0.10 | 0.15 | 0.12 | 0.12 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.20 | 0.20 | 0.63 | 0.20 | 0.20 | 0.20 | 0.00 | 0.30 | 0.30 | 0.42 | 0.72 | 0.72 |
| Volume/Cap: | 0.35 | 0.35 | 0.18 | 0.24 | 0.24 | 0.24 | 0.00 | 0.35 | 0.35 | 0.35 | 0.17 | 0.17 |
| Delay/Veh: | 41.8 | 41.8 | 9.5 | 40.5 | 40.5 | 40.5 | 0.0 | 33.2 | 33.2 | 23.7 | 5.3 | 5.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 41.8 | 41.8 | 9.5 | 40.5 | 40.5 | 40.5 | 0.0 | 33.2 | 33.2 | 23.7 | 5.3 | 5.3 |
| DesignQueue: | 4 | 1 | 5 | 2 | 2 | 0 | 0 | 15 | 2 | 10 | 8 | 0 |





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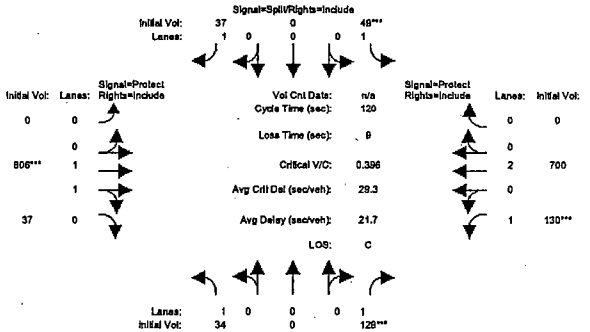
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

## Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 606 | 37 | 130 | 700 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 606 | 37 | 130 | 700 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 606 | 37 | 130 | 700 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 606 | 37 | 130 | 700 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 606 | 37 | 130 | 700 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 606 | 37 | 130 | 700 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.92 | 0.92 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.88 | 0.12 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3304 | 202 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.00 | 0.08 | 0.03 | 0.00 | 0.02 | 0.00 | 0.18 | 0.18 | 0.07 | 0.20 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.21 | 0.00 | 0.21 | 0.07 | 0.00 | 0.07 | 0.00 | 0.46 | 0.46 | 0.19 | 0.65 | 0.00 |
| Volume/Cap: | 0.09 | 0.00 | 0.40 | 0.40 | 0.00 | 0.33 | 0.00 | 0.40 | 0.40 | 0.40 | 0.30 | 0.00 |
| Delay/Veh: | 38.7 | 0.0 | 42.0 | 55.5 | 0.0 | 54.9 | 0.0 | 21.3 | 21.3 | 43.7 | 9.3 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 38.7 | 0.0 | 42.0 | 55.5 | 0.0 | 54.9 | 0.0 | 21.3 | 21.3 | 43.7 | 9.3 | 0.0 |
| DesignQueue: | 2 | 0 | 7 | 3 | 0 | 2 | 0 | 23 | 1 | 7 | 17 | 0 |

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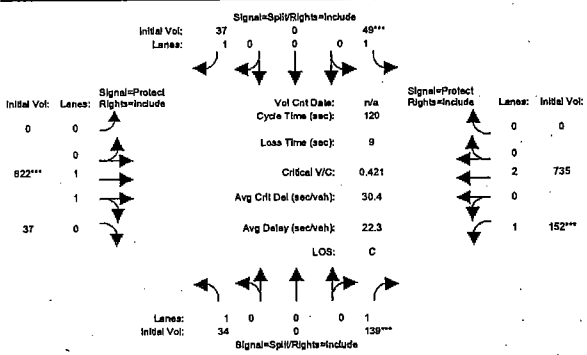
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 606 | 37 | 130 | 700 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 606 | 37 | 130 | 700 | 0 |
| Added Vol: | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 16 | 0 | 22 | 35 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 34 | 0 | 139 | 49 | 0 | 37 | 0 | 622 | 37 | 152 | 735 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 34 | 0 | 139 | 49 | 0 | 37 | 0 | 622 | 37 | 152 | 735 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 34 | 0 | 139 | 49 | 0 | 37 | 0 | 622 | 37 | 152 | 735 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 34 | 0 | 139 | 49 | 0 | 37 | 0 | 622 | 37 | 152 | 735 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.92 | 0.92 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.89 | 0.11 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3312 | 197 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.00 | 0.09 | 0.03 | 0.00 | 0.02 | 0.00 | 0.19 | 0.19 | 0.09 | 0.21 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.21 | 0.00 | 0.21 | 0.07 | 0.00 | 0.07 | 0.00 | 0.45 | 0.45 | 0.20 | 0.65 | 0.00 |
| Volume/Cap: | 0.09 | 0.00 | 0.42 | 0.42 | 0.00 | 0.36 | 0.00 | 0.42 | 0.42 | 0.42 | 0.32 | 0.00 |
| Delay/Veh: | 38.4 | 0.0 | 42.1 | 56.3 | 0.0 | 55.7 | 0.0 | 22.8 | 22.8 | 42.4 | 9.3 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 38.4 | 0.0 | 42.1 | 56.3 | 0.0 | 55.7 | 0.0 | 22.8 | 22.8 | 42.4 | 9.3 | 0.0 |
| DesignQueue: | 2 | 0 | 7 | 3 | 0 | 2 | 0 | 24 | 1 | 8 | 18 | 0 |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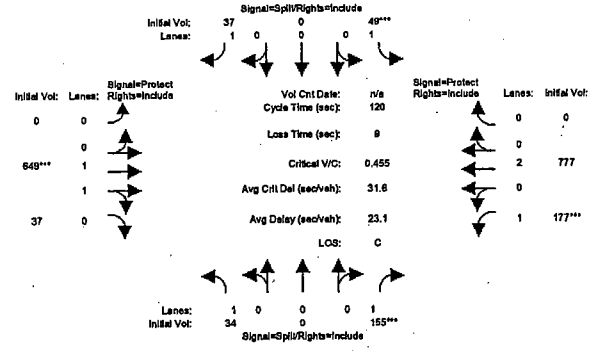
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 606 | 37 | 130 | 700 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 606 | 37 | 130 | 700 | 0 |
| Added Vol: | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 43 | 0 | 47 | 77 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 34 | 0 | 155 | 49 | 0 | 37 | 0 | 649 | 37 | 177 | 777 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 34 | 0 | 155 | 49 | 0 | 37 | 0 | 649 | 37 | 177 | 777 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 34 | 0 | 155 | 49 | 0 | 37 | 0 | 649 | 37 | 177 | 777 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 34 | 0 | 155 | 49 | 0 | 37 | 0 | 649 | 37 | 177 | 777 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.92 | 0.92 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.89 | 0.11 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3320 | 189 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.00 | 0.10 | 0.03 | 0.00 | 0.02 | 0.00 | 0.20 | 0.20 | 0.10 | 0.22 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.22 | 0.00 | 0.22 | 0.06 | 0.00 | 0.06 | 0.00 | 0.43 | 0.43 | 0.22 | 0.65 | 0.00 |
| Volume/Cap: | 0.09 | 0.00 | 0.46 | 0.46 | 0.00 | 0.38 | 0.00 | 0.46 | 0.46 | 0.46 | 0.34 | 0.00 |
| Delay/Veh: | 37.8 | 0.0 | 41.9 | 57.5 | 0.0 | 56.7 | 0.0 | 24.5 | 24.5 | 41.4 | 9.6 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.8 | 0.0 | 41.9 | 57.5 | 0.0 | 56.7 | 0.0 | 24.5 | 24.5 | 41.4 | 9.6 | 0.0 |
| DesignQueue: | 2 | 0 | 8 | 3 | 0 | 2 | 0 | 26 | 1 | 9 | 19 | 0 |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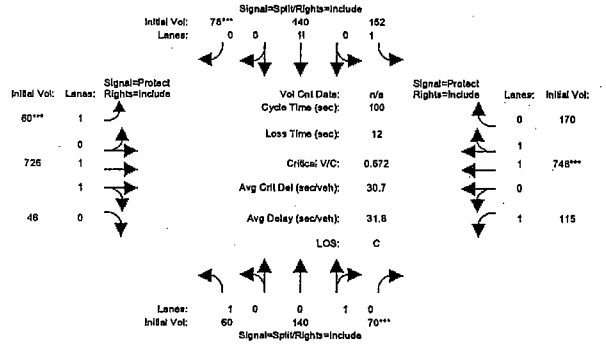
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

## Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 60 | 140 | 70 | 152 | 140 | 78 | 60 | 726 | 46 | 115 | 748 | 170 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 60 | 140 | 70 | 152 | 140 | 78 | 60 | 726 | 46 | 115 | 748 | 170 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 60 | 140 | 70 | 152 | 140 | 78 | 60 | 726 | 46 | 115 | 748 | 170 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 60 | 140 | 70 | 152 | 140 | 78 | 60 | 726 | 46 | 115 | 748 | 170 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 60 | 140 | 70 | 152 | 140 | 78 | 60 | 726 | 46 | 115 | 748 | 170 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 60 | 140 | 70 | 152 | 140 | 78 | 60 | 726 | 46 | 115 | 748 | 170 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.90 | 0.90 |
| Lanes: | 1.00 | 0.67 | 0.33 | 1.26 | 0.48 | 0.26 | 1.00 | 1.88 | 0.12 | 1.00 | 1.63 | 0.37 |
| Final Sat.: | 1736 | 1158 | 579 | 2182 | 826 | 460 | 1769 | 3297 | 209 | 1769 | 2802 | 637 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.12 | 0.12 | 0.07 | 0.17 | 0.17 | 0.03 | 0.22 | 0.22 | 0.07 | 0.27 | 0.27 |
| Crit Moves: | | | **** | | | **** | **** | | | | **** | |
| Green/Cycle: | 0.18 | 0.18 | 0.18 | 0.25 | 0.25 | 0.25 | 0.05 | 0.35 | 0.35 | 0.10 | 0.40 | 0.40 |
| Volume/Cap: | 0.19 | 0.67 | 0.67 | 0.28 | 0.67 | 0.67 | 0.67 | 0.64 | 0.64 | 0.64 | 0.67 | 0.67 |
| Delay/Veh: | 35.1 | 43.9 | 43.9 | 30.2 | 36.9 | 36.9 | 64.9 | 28.6 | 28.6 | 50.5 | 26.1 | 26.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 35.1 | 43.9 | 43.9 | 30.2 | 36.9 | 36.9 | 64.9 | 28.6 | 28.6 | 50.5 | 26.1 | 26.1 |
| DesignQueue: | 3 | 7 | 3 | 6 | 6 | 3 | 3 | 28 | 2 | 6 | 27 | 6 |



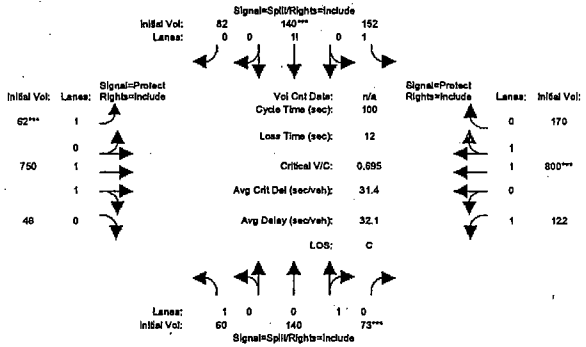


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 60 | 140 | 70 | 152 | 140 | 78 | 60 | 726 | 46 | 115 | 748 | 170 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 60 | 140 | 70 | 152 | 140 | 78 | 60 | 726 | 46 | 115 | 748 | 170 |
| Added Vol: | 0 | 0 | 3 | 0 | 0 | 4 | 2 | 24 | 0 | 7 | 52 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 60 | 140 | 73 | 152 | 140 | 82 | 62 | 750 | 46 | 122 | 800 | 170 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 60 | 140 | 73 | 152 | 140 | 82 | 62 | 750 | 46 | 122 | 800 | 170 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 60 | 140 | 73 | 152 | 140 | 82 | 62 | 750 | 46 | 122 | 800 | 170 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 60 | 140 | 73 | 152 | 140 | 82 | 62 | 750 | 46 | 122 | 800 | 170 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.66 | 0.34 | 1.25 | 0.47 | 0.28 | 1.00 | 1.88 | 0.12 | 1.00 | 1.65 | 0.35 |
| Final Sat.: | 1736 | 1140 | 594 | 2174 | 814 | 477 | 1769 | 3303 | 203 | 1769 | 2842 | 604 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.12 | 0.12 | 0.07 | 0.17 | 0.17 | 0.04 | 0.23 | 0.23 | 0.07 | 0.28 | 0.28 |
| Crit Moves: | | | **** | | **** | | **** | | | | **** | |
| Green/Cycle: | 0.18 | 0.18 | 0.18 | 0.25 | 0.25 | 0.25 | 0.05 | 0.35 | 0.35 | 0.11 | 0.41 | 0.41 |
| Volume/Cap: | 0.20 | 0.69 | 0.69 | 0.28 | 0.69 | 0.69 | 0.69 | 0.65 | 0.65 | 0.65 | 0.69 | 0.69 |
| Delay/Veh: | 35.4 | 45.4 | 45.4 | 30.5 | 38.1 | 38.1 | 67.9 | 28.6 | 28.6 | 50.7 | 26.2 | 26.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 35.4 | 45.4 | 45.4 | 30.5 | 38.1 | 38.1 | 67.9 | 28.6 | 28.6 | 50.7 | 26.2 | 26.2 |
| DesignQueue: | 3 | 7 | 3 | 6 | 6 | 4 | 3 | 29 | 2 | 6 | 28 | 6 |

Marine Science Center

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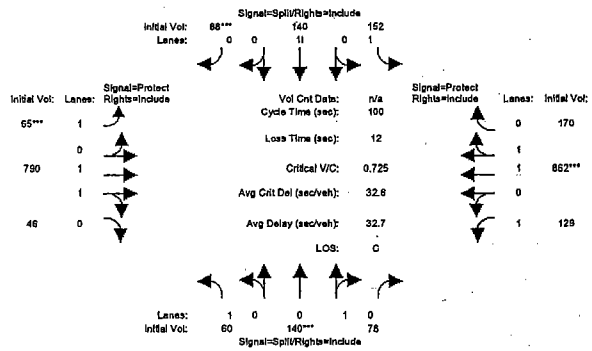
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 60 | 140 | 70 | 152 | 140 | 78 | 60 | 726 | 46 | 115 | 748 | 170 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 60 | 140 | 70 | 152 | 140 | 78 | 60 | 726 | 46 | 115 | 748 | 170 |
| Added Vol: | 0 | 0 | 8 | 0 | 0 | 10 | 5 | 64 | 0 | 14 | 114 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 60 | 140 | 78 | 152 | 140 | 88 | 65 | 790 | 46 | 129 | 862 | 170 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 60 | 140 | 78 | 152 | 140 | 88 | 65 | 790 | 46 | 129 | 862 | 170 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 60 | 140 | 78 | 152 | 140 | 88 | 65 | 790 | 46 | 129 | 862 | 170 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 60 | 140 | 78 | 152 | 140 | 88 | 65 | 790 | 46 | 129 | 862 | 170 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.64 | 0.36 | 1.25 | 0.46 | 0.29 | 1.00 | 1.89 | 0.11 | 1.00 | 1.67 | 0.33 |
| Final Sat.: | 1736 | 1110 | 619 | 2161 | 796 | 500 | 1769 | 3316 | 193 | 1769 | 2881 | 568 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.13 | 0.13 | 0.07 | 0.18 | 0.18 | 0.04 | 0.24 | 0.24 | 0.07 | 0.30 | 0.30 |
| Crit Moves: | | **** | | | | **** | **** | | | | **** | |
| Green/Cycle: | 0.17 | 0.17 | 0.17 | 0.24 | 0.24 | 0.24 | 0.05 | 0.35 | 0.35 | 0.11 | 0.41 | 0.41 |
| Volume/Cap: | 0.20 | 0.72 | 0.72 | 0.29 | 0.72 | 0.72 | 0.72 | 0.67 | 0.67 | 0.67 | 0.72 | 0.72 |
| Delay/Veh: | 35.7 | 47.5 | 47.5 | 31.0 | 39.8 | 39.8 | 72.0 | 28.8 | 28.8 | 51.8 | 26.5 | 26.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 35.7 | 47.5 | 47.5 | 31.0 | 39.8 | 39.8 | 72.0 | 28.8 | 28.8 | 51.8 | 26.5 | 26.5 |
| DesignQueue: | 3 | 7 | 4 | 7 | 6 | 4 | 3 | 30 | 2 | 7 | 30 | 6 |





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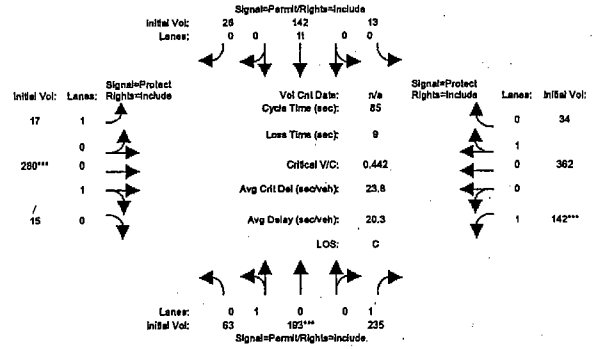
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

## Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 63 | 193 | 235 | 13 | 142 | 26 | 17 | 280 | 15 | 142 | 362 | 34 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 63 | 193 | 235 | 13 | 142 | 26 | 17 | 280 | 15 | 142 | 362 | 34 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 63 | 193 | 235 | 13 | 142 | 26 | 17 | 280 | 15 | 142 | 362 | 34 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 63 | 193 | 235 | 13 | 142 | 26 | 17 | 280 | 15 | 142 | 362 | 34 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 63 | 193 | 235 | 13 | 142 | 26 | 17 | 280 | 15 | 142 | 362 | 34 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 63 | 193 | 235 | 13 | 142 | 26 | 17 | 280 | 15 | 142 | 362 | 34 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.87 | 0.87 | 0.83 | 0.94 | 0.94 | 0.94 | 0.93 | 0.97 | 0.97 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.25 | 0.75 | 1.00 | 0.07 | 0.79 | 0.14 | 1.00 | 0.95 | 0.05 | 1.00 | 0.91 | 0.09 |
| Final Sat.: | 406 | 1245 | 1583 | 128 | 1397 | 256 | 1769 | 1753 | 94 | 1769 | 1680 | 158 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.16 | 0.16 | 0.15 | 0.10 | 0.10 | 0.10 | 0.01 | 0.16 | 0.16 | 0.08 | 0.22 | 0.22 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.02 | 0.36 | 0.36 | 0.18 | 0.52 | 0.52 |
| Volume/Cap: | 0.44 | 0.44 | 0.42 | 0.29 | 0.29 | 0.29 | 0.41 | 0.44 | 0.44 | 0.44 | 0.41 | 0.41 |
| Delay/Veh: | 21.7 | 21.7 | 21.6 | 20.2 | 20.2 | 20.2 | 47.6 | 21.1 | 21.1 | 31.9 | 12.8 | 12.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 21.7 | 21.7 | 21.6 | 20.2 | 20.2 | 20.2 | 47.6 | 21.1 | 21.1 | 31.9 | 12.8 | 12.8 |
| DesignQueue: | 2 | 6 | 7 | 0 | 4 | 1 | 1 | 9 | 0 | 6 | 9 | 1 |

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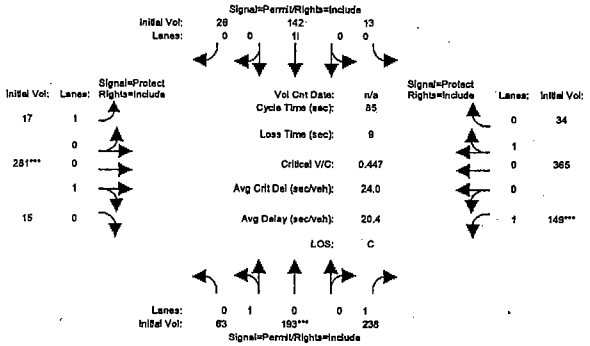
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 63 | 193 | 235 | 13 | 142 | 26 | 17 | 280 | 15 | 142 | 362 | 34 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 63 | 193 | 235 | 13 | 142 | 26 | 17 | 280 | 15 | 142 | 362 | 34 |
| Added Vol: | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 3 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 63 | 193 | 238 | 13 | 142 | 26 | 17 | 281 | 15 | 149 | 365 | 34 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 63 | 193 | 238 | 13 | 142 | 26 | 17 | 281 | 15 | 149 | 365 | 34 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 63 | 193 | 238 | 13 | 142 | 26 | 17 | 281 | 15 | 149 | 365 | 34 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 63 | 193 | 238 | 13 | 142 | 26 | 17 | 281 | 15 | 149 | 365 | 34 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.87 | 0.87 | 0.83 | 0.94 | 0.94 | 0.94 | 0.93 | 0.97 | 0.97 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.25 | 0.75 | 1.00 | 0.07 | 0.79 | 0.14 | 1.00 | 0.95 | 0.05 | 1.00 | 0.91 | 0.09 |
| Final Sat.: | 407 | 1247 | 1583 | 128 | 1397 | 256 | 1769 | 1754 | 94 | 1769 | 1681 | 157 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.15 | 0.15 | 0.15 | 0.10 | 0.10 | 0.10 | 0.01 | 0.16 | 0.16 | 0.08 | 0.22 | 0.22 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.02 | 0.36 | 0.36 | 0.19 | 0.52 | 0.52 |
| Volume/Cap: | 0.45 | 0.45 | 0.43 | 0.29 | 0.29 | 0.29 | 0.41 | 0.45 | 0.45 | 0.45 | 0.41 | 0.41 |
| Delay/Veh: | 22.0 | 22.0 | 21.9 | 20.5 | 20.5 | 20.5 | 47.6 | 21.3 | 21.3 | 31.5 | 12.6 | 12.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 22.0 | 22.0 | 21.9 | 20.5 | 20.5 | 20.5 | 47.6 | 21.3 | 21.3 | 31.5 | 12.6 | 12.6 |
| DesignQueue: | 2 | 6 | 8 | 0 | 4 | 1 | 1 | 9 | 0 | 6 | 9 | 1 |





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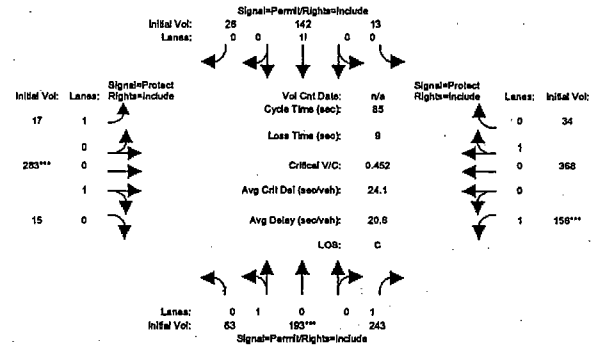
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #12: Laurel/California [N/S: California E/w: Laurel]



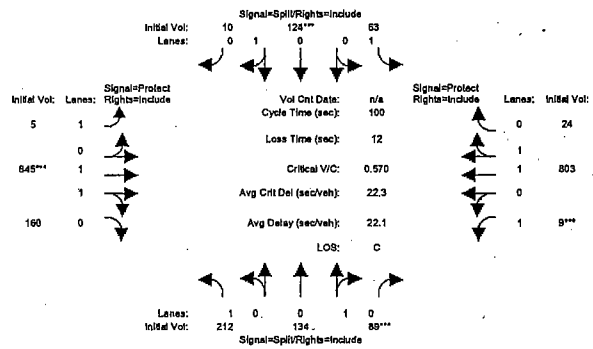

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 63 | 193 | 235 | 13 | 142 | 26 | 17 | 280 | 15 | 142 | 362 | 34 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 63 | 193 | 235 | 13 | 142 | 26 | 17 | 280 | 15 | 142 | 362 | 34 |
| Added Vol: | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 3 | 0 | 14 | 6 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 63 | 193 | 243 | 13 | 142 | 26 | 17 | 283 | 15 | 156 | 368 | 34 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 63 | 193 | 243 | 13 | 142 | 26 | 17 | 283 | 15 | 156 | 368 | 34 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 63 | 193 | 243 | 13 | 142 | 26 | 17 | 283 | 15 | 156 | 368 | 34 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 63 | 193 | 243 | 13 | 142 | 26 | 17 | 283 | 15 | 156 | 368 | 34 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.87 | 0.87 | 0.83 | 0.94 | 0.94 | 0.94 | 0.93 | 0.97 | 0.97 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.25 | 0.75 | 1.00 | 0.07 | 0.79 | 0.14 | 1.00 | 0.95 | 0.05 | 1.00 | 0.92 | 0.08 |
| Final Sat.: | 407 | 1248 | 1583 | 128 | 1397 | 256 | 1769 | 1756 | 93 | 1769 | 1682 | 155 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.15 | 0.15 | 0.15 | 0.10 | 0.10 | 0.10 | 0.01 | 0.16 | 0.16 | 0.09 | 0.22 | 0.22 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.02 | 0.36 | 0.36 | 0.20 | 0.53 | 0.53 |
| Volume/Cap: | 0.45 | 0.45 | 0.45 | 0.30 | 0.30 | 0.30 | 0.41 | 0.45 | 0.45 | 0.45 | 0.41 | 0.41 |
| Delay/Veh: | 22.3 | 22.3 | 22.3 | 20.7 | 20.7 | 20.7 | 47.6 | 21.5 | 21.5 | 31.1 | 12.4 | 12.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 22.3 | 22.3 | 22.3 | 20.7 | 20.7 | 20.7 | 47.6 | 21.5 | 21.5 | 31.1 | 12.4 | 12.4 |
| DesignQueue: | 2 | 6 | 8 | 0 | 5 | 1 | 1 | 9 | 0 | 6 | 9 | 1 |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

## Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 212 | 134 | 89 | 63 | 124 | 10 | 5 | 845 | 160 | 9 | 803 | 24 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 212 | 134 | 89 | 63 | 124 | 10 | 5 | 845 | 160 | 9 | 803 | 24 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 212 | 134 | 89 | 63 | 124 | 10 | 5 | 845 | 160 | 9 | 803 | 24 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 212 | 134 | 89 | 63 | 124 | 10 | 5 | 845 | 160 | 9 | 803 | 24 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 212 | 134 | 89 | 63 | 124 | 10 | 5 | 845 | 160 | 9 | 803 | 24 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 212 | 134 | 89 | 63 | 124 | 10 | 5 | 845 | 160 | 9 | 803 | 24 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.93 | 0.97 | 0.97 | 0.91 | 0.89 | 0.89 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.60 | 0.40 | 1.00 | 0.93 | 0.07 | 1.00 | 1.68 | 0.32 | 1.00 | 1.94 | 0.06 |
| Final Sat.: | 1769 | 1052 | 699 | 1769 | 1704 | 137 | 1736 | 2850 | 540 | 1736 | 3359 | 100 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.12 | 0.13 | 0.13 | 0.04 | 0.07 | 0.07 | 0.00 | 0.30 | 0.30 | 0.01 | 0.24 | 0.24 |
| Crit Moves: | | | **** | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.22 | 0.22 | 0.22 | 0.13 | 0.13 | 0.13 | 0.01 | 0.52 | 0.52 | 0.01 | 0.52 | 0.52 |
| Volume/Cap: | 0.54 | 0.57 | 0.57 | 0.28 | 0.57 | 0.57 | 0.46 | 0.57 | 0.57 | 0.57 | 0.46 | 0.46 |
| Delay/Veh: | 35.7 | 36.6 | 36.6 | 40.1 | 44.4 | 44.4 | 77.0 | 16.8 | 16.8 | 90.8 | 15.2 | 15.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 35.7 | 36.6 | 36.6 | 40.1 | 44.4 | 44.4 | 77.0 | 16.8 | 16.8 | 90.8 | 15.2 | 15.2 |
| DesignQueue: | 9 | 6 | 4 | 3 | 6 | 0 | 0 | 24 | 5 | 0 | 23 | 1 |





Marine Science Center

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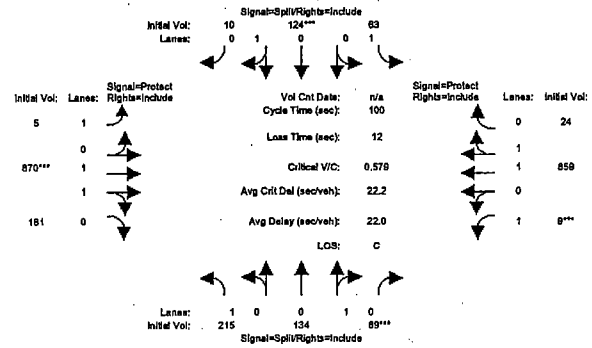
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 212 | 134 | 89 | 63 | 124 | 10 | 5 | 845 | 160 | 9 | 803 | 24 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 212 | 134 | 89 | 63 | 124 | 10 | 5 | 845 | 160 | 9 | 803 | 24 |
| Added Vol: | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 1 | 0 | 56 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 215 | 134 | 89 | 63 | 124 | 10 | 5 | 870 | 161 | 9 | 859 | 24 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 215 | 134 | 89 | 63 | 124 | 10 | 5 | 870 | 161 | 9 | 859 | 24 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 215 | 134 | 89 | 63 | 124 | 10 | 5 | 870 | 161 | 9 | 859 | 24 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 215 | 134 | 89 | 63 | 124 | 10 | 5 | 870 | 161 | 9 | 859 | 24 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.93 | 0.97 | 0.97 | 0.91 | 0.89 | 0.89 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.60 | 0.40 | 1.00 | 0.93 | 0.07 | 1.00 | 1.69 | 0.31 | 1.00 | 1.95 | 0.05 |
| Final Sat.: | 1769 | 1052 | 699 | 1769 | 1704 | 137 | 1736 | 2863 | 530 | 1736 | 3365 | 94 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.12 | 0.13 | 0.13 | 0.04 | 0.07 | 0.07 | 0.00 | 0.30 | 0.30 | 0.01 | 0.26 | 0.26 |
| Crit Moves: | | | **** | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.22 | 0.22 | 0.22 | 0.13 | 0.13 | 0.13 | 0.01 | 0.53 | 0.53 | 0.01 | 0.53 | 0.53 |
| Volume/Cap: | 0.55 | 0.58 | 0.58 | 0.28 | 0.58 | 0.58 | 0.48 | 0.58 | 0.58 | 0.58 | 0.48 | 0.48 |
| Delay/Veh: | 36.3 | 37.0 | 37.0 | 40.3 | 44.8 | 44.8 | 81.1 | 16.7 | 16.7 | 93.9 | 15.2 | 15.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 36.3 | 37.0 | 37.0 | 40.3 | 44.8 | 44.8 | 81.1 | 16.7 | 16.7 | 93.9 | 15.2 | 15.2 |
| DesignQueue: | 10 | 6 | 4 | 3 | 6 | 0 | 0 | 25 | 5 | 0 | 24 | 1 |

Marine Science Center

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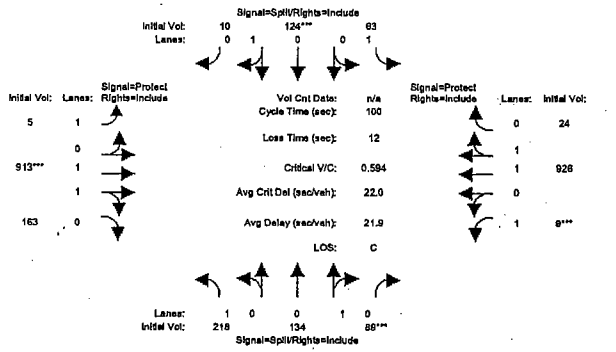
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 212 | 134 | 89 | 63 | 124 | 10 | 5 | 845 | 160 | 9 | 803 | 24 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 212 | 134 | 89 | 63 | 124 | 10 | 5 | 845 | 160 | 9 | 803 | 24 |
| Added Vol: | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 3 | 0 | 123 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 218 | 134 | 89 | 63 | 124 | 10 | 5 | 913 | 163 | 9 | 926 | 24 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 218 | 134 | 89 | 63 | 124 | 10 | 5 | 913 | 163 | 9 | 926 | 24 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 218 | 134 | 89 | 63 | 124 | 10 | 5 | 913 | 163 | 9 | 926 | 24 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 218 | 134 | 89 | 63 | 124 | 10 | 5 | 913 | 163 | 9 | 926 | 24 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.93 | 0.97 | 0.97 | 0.91 | 0.89 | 0.89 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.60 | 0.40 | 1.00 | 0.93 | 0.07 | 1.00 | 1.70 | 0.30 | 1.00 | 1.95 | 0.05 |
| Final Sat.: | 1769 | 1052 | 699 | 1769 | 1704 | 137 | 1736 | 2879 | 514 | 1736 | 3372 | 87 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.12 | 0.13 | 0.13 | 0.04 | 0.07 | 0.07 | 0.00 | 0.32 | 0.32 | 0.01 | 0.27 | 0.27 |
| Crit Moves: | | | **** | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.21 | 0.21 | 0.21 | 0.12 | 0.12 | 0.12 | 0.01 | 0.53 | 0.53 | 0.01 | 0.54 | 0.54 |
| Volume/Cap: | 0.57 | 0.59 | 0.59 | 0.29 | 0.59 | 0.59 | 0.51 | 0.59 | 0.59 | 0.59 | 0.51 | 0.51 |
| Delay/Veh: | 37.3 | 37.9 | 37.9 | 40.7 | 45.7 | 45.7 | 88.5 | 16.4 | 16.4 | 99.7 | 15.0 | 15.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.3 | 37.9 | 37.9 | 40.7 | 45.7 | 45.7 | 88.5 | 16.4 | 16.4 | 99.7 | 15.0 | 15.0 |
| DesignQueue: | 10 | 6 | 4 | 3 | 6 | 0 | 0 | 26 | 5 | 0 | 25 | 1 |





Marine Science Center

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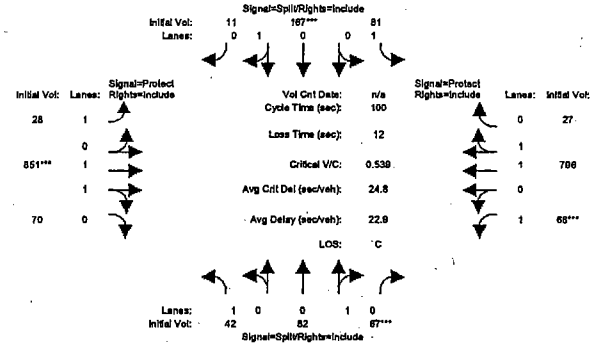
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

## Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 42 | 82 | 67 | 81 | 167 | 11 | 28 | 851 | 70 | 68 | 796 | 27 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 42 | 82 | 67 | 81 | 167 | 11 | 28 | 851 | 70 | 68 | 796 | 27 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 42 | 82 | 67 | 81 | 167 | 11 | 28 | 851 | 70 | 68 | 796 | 27 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 42 | 82 | 67 | 81 | 167 | 11 | 28 | 851 | 70 | 68 | 796 | 27 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 42 | 82 | 67 | 81 | 167 | 11 | 28 | 851 | 70 | 68 | 796 | 27 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 42 | 82 | 67 | 81 | 167 | 11 | 28 | 851 | 70 | 68 | 796 | 27 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.93 | 0.93 | 0.95 | 0.99 | 0.99 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.55 | 0.45 | 1.00 | 0.94 | 0.06 | 1.00 | 1.85 | 0.15 | 1.00 | 1.93 | 0.07 |
| Final Sat.: | 1805 | 976 | 797 | 1805 | 1767 | 116 | 1805 | 3299 | 271 | 1805 | 3474 | 118 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.08 | 0.08 | 0.04 | 0.09 | 0.09 | 0.02 | 0.26 | 0.26 | 0.04 | 0.23 | 0.23 |
| Crit Moves: | | | **** | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.16 | 0.16 | 0.16 | 0.18 | 0.18 | 0.18 | 0.03 | 0.48 | 0.48 | 0.07 | 0.51 | 0.51 |
| Volume/Cap: | 0.15 | 0.54 | 0.54 | 0.26 | 0.54 | 0.54 | 0.45 | 0.54 | 0.54 | 0.54 | 0.45 | 0.45 |
| Delay/Veh: | 36.7 | 41.0 | 41.0 | 36.0 | 39.3 | 39.3 | 52.3 | 18.7 | 18.7 | 49.5 | 15.5 | 15.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 36.7 | 41.0 | 41.0 | 36.0 | 39.3 | 39.3 | 52.3 | 18.7 | 18.7 | 49.5 | 15.5 | 15.5 |
| DesignQueue: | 2 | 4 | 3 | 4 | 8 | 1 | 2 | 26 | 2 | 4 | 23 | 1 |

Marina Science Center

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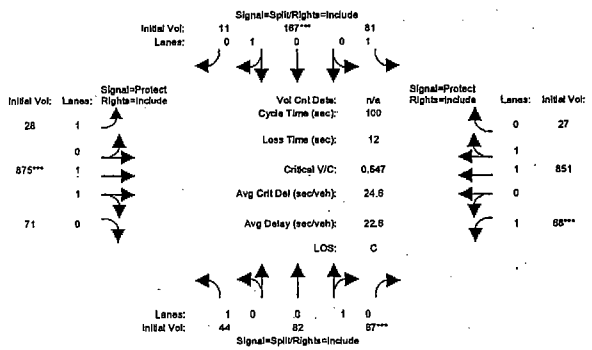
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 AM

Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 42 | 82 | 67 | 81 | 167 | 11 | 28 | 851 | 70 | 68 | 796 | 27 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 42 | 82 | 67 | 81 | 167 | 11 | 28 | 851 | 70 | 68 | 796 | 27 |
| Added Vol: | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 1 | 0 | 55 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 44 | 82 | 67 | 81 | 167 | 11 | 28 | 875 | 71 | 68 | 851 | 27 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 44 | 82 | 67 | 81 | 167 | 11 | 28 | 875 | 71 | 68 | 851 | 27 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 44 | 82 | 67 | 81 | 167 | 11 | 28 | 875 | 71 | 68 | 851 | 27 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 44 | 82 | 67 | 81 | 167 | 11 | 28 | 875 | 71 | 68 | 851 | 27 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.93 | 0.93 | 0.95 | 0.99 | 0.99 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.55 | 0.45 | 1.00 | 0.94 | 0.06 | 1.00 | 1.85 | 0.15 | 1.00 | 1.94 | 0.06 |
| Final Sat.: | 1805 | 976 | 797 | 1805 | 1767 | 116 | 1805 | 3302 | 268 | 1805 | 3481 | 110 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.08 | 0.08 | 0.04 | 0.09 | 0.09 | 0.02 | 0.26 | 0.26 | 0.04 | 0.24 | 0.24 |
| Crit Moves: | | | **** | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.15 | 0.15 | 0.15 | 0.17 | 0.17 | 0.17 | 0.03 | 0.48 | 0.48 | 0.07 | 0.52 | 0.52 |
| Volume/Cap: | 0.16 | 0.55 | 0.55 | 0.26 | 0.55 | 0.55 | 0.47 | 0.55 | 0.55 | 0.55 | 0.47 | 0.47 |
| Delay/Veh: | 37.0 | 41.4 | 41.4 | 36.3 | 39.7 | 39.7 | 53.2 | 18.4 | 18.4 | 50.1 | 15.4 | 15.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.0 | 41.4 | 41.4 | 36.3 | 39.7 | 39.7 | 53.2 | 18.4 | 18.4 | 50.1 | 15.4 | 15.4 |
| DesignQueue: | 2 | 4 | 3 | 4 | 8 | 1 | 2 | 27 | 2 | 4 | 24 | 1 |





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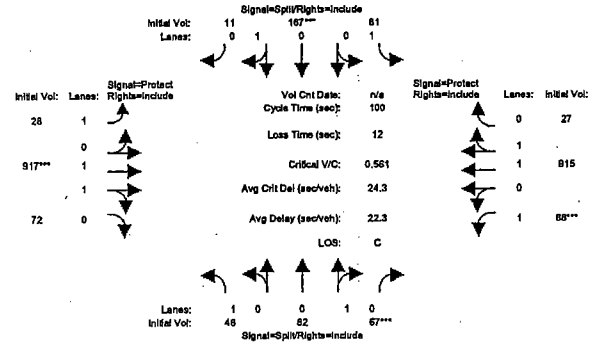
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 42 | 82 | 67 | 81 | 167 | 11 | 28 | 851 | 70 | 68 | 796 | 27 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 42 | 82 | 67 | 81 | 167 | 11 | 28 | 851 | 70 | 68 | 796 | 27 |
| Added Vol: | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 2 | 0 | 119 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 46 | 82 | 67 | 81 | 167 | 11 | 28 | 917 | 72 | 68 | 915 | 27 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 46 | 82 | 67 | 81 | 167 | 11 | 28 | 917 | 72 | 68 | 915 | 27 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 46 | 82 | 67 | 81 | 167 | 11 | 28 | 917 | 72 | 68 | 915 | 27 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 46 | 82 | 67 | 81 | 167 | 11 | 28 | 917 | 72 | 68 | 915 | 27 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.93 | 0.93 | 0.95 | 0.99 | 0.99 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.55 | 0.45 | 1.00 | 0.94 | 0.06 | 1.00 | 1.85 | 0.15 | 1.00 | 1.94 | 0.06 |
| Final Sat.: | 1805 | 976 | 797 | 1805 | 1767 | 116 | 1805 | 3310 | 260 | 1805 | 3493 | 103 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.08 | 0.08 | 0.04 | 0.09 | 0.09 | 0.02 | 0.28 | 0.28 | 0.04 | 0.26 | 0.26 |
| Crit Moves: | | | **** | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.15 | 0.15 | 0.15 | 0.17 | 0.17 | 0.17 | 0.03 | 0.49 | 0.49 | 0.07 | 0.53 | 0.53 |
| Volume/Cap: | 0.17 | 0.56 | 0.56 | 0.27 | 0.56 | 0.56 | 0.49 | 0.56 | 0.56 | 0.56 | 0.49 | 0.49 |
| Delay/Veh: | 37.4 | 42.1 | 42.1 | 36.7 | 40.4 | 40.4 | 54.3 | 18.1 | 18.1 | 51.0 | 15.2 | 15.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.4 | 42.1 | 42.1 | 36.7 | 40.4 | 40.4 | 54.3 | 18.1 | 18.1 | 51.0 | 15.2 | 15.2 |
| DesignQueue: | 2 | 4 | 3 | 4 | 8 | 1 | 2 | 28 | 2 | 4 | 26 | 1 |

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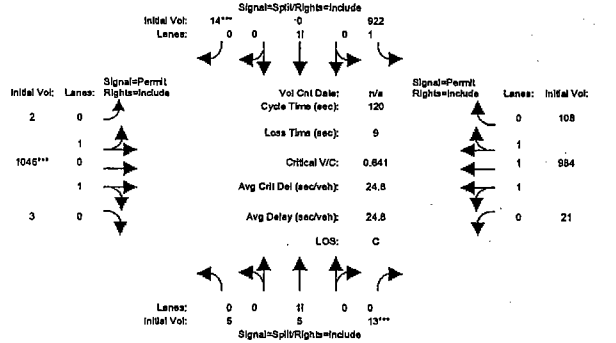
Existing AM

## Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1046 | 3 | 21 | 984 | 108 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1046 | 3 | 21 | 984 | 108 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1046 | 3 | 21 | 984 | 108 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1046 | 3 | 21 | 984 | 108 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1046 | 3 | 21 | 984 | 108 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1046 | 3 | 21 | 984 | 108 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.90 | 0.90 | 0.90 | 0.93 | 1.00 | 0.93 | 0.89 | 0.89 | 0.89 | 0.79 | 0.79 | 0.79 |
| Lanes: | 0.22 | 0.22 | 0.56 | 1.97 | 0.00 | 0.03 | 0.00 | 1.99 | 0.01 | 0.06 | 2.65 | 0.29 |
| Final Sat.: | 370 | 370 | 962 | 3490 | 0 | 52 | 6 | 3363 | 10 | 85 | 3984 | 437 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.01 | 0.01 | 0.26 | 0.00 | 0.27 | 0.31 | 0.31 | 0.31 | 0.25 | 0.25 | 0.25 |
| Crit Moves: | | | **** | | | **** | | **** | | | | |
| Green/Cycle: | 0.02 | 0.02 | 0.02 | 0.42 | 0.00 | 0.42 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |
| Volume/Cap: | 0.64 | 0.64 | 0.64 | 0.63 | 0.00 | 0.64 | 0.64 | 0.64 | 0.64 | 0.51 | 0.51 | 0.51 |
| Delay/Veh: | 91.4 | 91.4 | 91.4 | 28.5 | 0.0 | 28.7 | 23.9 | 23.9 | 23.9 | 21.3 | 21.3 | 21.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 91.4 | 91.4 | 91.4 | 28.5 | 0.0 | 28.7 | 23.9 | 23.9 | 23.9 | 21.3 | 21.3 | 21.3 |
| DesignQueue: | 0 | 0 | 1 | 38 | 0 | 1 | 0 | 39 | 0 | 1 | 36 | 4 |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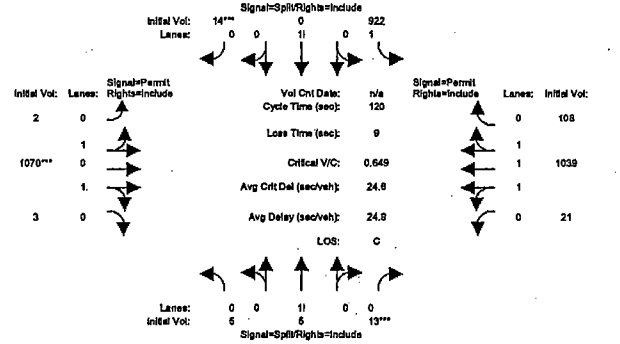
Ex + Ph 1 AM

## Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1046 | 3 | 21 | 984 | 108 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1046 | 3 | 21 | 984 | 108 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 55 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1070 | 3 | 21 | 1039 | 108 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1070 | 3 | 21 | 1039 | 108 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1070 | 3 | 21 | 1039 | 108 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1070 | 3 | 21 | 1039 | 108 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.90 | 0.90 | 0.90 | 0.93 | 1.00 | 0.93 | 0.89 | 0.89 | 0.89 | 0.79 | 0.79 | 0.79 |
| Lanes: | 0.22 | 0.22 | 0.56 | 1.97 | 0.00 | 0.03 | 0.00 | 1.99 | 0.01 | 0.05 | 2.67 | 0.28 |
| Final Sat.: | 370 | 370 | 962 | 3490 | 0 | 52 | 6 | 3363 | 9 | 81 | 4017 | 418 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.01 | 0.01 | 0.26 | 0.00 | 0.27 | 0.32 | 0.32 | 0.32 | 0.26 | 0.26 | 0.26 |
| Crit Moves: | | | **** | | | **** | | **** | | | | |
| Green/Cycle: | 0.02 | 0.02 | 0.02 | 0.41 | 0.00 | 0.41 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |
| Volume/Cap: | 0.65 | 0.65 | 0.65 | 0.64 | 0.00 | 0.65 | 0.65 | 0.65 | 0.65 | 0.53 | 0.53 | 0.53 |
| Delay/Veh: | 93.4 | 93.4 | 93.4 | 29.0 | 0.0 | 29.2 | 23.7 | 23.7 | 23.7 | 21.2 | 21.2 | 21.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 93.4 | 93.4 | 93.4 | 29.0 | 0.0 | 29.2 | 23.7 | 23.7 | 23.7 | 21.2 | 21.2 | 21.2 |
| DesignQueue: | 0 | 0 | 1 | 39 | 0 | 1 | 0 | 39 | 0 | 1 | 37 | 4 |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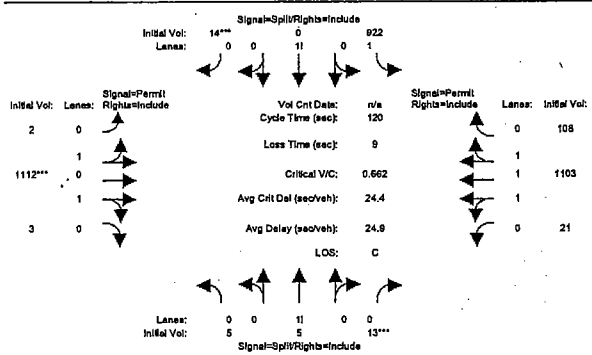
Ex + Ph 1 + Ph 2 AM

## Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1046 | 3 | 21 | 984 | 108 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1046 | 3 | 21 | 984 | 108 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 0 | 0 | 119 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1112 | 3 | 21 | 1103 | 108 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1112 | 3 | 21 | 1103 | 108 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1112 | 3 | 21 | 1103 | 108 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 5 | 5 | 13 | 922 | 0 | 14 | 2 | 1112 | 3 | 21 | 1103 | 108 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.90 | 0.90 | 0.90 | 0.93 | 1.00 | 0.93 | 0.89 | 0.89 | 0.89 | 0.79 | 0.79 | 0.79 |
| Lanes: | 0.22 | 0.22 | 0.56 | 1.97 | 0.00 | 0.03 | 0.00 | 1.99 | 0.01 | 0.05 | 2.69 | 0.26 |
| Final Sat.: | 370 | 370 | 962 | 3490 | 0 | 52 | 6 | 3363 | 9 | 77 | 4029 | 395 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.01 | 0.01 | 0.26 | 0.00 | 0.27 | 0.33 | 0.33 | 0.33 | 0.27 | 0.27 | 0.27 |
| Crit Moves: | | | **** | | | **** | | **** | | | | |
| Green/Cycle: | 0.02 | 0.02 | 0.02 | 0.41 | 0.00 | 0.41 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Volume/Cap: | 0.66 | 0.66 | 0.66 | 0.65 | 0.00 | 0.66 | 0.66 | 0.66 | 0.66 | 0.55 | 0.55 | 0.55 |
| Delay/Veh: | 97.1 | 97.1 | 97.1 | 29.9 | 0.0 | 30.2 | 23.5 | 23.5 | 23.5 | 21.0 | 21.0 | 21.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 97.1 | 97.1 | 97.1 | 29.9 | 0.0 | 30.2 | 23.5 | 23.5 | 23.5 | 21.0 | 21.0 | 21.0 |
| DesignQueue: | 0 | 0 | 1 | 39 | 0 | 1 | 0 | 40 | 0 | 1 | 39 | 4 |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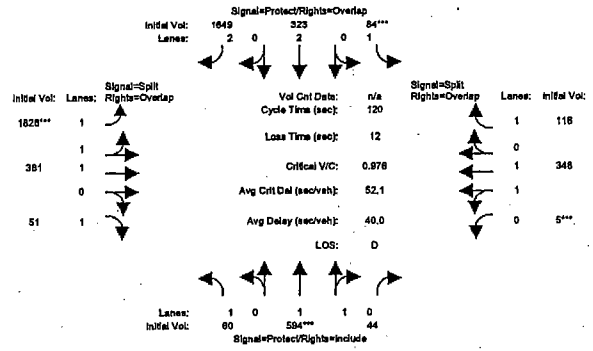
Existing AM

## Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 60 | 594 | 44 | 84 | 323 | 1649 | 1828 | 381 | 51 | 5 | 348 | 116 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 60 | 594 | 44 | 84 | 323 | 1649 | 1828 | 381 | 51 | 5 | 348 | 116 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 60 | 594 | 44 | 84 | 323 | 1649 | 1828 | 381 | 51 | 5 | 348 | 116 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 60 | 594 | 44 | 84 | 323 | 1649 | 1828 | 381 | 51 | 5 | 348 | 116 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 60 | 594 | 44 | 84 | 323 | 1649 | 1828 | 381 | 51 | 5 | 348 | 116 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 60 | 594 | 44 | 84 | 323 | 1649 | 1828 | 381 | 51 | 5 | 348 | 116 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.86 | 0.14 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.03 | 1.97 | 1.00 |
| Final Sat.: | 1769 | 3261 | 242 | 1736 | 3473 | 2734 | 3334 | 1667 | 1554 | 50 | 3484 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.18 | 0.18 | 0.05 | 0.09 | 0.60 | 0.55 | 0.23 | 0.03 | 0.10 | 0.10 | 0.07 |
| Crit Moves: | | **** | | **** | | | **** | | | **** | | |
| Green/Cycle: | 0.06 | 0.19 | 0.19 | 0.05 | 0.17 | 0.73 | 0.56 | 0.56 | 0.62 | 0.10 | 0.10 | 0.15 |
| Volume/Cap: | 0.54 | 0.98 | 0.98 | 0.98 | 0.54 | 0.82 | 0.98 | 0.41 | 0.05 | 0.98 | 0.98 | 0.48 |
| Delay/Veh: | 59.6 | 77.8 | 77.8 | 145.8 | 46.2 | 13.5 | 39.3 | 15.0 | 8.8 | 94.6 | 94.6 | 48.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 59.6 | 77.8 | 77.8 | 145.8 | 46.2 | 13.5 | 39.3 | 15.0 | 8.8 | 94.6 | 94.6 | 48.1 |
| DesignQueue: | 4 | 34 | 2 | 5 | 18 | 33 | 61 | 12 | 1 | 0 | 21 | 7 |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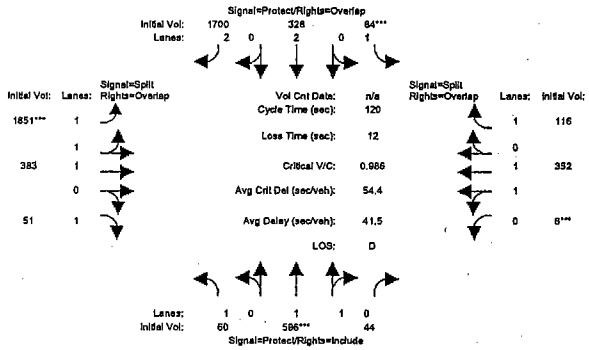
Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 60 | 594 | 44 | 84 | 323 | 1649 | 1828 | 381 | 51 | 5 | 348 | 116 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 60 | 594 | 44 | 84 | 323 | 1649 | 1828 | 381 | 51 | 5 | 348 | 116 |
| Added Vol: | 0 | 2 | 0 | 0 | 5 | 51 | 23 | 2 | 0 | 1 | 4 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 60 | 596 | 44 | 84 | 328 | 1700 | 1851 | 383 | 51 | 6 | 352 | 116 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 60 | 596 | 44 | 84 | 328 | 1700 | 1851 | 383 | 51 | 6 | 352 | 116 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 60 | 596 | 44 | 84 | 328 | 1700 | 1851 | 383 | 51 | 6 | 352 | 116 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 60 | 596 | 44 | 84 | 328 | 1700 | 1851 | 383 | 51 | 6 | 352 | 116 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.86 | 0.14 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.03 | 1.97 | 1.00 |
| Final Sat.: | 1769 | 3262 | 241 | 1736 | 3473 | 2734 | 3334 | 1667 | 1554 | 59 | 3475 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.18 | 0.18 | 0.05 | 0.09 | 0.62 | 0.56 | 0.23 | 0.03 | 0.10 | 0.10 | 0.07 |
| Crit Moves: | | **** | | **** | | | **** | | | **** | | |
| Green/Cycle: | 0.06 | 0.19 | 0.19 | 0.05 | 0.17 | 0.74 | 0.56 | 0.56 | 0.62 | 0.10 | 0.10 | 0.15 |
| Volume/Cap: | 0.55 | 0.99 | 0.99 | 0.99 | 0.55 | 0.85 | 0.99 | 0.41 | 0.05 | 0.99 | 0.99 | 0.48 |
| Delay/Veh: | 60.4 | 80.5 | 80.5 | 149.7 | 46.5 | 14.6 | 41.5 | 14.9 | 8.8 | 97.1 | 97.1 | 48.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 60.4 | 80.5 | 80.5 | 149.7 | 46.5 | 14.6 | 41.5 | 14.9 | 8.8 | 97.1 | 97.1 | 48.1 |
| DesignQueue: | 4 | 34 | 2 | 5 | 19 | 34 | 62 | 12 | 1 | 0 | 22 | 7 |



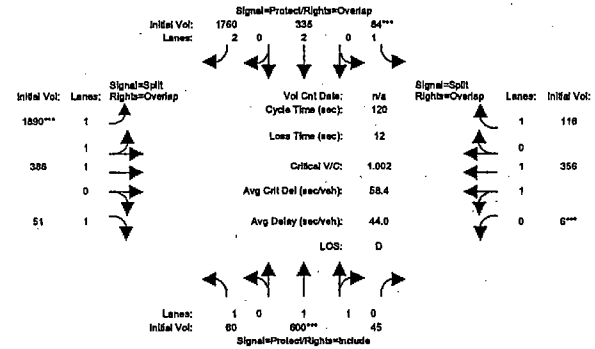


Marina Science Center

November 2003

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 60 | 594 | 44 | 84 | 323 | 1649 | 1828 | 381 | 51 | 5 | 348 | 116 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 60 | 594 | 44 | 84 | 323 | 1649 | 1828 | 381 | 51 | 5 | 348 | 116 |
| Added Vol: | 0 | 6 | 1 | 0 | 12 | 111 | 62 | 5 | 0 | 1 | 8 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 60 | 600 | 45 | 84 | 335 | 1760 | 1890 | 386 | 51 | 6 | 356 | 116 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 60 | 600 | 45 | 84 | 335 | 1760 | 1890 | 386 | 51 | 6 | 356 | 116 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 60 | 600 | 45 | 84 | 335 | 1760 | 1890 | 386 | 51 | 6 | 356 | 116 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 60 | 600 | 45 | 84 | 335 | 1760 | 1890 | 386 | 51 | 6 | 356 | 116 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.86 | 0.14 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.03 | 1.97 | 1.00 |
| Final Sat.: | 1769 | 3258 | 244 | 1736 | 3473 | 2734 | 3334 | 1667 | 1554 | 59 | 3476 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.18 | 0.18 | 0.05 | 0.10 | 0.64 | 0.57 | 0.23 | 0.03 | 0.10 | 0.10 | 0.07 |
| Crit Moves: | | **** | | **** | | | **** | | | **** | | |
| Green/Cycle: | 0.06 | 0.18 | 0.18 | 0.05 | 0.17 | 0.74 | 0.57 | 0.57 | 0.63 | 0.10 | 0.10 | 0.15 |
| Volume/Cap: | 0.56 | 1.00 | 1.00 | 1.00 | 0.56 | 0.87 | 1.00 | 0.41 | 0.05 | 1.00 | 1.00 | 0.49 |
| Delay/Veh: | 61.5 | 85.0 | 85.0 | 156.0 | 46.8 | 16.1 | 45.4 | 14.8 | 8.7 | 101.7 | 102 | 48.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 61.5 | 85.0 | 85.0 | 156.0 | 46.8 | 16.1 | 45.4 | 14.8 | 8.7 | 101.7 | 102 | 48.3 |
| DesignQueue: | 4 | 34 | 3 | 5 | 19 | 35 | 63 | 12 | 1 | 0 | 22 | 7 |

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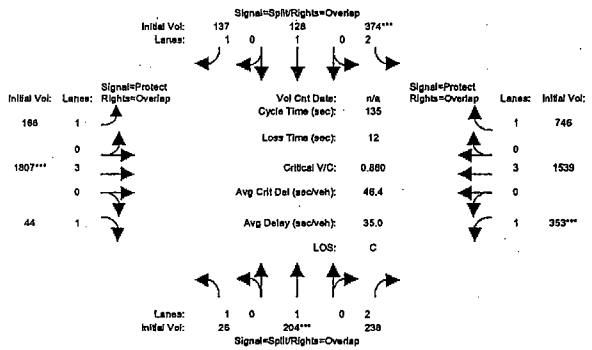
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

## Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 26 | 204 | 238 | 374 | 128 | 137 | 168 | 1807 | 44 | 353 | 1539 | 746 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 26 | 204 | 238 | 374 | 128 | 137 | 168 | 1807 | 44 | 353 | 1539 | 746 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 26 | 204 | 238 | 374 | 128 | 137 | 168 | 1807 | 44 | 353 | 1539 | 746 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 26 | 204 | 238 | 374 | 128 | 137 | 168 | 1807 | 44 | 353 | 1539 | 746 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 26 | 204 | 238 | 374 | 128 | 137 | 168 | 1807 | 44 | 353 | 1539 | 746 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 26 | 204 | 238 | 374 | 128 | 137 | 168 | 1807 | 44 | 353 | 1539 | 746 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.11 | 0.09 | 0.11 | 0.07 | 0.09 | 0.09 | 0.36 | 0.03 | 0.20 | 0.30 | 0.47 |
| Crit Moves: | | **** | | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.13 | 0.13 | 0.36 | 0.13 | 0.13 | 0.24 | 0.11 | 0.41 | 0.54 | 0.23 | 0.54 | 0.66 |
| Volume/Cap: | 0.12 | 0.86 | 0.24 | 0.86 | 0.54 | 0.37 | 0.88 | 0.86 | 0.05 | 0.86 | 0.56 | 0.71 |
| Delay/Veh: | 46.6 | 76.9 | 27.0 | 67.1 | 51.7 | 39.1 | 86.2 | 35.8 | 13.0 | 60.7 | 18.7 | 15.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 46.6 | 76.9 | 27.0 | 67.1 | 51.7 | 39.1 | 86.2 | 35.8 | 13.0 | 60.7 | 18.7 | 15.1 |
| DesignQueue: | 2 | 12 | 10 | 22 | 8 | 7 | 10 | 77 | 1 | 19 | 51 | 19 |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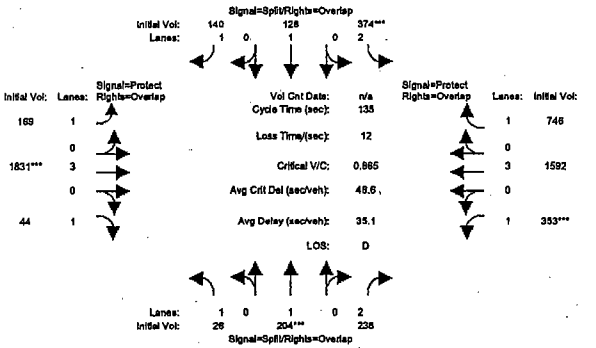
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 26 | 204 | 238 | 374 | 128 | 137 | 168 | 1807 | 44 | 353 | 1539 | 746 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 26 | 204 | 238 | 374 | 128 | 137 | 168 | 1807 | 44 | 353 | 1539 | 746 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 24 | 0 | 0 | 53 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 26 | 204 | 238 | 374 | 128 | 140 | 169 | 1831 | 44 | 353 | 1592 | 746 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 26 | 204 | 238 | 374 | 128 | 140 | 169 | 1831 | 44 | 353 | 1592 | 746 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 26 | 204 | 238 | 374 | 128 | 140 | 169 | 1831 | 44 | 353 | 1592 | 746 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 26 | 204 | 238 | 374 | 128 | 140 | 169 | 1831 | 44 | 353 | 1592 | 746 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.11 | 0.09 | 0.11 | 0.07 | 0.09 | 0.10 | 0.36 | 0.03 | 0.20 | 0.31 | 0.47 |
| Crit Moves: | | **** | | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.13 | 0.13 | 0.36 | 0.13 | 0.13 | 0.24 | 0.11 | 0.42 | 0.54 | 0.23 | 0.54 | 0.66 |
| Volume/Cap: | 0.12 | 0.86 | 0.24 | 0.86 | 0.55 | 0.38 | 0.88 | 0.86 | 0.05 | 0.86 | 0.58 | 0.71 |
| Delay/Veh: | 46.7 | 78.0 | 27.2 | 67.9 | 51.9 | 39.1 | 85.8 | 35.9 | 12.9 | 61.6 | 19.0 | 15.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 46.7 | 78.0 | 27.2 | 67.9 | 51.9 | 39.1 | 85.8 | 35.9 | 12.9 | 61.6 | 19.0 | 15.1 |
| DesignQueue: | 2 | 12 | 10 | 22 | 8 | 7 | 10 | 78 | 1 | 19 | 53 | 19 |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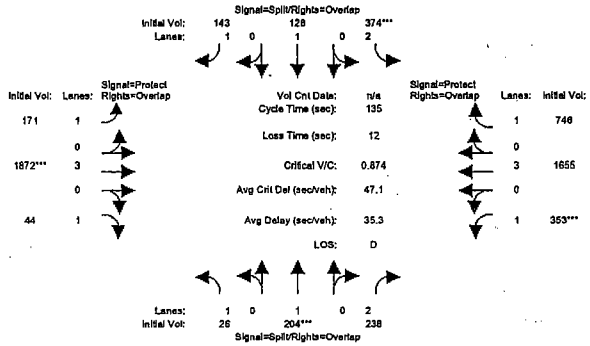
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 26 | 204 | 238 | 374 | 128 | 137 | 168 | 1807 | 44 | 353 | 1539 | 746 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 26 | 204 | 238 | 374 | 128 | 137 | 168 | 1807 | 44 | 353 | 1539 | 746 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 65 | 0 | 0 | 116 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 26 | 204 | 238 | 374 | 128 | 143 | 171 | 1872 | 44 | 353 | 1655 | 746 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 26 | 204 | 238 | 374 | 128 | 143 | 171 | 1872 | 44 | 353 | 1655 | 746 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 26 | 204 | 238 | 374 | 128 | 143 | 171 | 1872 | 44 | 353 | 1655 | 746 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 26 | 204 | 238 | 374 | 128 | 143 | 171 | 1872 | 44 | 353 | 1655 | 746 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.11 | 0.09 | 0.11 | 0.07 | 0.09 | 0.10 | 0.37 | 0.03 | 0.20 | 0.33 | 0.47 |
| Crit Moves: | | **** | | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.13 | 0.13 | 0.35 | 0.12 | 0.12 | 0.24 | 0.11 | 0.42 | 0.55 | 0.23 | 0.54 | 0.66 |
| Volume/Cap: | 0.12 | 0.87 | 0.24 | 0.87 | 0.55 | 0.38 | 0.87 | 0.87 | 0.05 | 0.87 | 0.60 | 0.71 |
| Delay/Veh: | 46.8 | 79.9 | 27.5 | 69.3 | 52.2 | 39.2 | 85.0 | 36.1 | 12.7 | 63.2 | 19.3 | 15.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 46.8 | 79.9 | 27.5 | 69.3 | 52.2 | 39.2 | 85.0 | 36.1 | 12.7 | 63.2 | 19.3 | 15.1 |
| DesignQueue: | 2 | 12 | 10 | 22 | 8 | 7 | 10 | 79 | 1 | 19 | 55 | 19 |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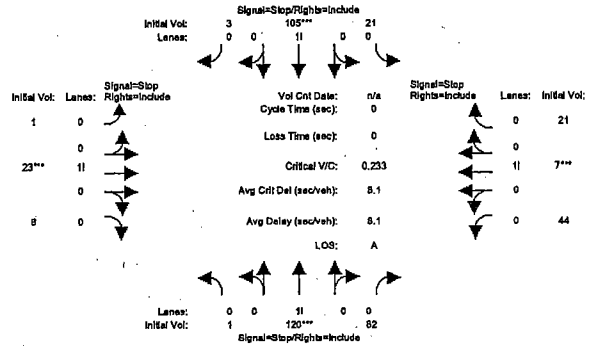
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing AM

## Intersection #18: Western/Meder [N/S: Western E/w: Meder]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 1 | 120 | 82 | 21 | 105 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 1 | 120 | 82 | 21 | 105 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 120 | 82 | 21 | 105 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1 | 120 | 82 | 21 | 105 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1 | 120 | 82 | 21 | 105 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1 | 120 | 82 | 21 | 105 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.01 | 0.59 | 0.40 | 0.16 | 0.82 | 0.02 | 0.03 | 0.77 | 0.20 | 0.61 | 0.10 | 0.29 |
| Final Sat.: | 4 | 516 | 353 | 131 | 657 | 19 | 25 | 565 | 147 | 453 | 72 | 216 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.23 | 0.23 | 0.23 | 0.16 | 0.16 | 0.16 | 0.04 | 0.04 | 0.04 | 0.10 | 0.10 | 0.10 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Delay/Veh: | 8.2 | 8.2 | 8.2 | 8.1 | 8.1 | 8.1 | 7.7 | 7.7 | 7.7 | 8.0 | 8.0 | 8.0 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 8.2 | 8.2 | 8.2 | 8.1 | 8.1 | 8.1 | 7.7 | 7.7 | 7.7 | 8.0 | 8.0 | 8.0 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | | 8.2 | | | 8.1 | | | 7.7 | | | 8.0 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 8.2 | | | 8.1 | | | 7.7 | | | 8.0 | |
| LOS by Appr: | | A | | | A | | | A | | | A | |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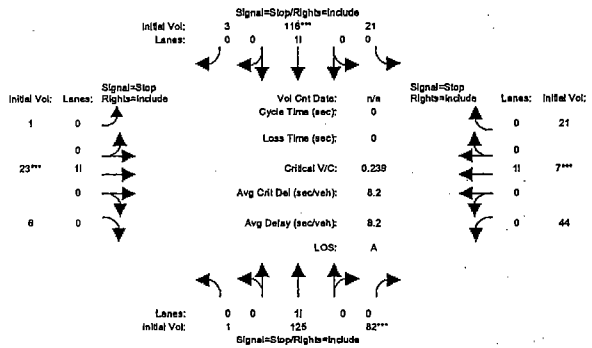
November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #18: Western/Meder [N/S: Western E/w: Meder]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 1 | 120 | 82 | 21 | 105 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 1 | 120 | 82 | 21 | 105 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Added Vol: | 0 | 5 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 125 | 82 | 21 | 116 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1 | 125 | 82 | 21 | 116 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1 | 125 | 82 | 21 | 116 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1 | 125 | 82 | 21 | 116 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.01 | 0.60 | 0.39 | 0.15 | 0.83 | 0.02 | 0.03 | 0.77 | 0.20 | 0.61 | 0.10 | 0.29 |
| Final Sat.: | 4 | 522 | 343 | 121 | 668 | 17 | 24 | 560 | 146 | 449 | 71 | 214 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.24 | 0.24 | 0.24 | 0.17 | 0.17 | 0.17 | 0.04 | 0.04 | 0.04 | 0.10 | 0.10 | 0.10 |
| Crit Moves: | | | **** | | **** | | | **** | | | **** | |
| Delay/Veh: | 8.3 | 8.3 | 8.3 | 8.2 | 8.2 | 8.2 | 7.8 | 7.8 | 7.8 | 8.1 | 8.1 | 8.1 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 8.3 | 8.3 | 8.3 | 8.2 | 8.2 | 8.2 | 7.8 | 7.8 | 7.8 | 8.1 | 8.1 | 8.1 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | | 8.3 | | | 8.2 | | | 7.8 | | | 8.1 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 8.3 | | | 8.2 | | | 7.8 | | | 8.1 | |
| LOS by Appr: | | A | | | A | | | A | | | A | |





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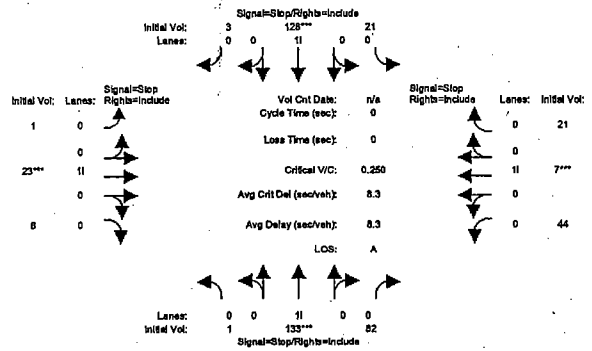
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #18: Western/Meder [N/S: Western E/w: Meder]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 1 | 120 | 82 | 21 | 105 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 1 | 120 | 82 | 21 | 105 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Added Vol: | 0 | 13 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 133 | 82 | 21 | 128 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1 | 133 | 82 | 21 | 128 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1 | 133 | 82 | 21 | 128 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1 | 133 | 82 | 21 | 128 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.01 | 0.61 | 0.38 | 0.14 | 0.84 | 0.02 | 0.03 | 0.77 | 0.20 | 0.61 | 0.10 | 0.29 |
| Final Sat.: | 4 | 532 | 328 | 111 | 678 | 16 | 24 | 552 | 144 | 443 | 70 | 211 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.25 | 0.25 | 0.25 | 0.19 | 0.19 | 0.19 | 0.04 | 0.04 | 0.04 | 0.10 | 0.10 | 0.10 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Delay/Veh: | 8.4 | 8.4 | 8.4 | 8.3 | 8.3 | 8.3 | 7.8 | 7.8 | 7.8 | 8.1 | 8.1 | 8.1 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 8.4 | 8.4 | 8.4 | 8.3 | 8.3 | 8.3 | 7.8 | 7.8 | 7.8 | 8.1 | 8.1 | 8.1 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | | 8.4 | | | 8.3 | | | 7.8 | | | 8.1 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 8.4 | | | 8.3 | | | 7.8 | | | 8.1 | |
| LOS by Appr: | | A | | | A | | | A | | | A | |

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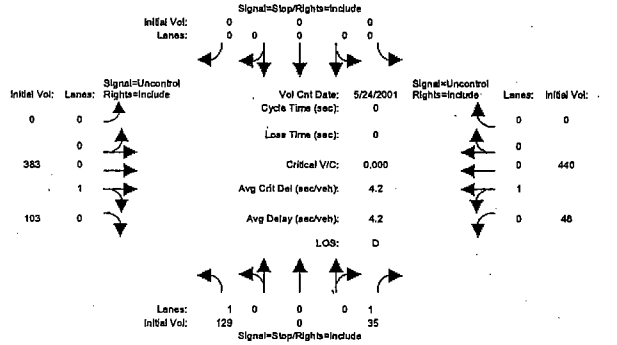
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

## Intersection #19: High/Western [N/S: Western E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 24 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 89 | 0 | 18 | 0 | 0 | 0 | 0 | 334 | 78 | 43 | 334 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 89 | 0 | 18 | 0 | 0 | 0 | 0 | 334 | 78 | 43 | 334 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 40 | 0 | 17 | 0 | 0 | 0 | 0 | 49 | 25 | 5 | 106 | 0 |
| Initial Fut: | 129 | 0 | 35 | 0 | 0 | 0 | 0 | 383 | 103 | 48 | 440 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 129 | 0 | 35 | 0 | 0 | 0 | 0 | 383 | 103 | 48 | 440 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 129 | 0 | 35 | 0 | 0 | 0 | 0 | 383 | 103 | 48 | 440 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 971 | xxxx | 435 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 486 | xxxx | xxxxx |
| Potent Cap.: | 283 | xxxx | 626 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1087 | xxxx | xxxxx |
| Move Cap.: | 273 | xxxx | 626 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1087 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 29.4 | xxxx | 11.1 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.5 | xxxx | xxxxx |
| LOS by Move: | D | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.5 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 25.5 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | D | | | * | | | * | | | * | |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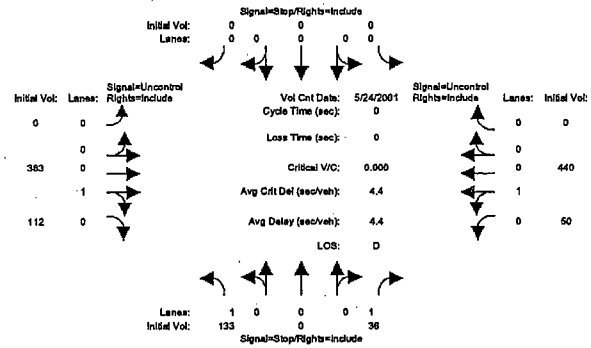
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #19: High/Western [N/S: Western E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 24 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 89 | 0 | 18 | 0 | 0 | 0 | 0 | 334 | 78 | 43 | 334 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 89 | 0 | 18 | 0 | 0 | 0 | 0 | 334 | 78 | 43 | 334 | 0 |
| Added Vol: | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 2 | 0 | 0 |
| Campus Incr: | 40 | 0 | 17 | 0 | 0 | 0 | 0 | 49 | 25 | 5 | 106 | 0 |
| Initial Fut: | 133 | 0 | 36 | 0 | 0 | 0 | 0 | 383 | 112 | 50 | 440 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 133 | 0 | 36 | 0 | 0 | 0 | 0 | 383 | 112 | 50 | 440 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 133 | 0 | 36 | 0 | 0 | 0 | 0 | 383 | 112 | 50 | 440 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 979 | xxxx | 439 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 495 | xxxx | xxxxx |
| Potent Cap.: | 280 | xxxx | 622 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1079 | xxxx | xxxxx |
| Move Cap.: | 270 | xxxx | 622 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1079 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 30.7 | xxxx | 11.1 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.5 | xxxx | xxxxx |
| LOS by Move: | D | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.5 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 26.5 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | D | | | * | | | * | | | * | |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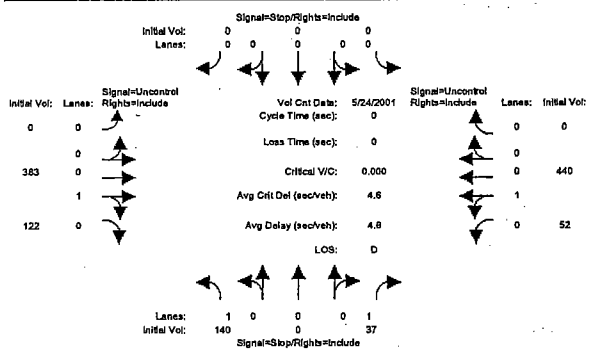
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #19: High/Western [N/S: Western E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 24 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 89 | 0 | 18 | 0 | 0 | 0 | 0 | 334 | 78 | 43 | 334 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 89 | 0 | 18 | 0 | 0 | 0 | 0 | 334 | 78 | 43 | 334 | 0 |
| Added Vol: | 11 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 19 | 4 | 0 | 0 |
| Campus Incr: | 40 | 0 | 17 | 0 | 0 | 0 | 0 | 49 | 25 | 5 | 106 | 0 |
| Initial Fut: | 140 | 0 | 37 | 0 | 0 | 0 | 0 | 383 | 122 | 52 | 440 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 140 | 0 | 37 | 0 | 0 | 0 | 0 | 383 | 122 | 52 | 440 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 140 | 0 | 37 | 0 | 0 | 0 | 0 | 383 | 122 | 52 | 440 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 988 | xxxx | 444 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 505 | xxxx | xxxxx |
| Potent Cap.: | 276 | xxxx | 618 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1070 | xxxx | xxxxx |
| Move Cap.: | 266 | xxxx | 618 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1070 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 32.7 | xxxx | 11.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.5 | xxxx | xxxxx |
| LOS by Move: | D | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.5 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 28.2 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | D | | | * | | | * | | | * | |





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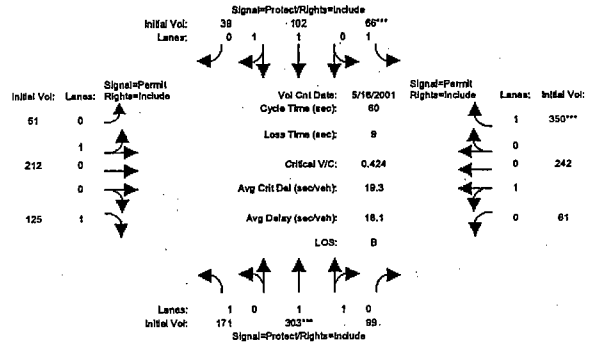
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

## Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Module: >> Count Date: 16 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 171 | 303 | 99 | 66 | 102 | 39 | 51 | 212 | 125 | 61 | 242 | 350 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 171 | 303 | 99 | 66 | 102 | 39 | 51 | 212 | 125 | 61 | 242 | 350 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 171 | 303 | 99 | 66 | 102 | 39 | 51 | 212 | 125 | 61 | 242 | 350 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 171 | 303 | 99 | 66 | 102 | 39 | 51 | 212 | 125 | 61 | 242 | 350 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 171 | 303 | 99 | 66 | 102 | 39 | 51 | 212 | 125 | 61 | 242 | 350 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 171 | 303 | 99 | 66 | 102 | 39 | 51 | 212 | 125 | 61 | 242 | 350 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.90 | 0.90 | 0.93 | 0.89 | 0.89 | 0.88 | 0.88 | 0.83 | 0.88 | 0.88 | 0.83 |
| Lanes: | 1.00 | 1.51 | 0.49 | 1.00 | 1.45 | 0.55 | 0.19 | 0.81 | 1.00 | 0.20 | 0.80 | 1.00 |
| Final Sat.: | 1769 | 2568 | 839 | 1769 | 2452 | 937 | 324 | 1346 | 1583 | 335 | 1330 | 1583 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.12 | 0.12 | 0.04 | 0.04 | 0.04 | 0.16 | 0.16 | 0.08 | 0.18 | 0.18 | 0.22 |
| Crit Moves: | | **** | | | **** | | | | | | | **** |
| Green/Cycle: | 0.26 | 0.28 | 0.28 | 0.09 | 0.11 | 0.11 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Volume/Cap: | 0.38 | 0.42 | 0.42 | 0.42 | 0.38 | 0.38 | 0.30 | 0.30 | 0.15 | 0.35 | 0.35 | 0.42 |
| Delay/Veh: | 25.0 | 23.9 | 23.9 | 36.4 | 33.7 | 33.7 | 11.1 | 11.1 | 10.0 | 11.4 | 11.4 | 12.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 25.0 | 23.9 | 23.9 | 36.4 | 33.7 | 33.7 | 11.1 | 11.1 | 10.0 | 11.4 | 11.4 | 12.1 |
| DesignQueue: | 6 | 10 | 3 | 3 | 4 | 2 | 1 | 5 | 3 | 1 | 5 | 8 |

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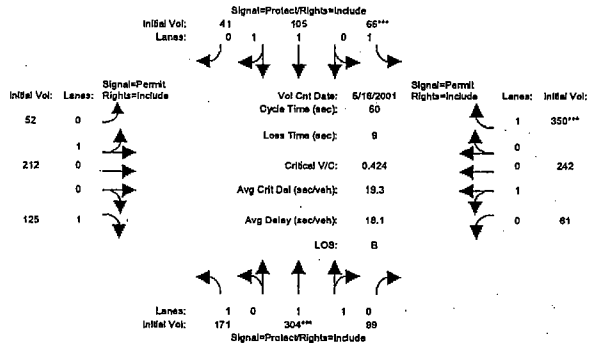
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 AM

Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module: >> Count Date: 16 May 2001 <<** | | | | | | | | | | | | |
| Base Vol: | 171 | 303 | 99 | 66 | 102 | 39 | 51 | 212 | 125 | 61 | 242 | 350 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 171 | 303 | 99 | 66 | 102 | 39 | 51 | 212 | 125 | 61 | 242 | 350 |
| Added Vol: | 0 | 1 | 0 | 0 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 171 | 304 | 99 | 66 | 105 | 41 | 52 | 212 | 125 | 61 | 242 | 350 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 171 | 304 | 99 | 66 | 105 | 41 | 52 | 212 | 125 | 61 | 242 | 350 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 171 | 304 | 99 | 66 | 105 | 41 | 52 | 212 | 125 | 61 | 242 | 350 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 171 | 304 | 99 | 66 | 105 | 41 | 52 | 212 | 125 | 61 | 242 | 350 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.90 | 0.90 | 0.93 | 0.89 | 0.89 | 0.87 | 0.87 | 0.83 | 0.88 | 0.88 | 0.83 |
| Lanes: | 1.00 | 1.51 | 0.49 | 1.00 | 1.44 | 0.56 | 0.20 | 0.80 | 1.00 | 0.20 | 0.80 | 1.00 |
| Final Sat.: | 1769 | 2570 | 837 | 1769 | 2437 | 952 | 327 | 1334 | 1583 | 335 | 1330 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.12 | 0.12 | 0.04 | 0.04 | 0.04 | 0.16 | 0.16 | 0.08 | 0.18 | 0.18 | 0.22 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.25 | 0.28 | 0.28 | 0.09 | 0.11 | 0.11 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Volume/Cap: | 0.38 | 0.42 | 0.42 | 0.42 | 0.38 | 0.38 | 0.31 | 0.31 | 0.15 | 0.35 | 0.35 | 0.42 |
| Delay/Veh: | 25.2 | 23.9 | 23.9 | 36.4 | 33.5 | 33.5 | 11.1 | 11.1 | 10.1 | 11.5 | 11.5 | 12.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 25.2 | 23.9 | 23.9 | 36.4 | 33.5 | 33.5 | 11.1 | 11.1 | 10.1 | 11.5 | 11.5 | 12.1 |
| DesignQueue: | 6 | 10 | 3 | 3 | 4 | 2 | 1 | 5 | 3 | 1 | 5 | 8 |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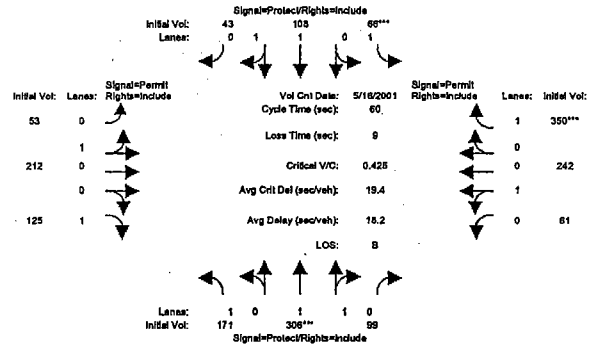
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module: >> Count Date: 16 May 2001 <<** | | | | | | | | | | | | |
| Base Vol: | 171 | 303 | 99 | 66 | 102 | 39 | 51 | 212 | 125 | 61 | 242 | 350 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 171 | 303 | 99 | 66 | 102 | 39 | 51 | 212 | 125 | 61 | 242 | 350 |
| Added Vol: | 0 | 3 | 0 | 0 | 6 | 4 | 2 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 171 | 306 | 99 | 66 | 108 | 43 | 53 | 212 | 125 | 61 | 242 | 350 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 171 | 306 | 99 | 66 | 108 | 43 | 53 | 212 | 125 | 61 | 242 | 350 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 171 | 306 | 99 | 66 | 108 | 43 | 53 | 212 | 125 | 61 | 242 | 350 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 171 | 306 | 99 | 66 | 108 | 43 | 53 | 212 | 125 | 61 | 242 | 350 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.90 | 0.90 | 0.93 | 0.89 | 0.89 | 0.87 | 0.87 | 0.83 | 0.88 | 0.88 | 0.83 |
| Lanes: | 1.00 | 1.51 | 0.49 | 1.00 | 1.43 | 0.57 | 0.20 | 0.80 | 1.00 | 0.20 | 0.80 | 1.00 |
| Final Sat.: | 1769 | 2574 | 833 | 1769 | 2422 | 964 | 332 | 1327 | 1583 | 335 | 1330 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.12 | 0.12 | 0.04 | 0.04 | 0.04 | 0.16 | 0.16 | 0.08 | 0.18 | 0.18 | 0.22 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.25 | 0.28 | 0.28 | 0.09 | 0.12 | 0.12 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Volume/Cap: | 0.38 | 0.43 | 0.43 | 0.43 | 0.38 | 0.38 | 0.31 | 0.31 | 0.15 | 0.35 | 0.35 | 0.43 |
| Delay/Veh: | 25.4 | 23.9 | 23.9 | 36.5 | 33.3 | 33.3 | 11.2 | 11.2 | 10.1 | 11.5 | 11.5 | 12.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 25.4 | 23.9 | 23.9 | 36.5 | 33.3 | 33.3 | 11.2 | 11.2 | 10.1 | 11.5 | 11.5 | 12.2 |
| DesignQueue: | 6 | 10 | 3 | 3 | 4 | 2 | 1 | 5 | 3 | 1 | 5 | 8 |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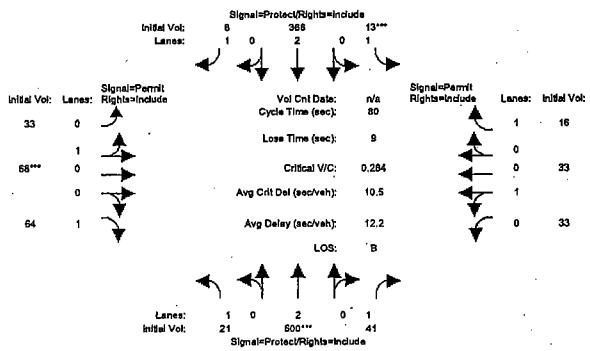
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

## Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 21 | 500 | 41 | 13 | 368 | 8 | 33 | 68 | 64 | 33 | 33 | 16 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 21 | 500 | 41 | 13 | 368 | 8 | 33 | 68 | 64 | 33 | 33 | 16 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 21 | 500 | 41 | 13 | 368 | 8 | 33 | 68 | 64 | 33 | 33 | 16 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| PHF Volume: | 25 | 602 | 49 | 16 | 443 | 10 | 40 | 82 | 77 | 40 | 40 | 19 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 25 | 602 | 49 | 16 | 443 | 10 | 40 | 82 | 77 | 40 | 40 | 19 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 25 | 602 | 49 | 16 | 443 | 10 | 40 | 82 | 77 | 40 | 40 | 19 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.88 | 0.88 | 0.83 | 0.82 | 0.82 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.33 | 0.67 | 1.00 | 0.50 | 0.50 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 544 | 1121 | 1583 | 779 | 779 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.17 | 0.03 | 0.01 | 0.13 | 0.01 | 0.07 | 0.07 | 0.05 | 0.05 | 0.05 | 0.01 |
| Crit Moves: | | **** | | | **** | | | **** | | | | |
| Green/Cycle: | 0.06 | 0.60 | 0.60 | 0.03 | 0.57 | 0.57 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Volume/Cap: | 0.22 | 0.28 | 0.05 | 0.28 | 0.22 | 0.01 | 0.28 | 0.28 | 0.19 | 0.20 | 0.20 | 0.05 |
| Delay/Veh: | 36.5 | 7.8 | 6.7 | 40.7 | 8.7 | 7.6 | 24.2 | 24.2 | 23.4 | 23.5 | 23.5 | 22.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 36.5 | 7.8 | 6.7 | 40.7 | 8.7 | 7.6 | 24.2 | 24.2 | 23.4 | 23.5 | 23.5 | 22.4 |
| DesignQueue: | 1 | 11 | 1 | 1 | 9 | 0 | 1 | 3 | 3 | 1 | 1 | 1 |





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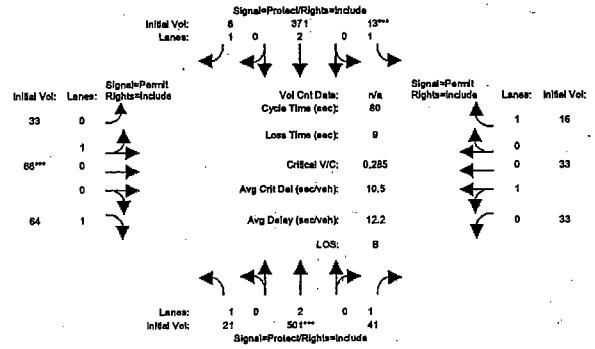
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 21 | 500 | 41 | 13 | 368 | 8 | 33 | 68 | 64 | 33 | 33 | 16 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 21 | 500 | 41 | 13 | 368 | 8 | 33 | 68 | 64 | 33 | 33 | 16 |
| Added Vol: | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 21 | 501 | 41 | 13 | 371 | 8 | 33 | 68 | 64 | 33 | 33 | 16 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| PHF Volume: | 25 | 604 | 49 | 16 | 447 | 10 | 40 | 82 | 77 | 40 | 40 | 19 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 25 | 604 | 49 | 16 | 447 | 10 | 40 | 82 | 77 | 40 | 40 | 19 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 25 | 604 | 49 | 16 | 447 | 10 | 40 | 82 | 77 | 40 | 40 | 19 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.88 | 0.88 | 0.83 | 0.82 | 0.82 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.33 | 0.67 | 1.00 | 0.50 | 0.50 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 544 | 1121 | 1583 | 779 | 779 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.17 | 0.03 | 0.01 | 0.13 | 0.01 | 0.07 | 0.07 | 0.05 | 0.05 | 0.05 | 0.01 |
| Crit Moves: | | **** | | | **** | | | **** | | | | |
| Green/Cycle: | 0.06 | 0.60 | 0.60 | 0.03 | 0.57 | 0.57 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Volume/Cap: | 0.22 | 0.28 | 0.05 | 0.28 | 0.22 | 0.01 | 0.28 | 0.28 | 0.19 | 0.20 | 0.20 | 0.05 |
| Delay/Veh: | 36.5 | 7.8 | 6.6 | 40.7 | 8.7 | 7.6 | 24.2 | 24.2 | 23.4 | 23.5 | 23.5 | 22.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 36.5 | 7.8 | 6.6 | 40.7 | 8.7 | 7.6 | 24.2 | 24.2 | 23.4 | 23.5 | 23.5 | 22.4 |
| DesignQueue: | 1 | 11 | 1 | 1 | 9 | 0 | 1 | 3 | 3 | 1 | 1 | 1 |

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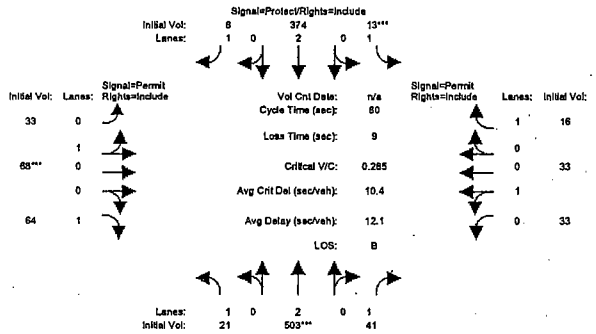
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 21 | 500 | 41 | 13 | 368 | 8 | 33 | 68 | 64 | 33 | 33 | 16 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 21 | 500 | 41 | 13 | 368 | 8 | 33 | 68 | 64 | 33 | 33 | 16 |
| Added Vol: | 0 | 3 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 21 | 503 | 41 | 13 | 374 | 8 | 33 | 68 | 64 | 33 | 33 | 16 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| PHF Volume: | 25 | 606 | 49 | 16 | 451 | 10 | 40 | 82 | 77 | 40 | 40 | 19 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 25 | 606 | 49 | 16 | 451 | 10 | 40 | 82 | 77 | 40 | 40 | 19 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 25 | 606 | 49 | 16 | 451 | 10 | 40 | 82 | 77 | 40 | 40 | 19 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.88 | 0.88 | 0.83 | 0.82 | 0.82 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.33 | 0.67 | 1.00 | 0.50 | 0.50 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 544 | 1121 | 1583 | 779 | 779 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.17 | 0.03 | 0.01 | 0.13 | 0.01 | 0.07 | 0.07 | 0.05 | 0.05 | 0.05 | 0.01 |
| Crit Moves: | | **** | | | **** | | | **** | | | | |
| Green/Cycle: | 0.06 | 0.60 | 0.60 | 0.03 | 0.57 | 0.57 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Volume/Cap: | 0.22 | 0.29 | 0.05 | 0.29 | 0.22 | 0.01 | 0.29 | 0.29 | 0.19 | 0.20 | 0.20 | 0.05 |
| Delay/Veh: | 36.6 | 7.8 | 6.6 | 40.7 | 8.6 | 7.5 | 24.2 | 24.2 | 23.5 | 23.6 | 23.6 | 22.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 36.6 | 7.8 | 6.6 | 40.7 | 8.6 | 7.5 | 24.2 | 24.2 | 23.5 | 23.6 | 23.6 | 22.5 |
| DesignQueue: | 1 | 11 | 1 | 1 | 9 | 0 | 1 | 3 | 3 | 1 | 1 | 1 |





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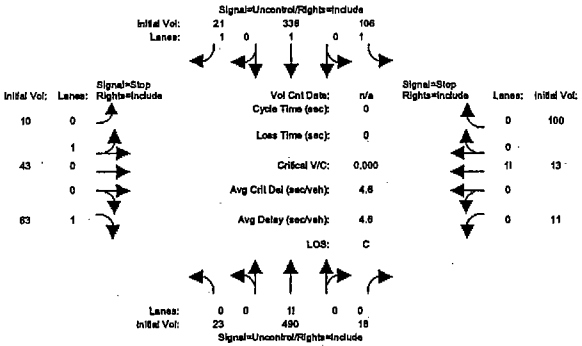
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

## Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 23 | 490 | 18 | 106 | 336 | 21 | 10 | 43 | 63 | 11 | 13 | 100 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 23 | 490 | 18 | 106 | 336 | 21 | 10 | 43 | 63 | 11 | 13 | 100 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 23 | 490 | 18 | 106 | 336 | 21 | 10 | 43 | 63 | 11 | 13 | 100 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 23 | 490 | 18 | 106 | 336 | 21 | 10 | 43 | 63 | 11 | 13 | 100 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 23 | 490 | 18 | 106 | 336 | 21 | 10 | 43 | 63 | 11 | 13 | 100 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 357 | xxxx | xxxxx | 508 | xxxx | xxxxx | 1150 | 1102 | 336 | 1157 | 1114 | 499 |
| Potent Cap.: | 1213 | xxxx | xxxxx | 1067 | xxxx | xxxxx | 177 | 213 | 711 | 175 | 210 | 576 |
| Move Cap.: | 1213 | xxxx | xxxxx | 1067 | xxxx | xxxxx | 126 | 189 | 711 | 120 | 185 | 576 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 8.0 | xxxx | xxxxx | 8.7 | xxxx | xxxxx | xxxxx | xxxx | 10.6 | xxxxx | xxxx | xxxxx |
| LOS by Move: | A | * | * | A | * | * | * | * | B | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 172 | xxxx | xxxxx | xxxx | 370 | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 34.9 | xxxx | xxxxx | xxxxx | 19.6 | xxxxx |
| Shared LOS: | * | * | * | * | * | * | D | * | * | * | C | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 21.7 | | | 19.6 | | |
| ApproachLOS: | * | | | * | | | C | | | C | | |

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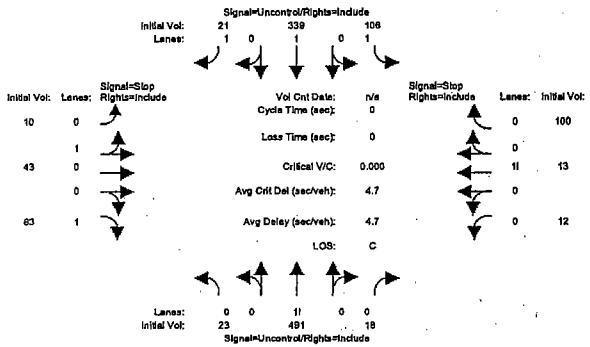
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 AM

## Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 23 | 490 | 18 | 106 | 336 | 21 | 10 | 43 | 63 | 11 | 13 | 100 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 23 | 490 | 18 | 106 | 336 | 21 | 10 | 43 | 63 | 11 | 13 | 100 |
| Added Vol: | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 23 | 491 | 18 | 106 | 339 | 21 | 10 | 43 | 63 | 12 | 13 | 100 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 23 | 491 | 18 | 106 | 339 | 21 | 10 | 43 | 63 | 12 | 13 | 100 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 23 | 491 | 18 | 106 | 339 | 21 | 10 | 43 | 63 | 12 | 13 | 100 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 360 | xxxx | xxxxx | 509 | xxxx | xxxxx | 1154 | 1106 | 339 | 1161 | 1118 | 500 |
| Potent Cap.: | 1210 | xxxx | xxxxx | 1066 | xxxx | xxxxx | 176 | 212 | 708 | 174 | 209 | 575 |
| Move Cap.: | 1210 | xxxx | xxxxx | 1066 | xxxx | xxxxx | 125 | 187 | 708 | 119 | 184 | 575 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 8.0 | xxxx | xxxxx | 8.7 | xxxx | xxxxx | xxxxx | xxxx | 10.6 | xxxxx | xxxx | xxxxx |
| LOS by Move: | A | * | * | A | * | * | * | * | B | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 171 | xxxx | xxxxx | xxxx | 362 | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 35.1 | xxxx | xxxxx | xxxxx | 20.1 | xxxxx |
| Shared LOS: | * | * | * | * | * | * | E | * | * | * | C | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 21.8 | | | 20.1 | | |
| ApproachLOS: | * | | | * | | | C | | | C | | |





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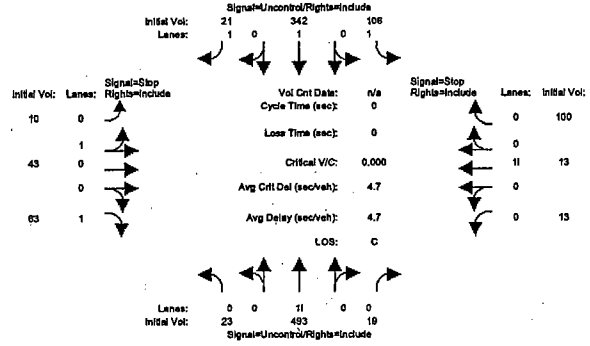
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 23 | 490 | 18 | 106 | 336 | 21 | 10 | 43 | 63 | 11 | 13 | 100 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 23 | 490 | 18 | 106 | 336 | 21 | 10 | 43 | 63 | 11 | 13 | 100 |
| Added Vol: | 0 | 3 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 23 | 493 | 19 | 106 | 342 | 21 | 10 | 43 | 63 | 13 | 13 | 100 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 23 | 493 | 19 | 106 | 342 | 21 | 10 | 43 | 63 | 13 | 13 | 100 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 23 | 493 | 19 | 106 | 342 | 21 | 10 | 43 | 63 | 13 | 13 | 100 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 363 | xxxx | xxxxx | 512 | xxxx | xxxxx | 1159 | 1112 | 342 | 1166 | 1124 | 503 |
| Potent Cap.: | 1207 | xxxx | xxxxx | 1064 | xxxx | xxxxx | 174 | 211 | 705 | 172 | 207 | 573 |
| Move Cap.: | 1207 | xxxx | xxxxx | 1064 | xxxx | xxxxx | 124 | 186 | 705 | 118 | 183 | 573 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 8.0 | xxxx | xxxxx | 8.8 | xxxx | xxxxx | xxxxx | xxxx | 10.6 | xxxxx | xxxx | xxxxx |
| LOS by Move: | A | * | * | A | * | * | * | * | B | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 170 | xxxx | xxxxx | xxxx | 354 | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 35.5 | xxxx | xxxxx | xxxxx | 20.7 | xxxxx |
| Shared LOS: | * | * | * | * | * | * | E | * | * | * | C | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 22.0 | | | 20.7 | | |
| ApproachLOS: | * | | | * | | | C | | | C | | |

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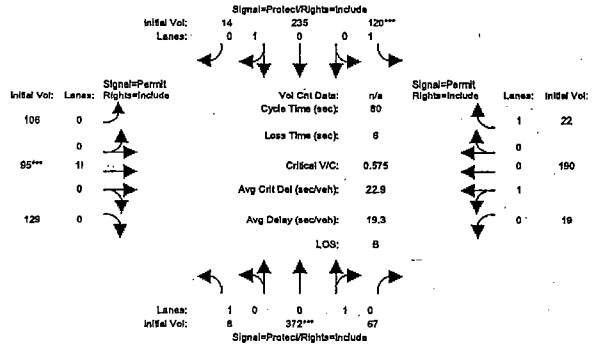
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 372 | 67 | 120 | 235 | 14 | 106 | 95 | 129 | 19 | 190 | 22 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 8 | 372 | 67 | 120 | 235 | 14 | 106 | 95 | 129 | 19 | 190 | 22 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 8 | 372 | 67 | 120 | 235 | 14 | 106 | 95 | 129 | 19 | 190 | 22 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 8 | 372 | 67 | 120 | 235 | 14 | 106 | 95 | 129 | 19 | 190 | 22 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 8 | 372 | 67 | 120 | 235 | 14 | 106 | 95 | 129 | 19 | 190 | 22 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 8 | 372 | 67 | 120 | 235 | 14 | 106 | 95 | 129 | 19 | 190 | 22 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.96 | 0.96 | 0.93 | 0.97 | 0.97 | 0.78 | 0.78 | 0.78 | 0.94 | 0.94 | 0.83 |
| Lanes: | 1.00 | 0.85 | 0.15 | 1.00 | 0.94 | 0.06 | 0.32 | 0.29 | 0.39 | 0.09 | 0.91 | 1.00 |
| Final Sat.: | 1769 | 1542 | 278 | 1769 | 1743 | 104 | 476 | 427 | 580 | 163 | 1628 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.24 | 0.24 | 0.07 | 0.13 | 0.13 | 0.22 | 0.22 | 0.22 | 0.12 | 0.12 | 0.01 |
| Crit Moves: | | **** | | **** | | | | **** | | | | |
| Green/Cycle: | 0.02 | 0.42 | 0.42 | 0.12 | 0.52 | 0.52 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 |
| Volume/Cap: | 0.26 | 0.57 | 0.57 | 0.57 | 0.26 | 0.26 | 0.57 | 0.57 | 0.57 | 0.30 | 0.30 | 0.04 |
| Delay/Veh: | 43.2 | 18.8 | 18.8 | 37.3 | 10.8 | 10.8 | 20.8 | 20.8 | 20.8 | 17.3 | 17.3 | 15.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 43.2 | 18.8 | 18.8 | 37.3 | 10.8 | 10.8 | 20.8 | 20.8 | 20.8 | 17.3 | 17.3 | 15.3 |
| DesignQueue: | 0 | 10 | 2 | 5 | 5 | 0 | 3 | 3 | 4 | 1 | 5 | 1 |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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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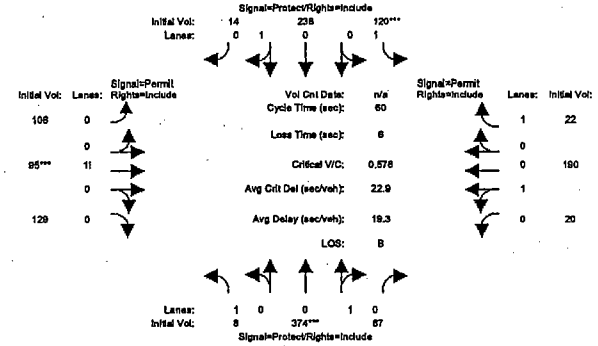
Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 372 | 67 | 120 | 235 | 14 | 106 | 95 | 129 | 19 | 190 | 22 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 8 | 372 | 67 | 120 | 235 | 14 | 106 | 95 | 129 | 19 | 190 | 22 |
| Added Vol: | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 8 | 374 | 67 | 120 | 238 | 14 | 106 | 95 | 129 | 20 | 190 | 22 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 8 | 374 | 67 | 120 | 238 | 14 | 106 | 95 | 129 | 20 | 190 | 22 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 8 | 374 | 67 | 120 | 238 | 14 | 106 | 95 | 129 | 20 | 190 | 22 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 8 | 374 | 67 | 120 | 238 | 14 | 106 | 95 | 129 | 20 | 190 | 22 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.96 | 0.96 | 0.93 | 0.97 | 0.97 | 0.78 | 0.78 | 0.78 | 0.94 | 0.94 | 0.83 |
| Lanes: | 1.00 | 0.85 | 0.15 | 1.00 | 0.94 | 0.06 | 0.32 | 0.29 | 0.39 | 0.10 | 0.90 | 1.00 |
| Final Sat.: | 1769 | 1543 | 276 | 1769 | 1744 | 103 | 476 | 427 | 580 | 170 | 1612 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.24 | 0.24 | 0.07 | 0.14 | 0.14 | 0.22 | 0.22 | 0.22 | 0.12 | 0.12 | 0.01 |
| Crit Moves: | | **** | | **** | | | | **** | | | | |
| Green/Cycle: | 0.02 | 0.42 | 0.42 | 0.12 | 0.52 | 0.52 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 |
| Volume/Cap: | 0.26 | 0.58 | 0.58 | 0.58 | 0.26 | 0.26 | 0.58 | 0.58 | 0.58 | 0.31 | 0.31 | 0.04 |
| Delay/Veh: | 43.3 | 18.8 | 18.8 | 37.3 | 10.8 | 10.8 | 20.8 | 20.8 | 20.8 | 17.3 | 17.3 | 15.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 43.3 | 18.8 | 18.8 | 37.3 | 10.8 | 10.8 | 20.8 | 20.8 | 20.8 | 17.3 | 17.3 | 15.3 |
| DesignQueue: | 0 | 10 | 2 | 5 | 5 | 0 | 3 | 3 | 4 | 1 | 5 | 1 |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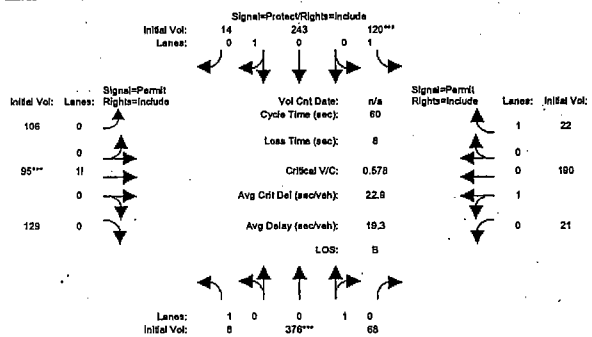
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

## Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 372 | 67 | 120 | 235 | 14 | 106 | 95 | 129 | 19 | 190 | 22 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 8 | 372 | 67 | 120 | 235 | 14 | 106 | 95 | 129 | 19 | 190 | 22 |
| Added Vol: | 0 | 4 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 8 | 376 | 68 | 120 | 243 | 14 | 106 | 95 | 129 | 21 | 190 | 22 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 8 | 376 | 68 | 120 | 243 | 14 | 106 | 95 | 129 | 21 | 190 | 22 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 8 | 376 | 68 | 120 | 243 | 14 | 106 | 95 | 129 | 21 | 190 | 22 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 8 | 376 | 68 | 120 | 243 | 14 | 106 | 95 | 129 | 21 | 190 | 22 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.96 | 0.96 | 0.93 | 0.97 | 0.97 | 0.78 | 0.78 | 0.78 | 0.94 | 0.94 | 0.83 |
| Lanes: | 1.00 | 0.85 | 0.15 | 1.00 | 0.95 | 0.05 | 0.32 | 0.29 | 0.39 | 0.10 | 0.90 | 1.00 |
| Final Sat.: | 1769 | 1541 | 279 | 1769 | 1746 | 101 | 476 | 426 | 579 | 177 | 1603 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.24 | 0.24 | 0.07 | 0.14 | 0.14 | 0.22 | 0.22 | 0.22 | 0.12 | 0.12 | 0.01 |
| Crit Moves: | | **** | | **** | | | | **** | | | | |
| Green/Cycle: | 0.02 | 0.42 | 0.42 | 0.12 | 0.52 | 0.52 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 |
| Volume/Cap: | 0.27 | 0.58 | 0.58 | 0.58 | 0.27 | 0.27 | 0.58 | 0.58 | 0.58 | 0.31 | 0.31 | 0.04 |
| Delay/Veh: | 43.5 | 18.8 | 18.8 | 37.4 | 10.7 | 10.7 | 20.9 | 20.9 | 20.9 | 17.4 | 17.4 | 15.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 43.5 | 18.8 | 18.8 | 37.4 | 10.7 | 10.7 | 20.9 | 20.9 | 20.9 | 17.4 | 17.4 | 15.3 |
| DesignQueue: | 0 | 10 | 2 | 5 | 5 | 0 | 3 | 3 | 4 | 1 | 5 | 1 |





Marine Science Center

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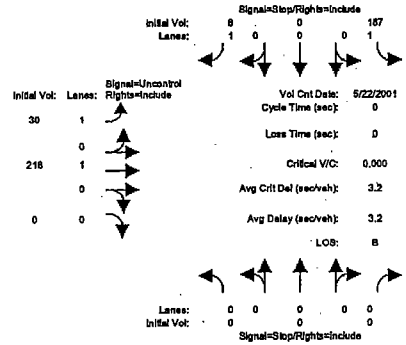
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

## Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module: >> Count Date: 22 May 2001 <<** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 218 | 0 | 0 | 110 | 340 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 218 | 0 | 0 | 110 | 340 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 218 | 0 | 0 | 110 | 340 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 218 | 0 | 0 | 110 | 340 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 218 | 0 | 0 | 110 | 340 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 388 | xxxx | 110 | 450 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 619 | xxxx | 949 | 1121 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 607 | xxxx | 949 | 1121 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 13.6 | xxxx | 8.8 | 8.3 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | B | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 13.4 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

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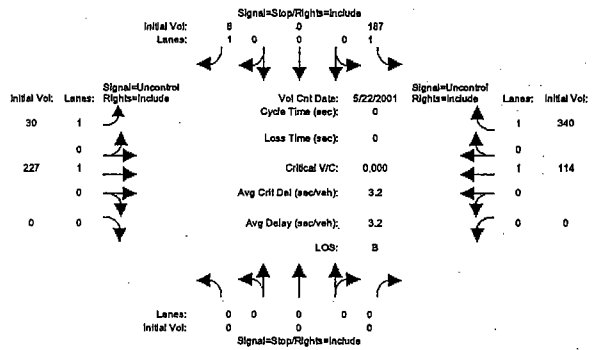
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 AM

Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 22 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 218 | 0 | 0 | 110 | 340 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 218 | 0 | 0 | 110 | 340 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 4 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 227 | 0 | 0 | 114 | 340 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 227 | 0 | 0 | 114 | 340 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 227 | 0 | 0 | 114 | 340 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 401 | xxxx | 114 | 454 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 609 | xxxx | 944 | 1117 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 596 | xxxx | 944 | 1117 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 13.8 | xxxx | 8.8 | 8.3 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | B | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 13.6 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |





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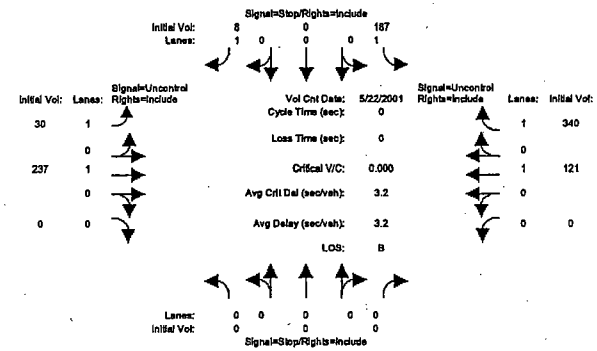
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 + Ph 2 AM

Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 22 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 218 | 0 | 0 | 110 | 340 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 218 | 0 | 0 | 110 | 340 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 11 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 237 | 0 | 0 | 121 | 340 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 237 | 0 | 0 | 121 | 340 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 187 | 0 | 8 | 30 | 237 | 0 | 0 | 121 | 340 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 418 | xxxx | 121 | 461 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 595 | xxxx | 936 | 1111 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 583 | xxxx | 936 | 1111 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 14.1 | xxxx | 8.9 | 8.3 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | B | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 13.8 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

Marine Science Center

November 2003

Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

| Intersection | | Existing PM | | | | Ex + Ph 1 PM | | | | Ex + Ph 1 + Ph 2 PM | | | | | | ??? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LOS | Avg Del (sec) | Crit V/C | Avg Crit Del (sec) | LOS | Avg Del (sec) | Crit V/C | Avg Crit Del (sec) | LOS | Avg Del (sec) | Crit V/C | Crit V/C Change | Avg Crit Del (sec) | Avg Crit Del Change | LOS | Avg Del (sec) | Crit V/C | Avg Crit Del (sec) |
| #1 | Delaware/Shaffer [N/S:Shaffer E/W:Delaware] | A | 1.1 | 0.000 | 1.1 | B | 0.3 | 0.000 | 0.3 | B | 0.2 | 0.000 | + 0.000 | 0.2 | - 0.1 | ? | xx.x | x.xxx | xx.x |
| #2 | Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware] | A | 8.4 | 0.162 | 8.4 | A | 9.0 | 0.282 | 9.0 | B | 10.5 | 0.455 | + 0.173 | 10.5 | + 1.4 | ? | xx.x | x.xxx | xx.x |
| #3 | Delaware/Swanton [N/S: Swanton E/W: Delaware] | B | 3.5 | 0.000 | 3.5 | B | 3.1 | 0.000 | 3.1 | B | 2.9 | 0.000 | + 0.000 | 2.9 | - 0.2 | ? | xx.x | x.xxx | xx.x |
| #4 | Bay/Laguna [N/S:Laguna E/W: Bay] | B | 4.3 | 0.000 | 4.3 | B | 4.5 | 0.000 | 4.5 | B | 4.8 | 0.000 | + 0.000 | 4.8 | + 0.3 | ? | xx.x | x.xxx | xx.x |
| #5 | SR 1/Shaffer [N/S: Shaffer E/w: SR 1] | B | 2.2 | 0.000 | 2.2 | B | 2.3 | 0.000 | 2.3 | B | 2.3 | 0.000 | + 0.000 | 2.3 | + 0.1 | ? | xx.x | x.xxx | xx.x |
| #6 | Delaware/Swift [N/S: Swift E/W: Delaware] | B | 10.9 | 0.477 | 10.9 | B | 11.9 | 0.525 | 11.9 | B | 13.8 | 0.604 | + 0.079 | 13.8 | + 1.9 | ? | xx.x | x.xxx | xx.x |
| #7 | Delaware/Almar [N/S: Almar E/W: Delaware] | B | 11.4 | 0.548 | 11.4 | B | 12.5 | 0.617 | 12.5 | B | 14.5 | 0.703 | + 0.085 | 14.5 | + 2.0 | ? | xx.x | x.xxx | xx.x |
| #8 | SR 1/Western [N/S: Western E/w: SR 1] | B | 18.1 | 0.510 | 17.7 | B | 19.0 | 0.524 | 19.0 | C | 20.2 | 0.546 | + 0.023 | 21.0 | + 2.0 | ? | xx.x | x.xxx | xx.x |
| #9 | SR 1/Swift [N/S: Swift E/w: SR 1] | C | 20.0 | 0.398 | 24.9 | C | 20.2 | 0.410 | 25.1 | C | 20.5 | 0.427 | + 0.017 | 25.6 | + 0.5 | ? | xx.x | x.xxx | xx.x |
| #10 | Mission/Almar [N/S: Almar E/w: Mission] | C | 24.6 | 0.568 | 31.4 | C | 25.7 | 0.604 | 32.8 | C | 27.2 | 0.650 | + 0.046 | 34.8 | + 2.0 | ? | xx.x | x.xxx | xx.x |
| #11 | Mission/Bay [N/S: Bay E/w: Mission] | D | 51.1 | 0.940 | 54.7 | E | 55.0 | 0.959 | 58.2 | E | 61.9 | 0.987 | + 0.028 | 66.5 | + 8.2 | ? | xx.x | x.xxx | xx.x |
| #12 | Laurel/California [N/S: California E/w: Laurel] | C | 20.6 | 0.578 | 22.4 | C | 20.7 | 0.587 | 22.8 | C | 21.0 | 0.600 | + 0.013 | 23.3 | + 0.5 | ? | xx.x | x.xxx | xx.x |
| #13 | Mission/Laurel [N/S: Laurel E/w: Missionl] | D | 35.3 | 0.851 | 37.8 | D | 36.1 | 0.873 | 38.9 | D | 37.4 | 0.900 | + 0.027 | 40.7 | + 1.8 | ? | xx.x | x.xxx | xx.x |
| #14 | Mission/Walnut [N/S: Walnut E/w: Mission] | B | 19.2 | 0.547 | 18.6 | B | 19.0 | 0.562 | 20.9 | B | 18.6 | 0.586 | + 0.024 | 20.6 | - 0.3 | ? | xx.x | x.xxx | xx.x |
| #15 | Mission/Union [N/S: Union E/w: Mission] | C | 24.1 | 0.621 | 21.6 | C | 24.2 | 0.628 | 21.5 | C | 24.2 | 0.645 | + 0.017 | 21.1 | - 0.4 | ? | xx.x | x.xxx | xx.x |
| #16 | Mission/Chestnut [N/S: Chestnut E/w: Mission] | E | 79.4 | 1.122 | 93.6 | F | 82.7 | 1.133 | 97.7 | F | 88.6 | 1.152 | + 0.019 | 100.8 | + 3.1 | ? | xx.x | x.xxx | xx.x |
| #17 | Mission/River [N/S: River E/w: Mission] | D | 45.1 | 0.904 | 57.2 | D | 45.9 | 0.918 | 58.6 | D | 47.1 | 0.934 | + 0.016 | 60.6 | + 2.0 | ? | xx.x | x.xxx | xx.x |
| #18 | Western/Meder [N/S: Western E/w: Meder] | A | 8.7 | 0.257 | 8.7 | A | 8.8 | 0.272 | 8.8 | A | 8.9 | 0.292 | + 0.020 | 8.9 | + 0.1 | ? | xx.x | x.xxx | xx.x |
| #19 | High/Western [N/S: Western E/w: High] | D | 4.4 | 0.000 | 4.4 | D | 4.8 | 0.000 | 4.8 | E | 5.3 | 0.000 | + 0.000 | 5.3 | + 0.5 | ? | xx.x | x.xxx | xx.x |
| #20 | High/Bay [N/S: Bay E/w: High] | C | 22.9 | 0.558 | 25.1 | C | 22.9 | 0.559 | 25.1 | C | 22.9 | 0.561 | + 0.002 | 25.1 | + 0.0 | ? | xx.x | x.xxx | xx.x |
| #21 | Bay/Iowa [N/S: Bay E/w: Iowa] | B | 10.1 | 0.395 | 9.6 | B | 10.1 | 0.395 | 9.6 | B | 10.0 | 0.396 | + 0.001 | 9.6 | - 0.0 | ? | xx.x | x.xxx | xx.x |
| #22 | Bay/Escalona [N/S: Bay E/w: Escalana] | F | 9.1 | 0.000 | 9.1 | F | 9.2 | 0.000 | 9.2 | F | 9.7 | 0.000 | + 0.000 | 9.7 | + 0.5 | ? | xx.x | x.xxx | xx.x |
| #23 | Bay/King [N/S: Bay E/w: King] | C | 22.7 | 0.749 | 29.2 | C | 22.8 | 0.751 | 29.3 | C | 22.9 | 0.755 | + 0.004 | 29.5 | + 0.1 | ? | xx.x | x.xxx | xx.x |
| #24 | Empire Grade/Heller [N/S: Heller E/w: Empire Grade] | C | 8.9 | 0.000 | 8.9 | C | 9.2 | 0.000 | 9.2 | C | 9.6 | 0.000 | + 0.000 | 9.6 | + 0.4 | ? | xx.x | x.xxx | xx.x |

Marine Science Center

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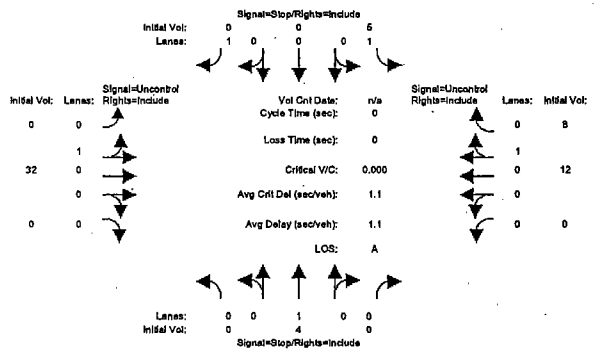
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

## Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 32 | 0 | 0 | 12 | 8 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 32 | 0 | 0 | 12 | 8 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 32 | 0 | 0 | 12 | 8 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 32 | 0 | 0 | 12 | 8 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 32 | 0 | 0 | 12 | 8 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | 6.6 | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | 4.1 | xxxxx | 3.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | 52 | xxxxx | 50 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | 828 | xxxxx | 935 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | 828 | xxxxx | 932 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | 9.4 | xxxxx | 8.9 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | A | * | A | * | * | * | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | | 9.4 | | | 8.9 | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | A | | | A | | | * | | | * | |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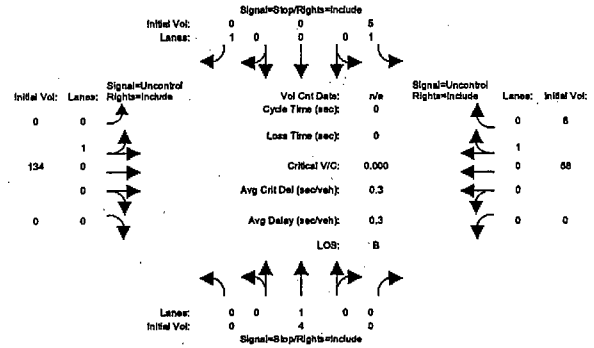
Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 PM

## Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 32 | 0 | 0 | 12 | 8 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 32 | 0 | 0 | 12 | 8 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 102 | 0 | 0 | 46 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 134 | 0 | 0 | 58 | 8 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 134 | 0 | 0 | 58 | 8 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 134 | 0 | 0 | 58 | 8 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | 6.6 | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | 4.1 | xxxxx | 3.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | 200 | xxxxx | 198 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | 685 | xxxxx | 748 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | 685 | xxxxx | 745 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | 10.3 | xxxxx | 9.9 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | B | * | A | * | * | * | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | | 10.3 | | | 9.9 | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | A | | | * | | | * | |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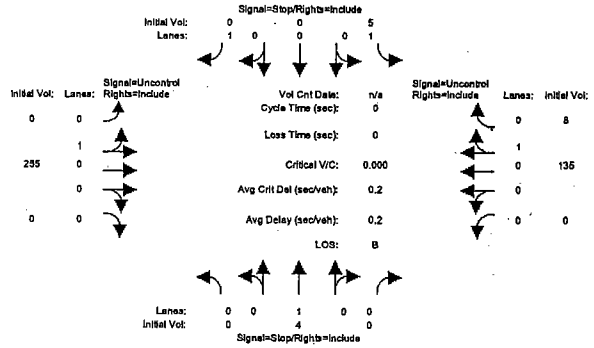
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 32 | 0 | 0 | 12 | 8 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 32 | 0 | 0 | 12 | 8 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 223 | 0 | 0 | 123 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 255 | 0 | 0 | 135 | 8 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 255 | 0 | 0 | 135 | 8 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 255 | 0 | 0 | 135 | 8 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | 6.6 | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | 4.1 | xxxxx | 3.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | 398 | xxxxx | 396 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | 530 | xxxxx | 553 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | 530 | xxxxx | 550 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | 11.8 | xxxxx | 11.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | B | * | B | * | * | * | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | | 11.8 | | | 11.6 | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | B | | | * | | | * | |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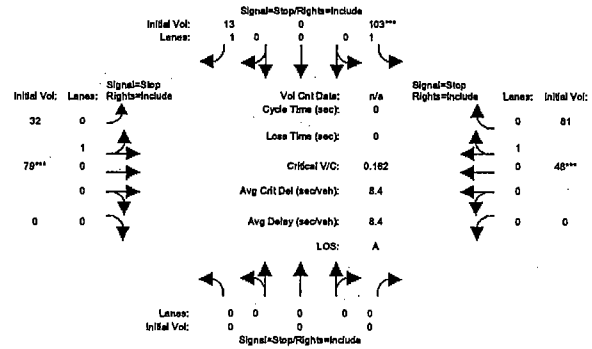
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing PM

## Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 79 | 0 | 0 | 48 | 81 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 79 | 0 | 0 | 48 | 81 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 79 | 0 | 0 | 48 | 81 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 79 | 0 | 0 | 48 | 81 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 79 | 0 | 0 | 48 | 81 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 79 | 0 | 0 | 48 | 81 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.29 | 0.71 | 0.00 | 0.00 | 0.37 | 0.63 |
| Final Sat.: | 0 | 0 | 0 | 634 | 0 | 802 | 222 | 548 | 0 | 0 | 316 | 534 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.16 | xxxx | 0.02 | 0.14 | 0.14 | xxxx | xxxx | 0.15 | 0.15 |
| Crit Moves: | | | | **** | | | | **** | | | **** | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 9.2 | 0.0 | 7.1 | 8.3 | 8.3 | 0.0 | 0.0 | 7.8 | 7.8 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 9.2 | 0.0 | 7.1 | 8.3 | 8.3 | 0.0 | 0.0 | 7.8 | 7.8 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | | xxxxxx | | | 9.0 | | | 8.3 | | | 7.8 | |
| Delay Adj: | | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | xxxxxx | | | 9.0 | | | 8.3 | | | 7.8 | |
| LOS by Appr: | | * | | | A | | | A | | | A | |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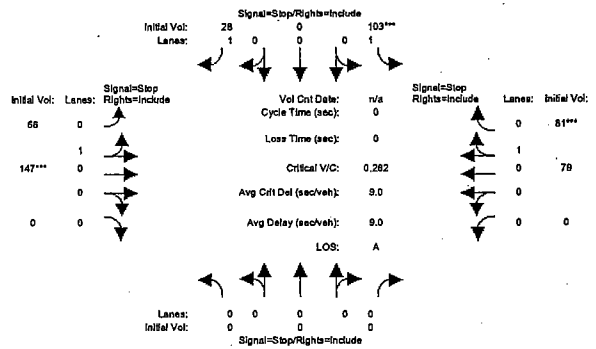
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 PM

## Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 79 | 0 | 0 | 48 | 81 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 79 | 0 | 0 | 48 | 81 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 15 | 34 | 68 | 0 | 0 | 31 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 103 | 0 | 28 | 66 | 147 | 0 | 0 | 79 | 81 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 103 | 0 | 28 | 66 | 147 | 0 | 0 | 79 | 81 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 103 | 0 | 28 | 66 | 147 | 0 | 0 | 79 | 81 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 103 | 0 | 28 | 66 | 147 | 0 | 0 | 79 | 81 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.31 | 0.69 | 0.00 | 0.00 | 0.49 | 0.51 |
| Final Sat.: | 0 | 0 | 0 | 593 | 0 | 737 | 234 | 521 | 0 | 0 | 396 | 406 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.17 | xxxx | 0.04 | 0.28 | 0.28 | xxxx | xxxx | 0.20 | 0.20 |
| Crit Moves: | | | | **** | | | | **** | | | | **** |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 9.7 | 0.0 | 7.5 | 9.4 | 9.4 | 0.0 | 0.0 | 8.4 | 8.4 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 9.7 | 0.0 | 7.5 | 9.4 | 9.4 | 0.0 | 0.0 | 8.4 | 8.4 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | 9.2 | | | 9.4 | | | 8.4 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 9.2 | | | 9.4 | | | 8.4 | | |
| LOS by Appr: | * | | | A | | | A | | | A | | |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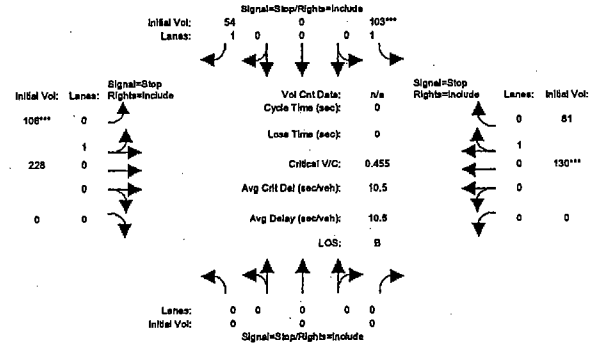
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 79 | 0 | 0 | 48 | 81 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 79 | 0 | 0 | 48 | 81 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 41 | 74 | 149 | 0 | 0 | 82 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 103 | 0 | 54 | 106 | 228 | 0 | 0 | 130 | 81 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 103 | 0 | 54 | 106 | 228 | 0 | 0 | 130 | 81 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 103 | 0 | 54 | 106 | 228 | 0 | 0 | 130 | 81 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 103 | 0 | 54 | 106 | 228 | 0 | 0 | 130 | 81 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.32 | 0.68 | 0.00 | 0.00 | 0.62 | 0.38 |
| Final Sat.: | 0 | 0 | 0 | 548 | 0 | 670 | 233 | 501 | 0 | 0 | 461 | 287 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.19 | xxxx | 0.08 | 0.46 | 0.46 | xxxx | xxxx | 0.28 | 0.28 |
| Crit Moves: | | | | **** | | | **** | | | | **** | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 10.2 | 0.0 | 8.1 | 11.6 | 11.6 | 0.0 | 0.0 | 9.4 | 9.4 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 10.2 | 0.0 | 8.1 | 11.6 | 11.6 | 0.0 | 0.0 | 9.4 | 9.4 |
| LOS by Move: | * | * | * | B | * | A | B | B | * | * | A | A |
| ApproachDel: | xxxxxx | | | 9.5 | | | 11.6 | | | 9.4 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 9.5 | | | 11.6 | | | 9.4 | | |
| LOS by Appr: | * | | | A | | | B | | | A | | |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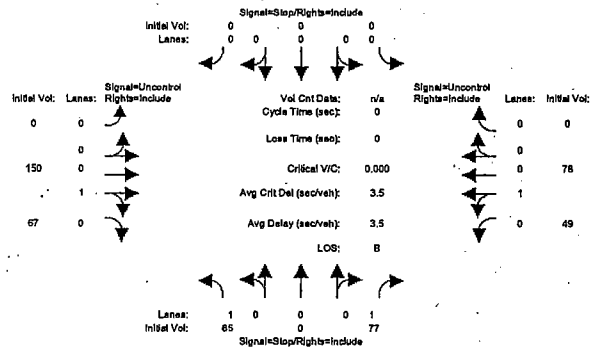
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

## Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 150 | 67 | 49 | 78 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 150 | 67 | 49 | 78 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 150 | 67 | 49 | 78 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 150 | 67 | 49 | 78 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 150 | 67 | 49 | 78 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 360 | xxxx | 184 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 217 | xxxx | xxxxx |
| Potent Cap.: | 639 | xxxx | 859 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1335 | xxxx | xxxxx |
| Move Cap.: | 621 | xxxx | 859 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1335 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 11.5 | xxxx | 9.6 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.8 | xxxx | xxxxx |
| LOS by Move: | B | * | A | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.8 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 10.5 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |



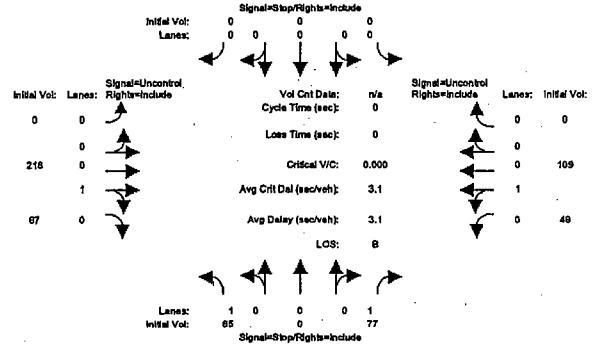


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Pn 1 PM

## Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 150 | 67 | 49 | 78 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 150 | 67 | 49 | 78 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 0 | 0 | 31 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 218 | 67 | 49 | 109 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 218 | 67 | 49 | 109 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 218 | 67 | 49 | 109 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 459 | xxxx | 252 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 285 | xxxx | xxxxx |
| Potent Cap.: | 560 | xxxx | 787 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1260 | xxxx | xxxxx |
| Move Cap.: | 543 | xxxx | 787 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1260 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 12.5 | xxxx | 10.1 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx |
| LOS by Move: | B | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 11.2 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |

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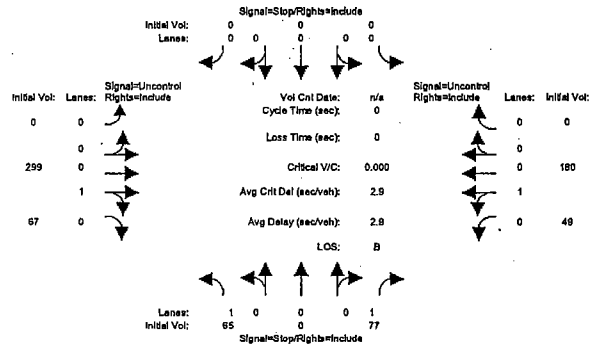
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 150 | 67 | 49 | 78 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 150 | 67 | 49 | 78 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 149 | 0 | 0 | 82 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 299 | 67 | 49 | 160 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 299 | 67 | 49 | 160 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 299 | 67 | 49 | 160 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | | 6.2 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | |
| FollowUpTim: | 3.5 | xxxx | | 3.3 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | |
| | 4.1 | xxxx | xxxxx | | | | | | | | | |
| | 2.2 | xxxx | xxxxx | | | | | | | | | |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 591 | xxxx | | 333 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | |
| Potent Cap.: | 470 | xxxx | | 709 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | |
| Move Cap.: | 454 | xxxx | | 709 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | |
| | 366 | xxxx | xxxxx | | | | | | | | | |
| | 1176 | xxxx | xxxxx | | | | | | | | | |
| | 1176 | xxxx | xxxxx | | | | | | | | | |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 14.2 | xxxx | | 10.7 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | |
| LOS by Move: | B | * | | B | * | * | * | * | * | * | | |
| | 8.2 | xxxx | xxxxx | | | | | | | | | |
| | A | * | * | | | | | | | | | |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.2 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 12.3 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |



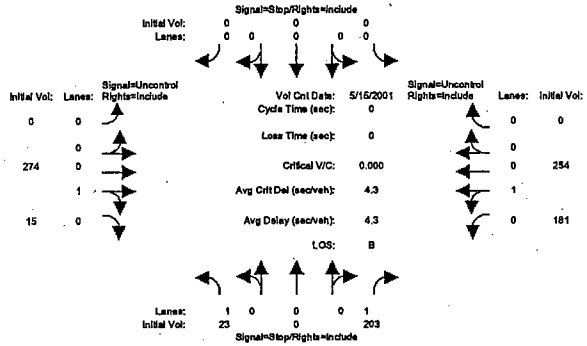


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

## Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** >> Count Date: 15 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 23 | 0 | 203 | 0 | 0 | 0 | 0 | 274 | 15 | 181 | 254 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 23 | 0 | 203 | 0 | 0 | 0 | 0 | 274 | 15 | 181 | 254 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 23 | 0 | 203 | 0 | 0 | 0 | 0 | 274 | 15 | 181 | 254 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 23 | 0 | 203 | 0 | 0 | 0 | 0 | 274 | 15 | 181 | 254 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 23 | 0 | 203 | 0 | 0 | 0 | 0 | 274 | 15 | 181 | 254 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | | 6.2 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | |
| FollowUpTim: | 3.5 | xxxx | | 3.3 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | |
| | 4.1 | xxxx | xxxxx | | | | | | | | | |
| | 2.2 | xxxx | xxxxx | | | | | | | | | |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 898 | xxxx | | 282 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | |
| Potent Cap.: | 313 | xxxx | | 762 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | |
| Move Cap.: | 275 | xxxx | | 762 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | |
| | 289 | xxxx | xxxxx | | | | | | | | | |
| | 1284 | xxxx | xxxxx | | | | | | | | | |
| | 1284 | xxxx | xxxxx | | | | | | | | | |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 19.3 | xxxx | | 11.4 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | |
| LOS by Move: | C | * | | B | * | * | * | * | * | * | | |
| | 8.3 | xxxx | xxxxx | | | | | | | | | |
| | A | * | * | | | | | | | | | |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.3 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 12.2 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |

Marine Science Center

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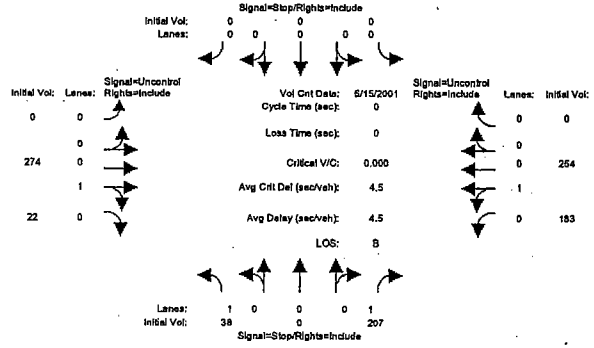
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 PM

Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 15 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 23 | 0 | 203 | 0 | 0 | 0 | 0 | 274 | 15 | 181 | 254 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 23 | 0 | 203 | 0 | 0 | 0 | 0 | 274 | 15 | 181 | 254 | 0 |
| Added Vol: | 15 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 7 | 2 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 38 | 0 | 207 | 0 | 0 | 0 | 0 | 274 | 22 | 183 | 254 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 38 | 0 | 207 | 0 | 0 | 0 | 0 | 274 | 22 | 183 | 254 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 38 | 0 | 207 | 0 | 0 | 0 | 0 | 274 | 22 | 183 | 254 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 905 | xxxx | 285 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 296 | xxxx | xxxxx |
| Potent Cap.: | 309 | xxxx | 759 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1277 | xxxx | xxxxx |
| Move Cap.: | 272 | xxxx | 759 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1277 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 20.4 | xxxx | 11.5 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.3 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.3 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 12.9 | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | | B | | * | | | * | | | * | | |





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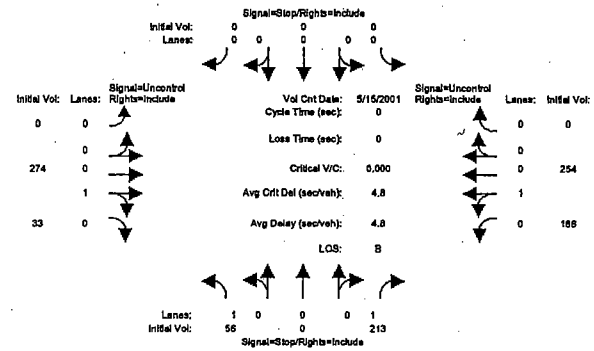
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 15 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 23 | 0 | 203 | 0 | 0 | 0 | 0 | 274 | 15 | 181 | 254 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 23 | 0 | 203 | 0 | 0 | 0 | 0 | 274 | 15 | 181 | 254 | 0 |
| Added Vol: | 33 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 18 | 5 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 56 | 0 | 213 | 0 | 0 | 0 | 0 | 274 | 33 | 186 | 254 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 56 | 0 | 213 | 0 | 0 | 0 | 0 | 274 | 33 | 186 | 254 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 56 | 0 | 213 | 0 | 0 | 0 | 0 | 274 | 33 | 186 | 254 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 916 | xxxx | 291 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 307 | xxxx | xxxxx |
| Potent Cap.: | 305 | xxxx | 753 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1265 | xxxx | xxxxx |
| Move Cap.: | 266 | xxxx | 753 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1265 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 22.1 | xxxx | 11.7 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.3 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.3 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 13.8 | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | | B | | * | | | * | | | * | | |

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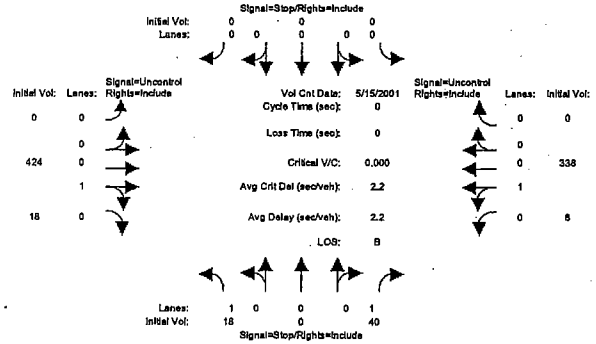
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 15 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 18 | 0 | 40 | 0 | 0 | 0 | 0 | 424 | 18 | 8 | 338 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 18 | 0 | 40 | 0 | 0 | 0 | 0 | 424 | 18 | 8 | 338 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 18 | 0 | 40 | 0 | 0 | 0 | 0 | 424 | 18 | 8 | 338 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 18 | 0 | 40 | 0 | 0 | 0 | 0 | 424 | 18 | 8 | 338 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 18 | 0 | 40 | 0 | 0 | 0 | 0 | 424 | 18 | 8 | 338 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 787 | xxxx | 433 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 442 | xxxx | xxxxx |
| Potent Cap.: | 363 | xxxx | 627 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1129 | xxxx | xxxxx |
| Move Cap.: | 361 | xxxx | 627 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1129 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 15.5 | xxxx | 11.1 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.2 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.2 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 12.5 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |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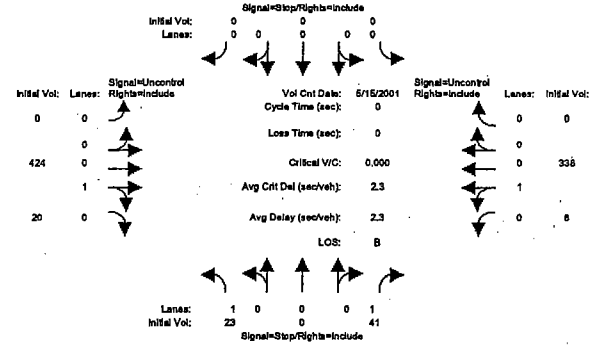
November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 PM

Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 15 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 18 | 0 | 40 | 0 | 0 | 0 | 0 | 424 | 18 | 8 | 338 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 18 | 0 | 40 | 0 | 0 | 0 | 0 | 424 | 18 | 8 | 338 | 0 |
| Added Vol: | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 23 | 0 | 41 | 0 | 0 | 0 | 0 | 424 | 20 | 8 | 338 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 23 | 0 | 41 | 0 | 0 | 0 | 0 | 424 | 20 | 8 | 338 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 23 | 0 | 41 | 0 | 0 | 0 | 0 | 424 | 20 | 8 | 338 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 788 | xxxx | 434 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 444 | xxxx | xxxxx |
| Potent Cap.: | 363 | xxxx | 626 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1127 | xxxx | xxxxx |
| Move Cap.: | 361 | xxxx | 626 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1127 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 15.7 | xxxx | 11.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.2 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.2 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 12.8 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |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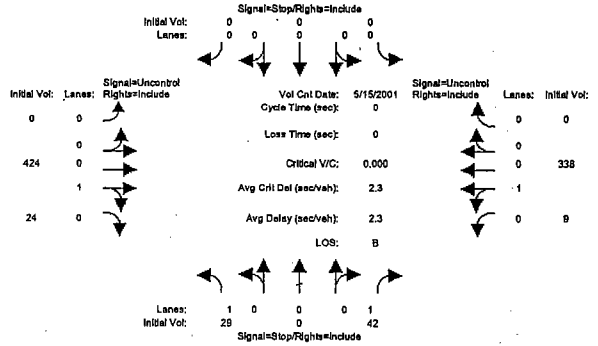
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + PH 1 + Ph 2 PM

## Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 15 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 18 | 0 | 40 | 0 | 0 | 0 | 0 | 424 | 18 | 8 | 338 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 18 | 0 | 40 | 0 | 0 | 0 | 0 | 424 | 18 | 8 | 338 | 0 |
| Added Vol: | 11 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 29 | 0 | 42 | 0 | 0 | 0 | 0 | 424 | 24 | 9 | 338 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 29 | 0 | 42 | 0 | 0 | 0 | 0 | 424 | 24 | 9 | 338 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 29 | 0 | 42 | 0 | 0 | 0 | 0 | 424 | 24 | 9 | 338 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 792 | xxxx | 436 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 448 | xxxx | xxxxx |
| Potent Cap.: | 361 | xxxx | 625 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1123 | xxxx | xxxxx |
| Move Cap.: | 359 | xxxx | 625 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1123 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 15.9 | xxxx | 11.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.2 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.2 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 13.1 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |



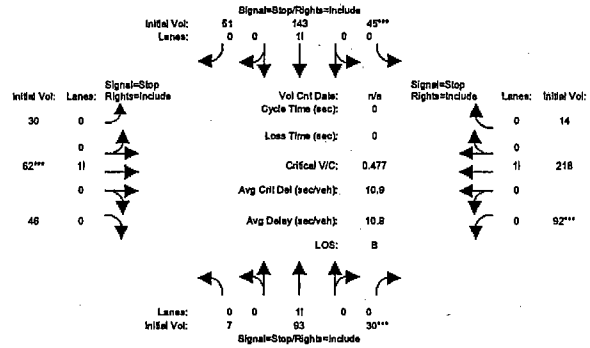


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing PM

## Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]



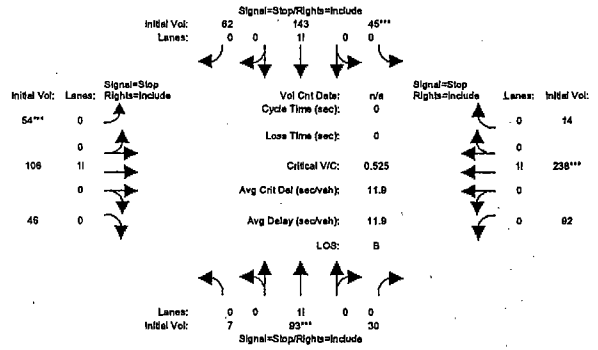

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 7 | 93 | 30 | 45 | 143 | 51 | 30 | 62 | 46 | 92 | 218 | 14 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 7 | 93 | 30 | 45 | 143 | 51 | 30 | 62 | 46 | 92 | 218 | 14 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 7 | 93 | 30 | 45 | 143 | 51 | 30 | 62 | 46 | 92 | 218 | 14 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 7 | 93 | 30 | 45 | 143 | 51 | 30 | 62 | 46 | 92 | 218 | 14 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 7 | 93 | 30 | 45 | 143 | 51 | 30 | 62 | 46 | 92 | 218 | 14 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 7 | 93 | 30 | 45 | 143 | 51 | 30 | 62 | 46 | 92 | 218 | 14 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.05 | 0.72 | 0.23 | 0.19 | 0.60 | 0.21 | 0.22 | 0.45 | 0.33 | 0.28 | 0.68 | 0.04 |
| Final Sat.: | 34 | 446 | 144 | 123 | 392 | 140 | 140 | 290 | 215 | 193 | 457 | 29 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.21 | 0.21 | 0.21 | 0.37 | 0.37 | 0.37 | 0.21 | 0.21 | 0.21 | 0.48 | 0.48 | 0.48 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Delay/Veh: | 9.5 | 9.5 | 9.5 | 10.8 | 10.8 | 10.8 | 9.4 | 9.4 | 9.4 | 12.2 | 12.2 | 12.2 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.5 | 9.5 | 9.5 | 10.8 | 10.8 | 10.8 | 9.4 | 9.4 | 9.4 | 12.2 | 12.2 | 12.2 |
| LOS by Move: | A | A | A | B | B | B | A | A | A | B | B | B |
| ApproachDel: | | 9.5 | | | 10.8 | | | 9.4 | | | 12.2 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 9.5 | | | 10.8 | | | 9.4 | | | 12.2 | |
| LOS by Appr: | | A | | | B | | | A | | | B | |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 PM

## Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 7 | 93 | 30 | 45 | 143 | 51 | 30 | 62 | 46 | 92 | 218 | 14 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 7 | 93 | 30 | 45 | 143 | 51 | 30 | 62 | 46 | 92 | 218 | 14 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 11 | 24 | 44 | 0 | 0 | 20 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 7 | 93 | 30 | 45 | 143 | 62 | 54 | 106 | 46 | 92 | 238 | 14 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 7 | 93 | 30 | 45 | 143 | 62 | 54 | 106 | 46 | 92 | 238 | 14 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 7 | 93 | 30 | 45 | 143 | 62 | 54 | 106 | 46 | 92 | 238 | 14 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 7 | 93 | 30 | 45 | 143 | 62 | 54 | 106 | 46 | 92 | 238 | 14 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.05 | 0.72 | 0.23 | 0.18 | 0.57 | 0.25 | 0.26 | 0.52 | 0.22 | 0.27 | 0.69 | 0.04 |
| Final Sat.: | 31 | 413 | 133 | 111 | 354 | 154 | 164 | 322 | 140 | 175 | 454 | 27 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.23 | 0.23 | 0.23 | 0.40 | 0.40 | 0.40 | 0.33 | 0.33 | 0.33 | 0.52 | 0.52 | 0.52 |
| Crit Moves: | | **** | | **** | | | **** | | | | **** | |
| Delay/Veh: | 10.0 | 10.0 | 10.0 | 11.6 | 11.6 | 11.6 | 10.7 | 10.7 | 10.7 | 13.4 | 13.4 | 13.4 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.0 | 10.0 | 10.0 | 11.6 | 11.6 | 11.6 | 10.7 | 10.7 | 10.7 | 13.4 | 13.4 | 13.4 |
| LOS by Move: | B | B | B | B | B | B | B | B | B | B | B | B |
| ApproachDel: | | 10.0 | | | 11.6 | | | 10.7 | | | 13.4 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.0 | | | 11.6 | | | 10.7 | | | 13.4 | |
| LOS by Appr: | | B | | | B | | | B | | | B | |





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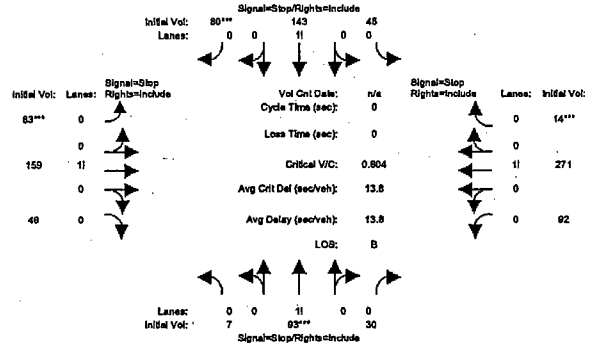
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 7 | 93 | 30 | 45 | 143 | 51 | 30 | 62 | 46 | 92 | 218 | 14 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 7 | 93 | 30 | 45 | 143 | 51 | 30 | 62 | 46 | 92 | 218 | 14 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 29 | 53 | 97 | 0 | 0 | 53 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 7 | 93 | 30 | 45 | 143 | 80 | 83 | 159 | 46 | 92 | 271 | 14 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 7 | 93 | 30 | 45 | 143 | 80 | 83 | 159 | 46 | 92 | 271 | 14 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 7 | 93 | 30 | 45 | 143 | 80 | 83 | 159 | 46 | 92 | 271 | 14 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 7 | 93 | 30 | 45 | 143 | 80 | 83 | 159 | 46 | 92 | 271 | 14 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.05 | 0.72 | 0.23 | 0.17 | 0.53 | 0.30 | 0.29 | 0.55 | 0.16 | 0.24 | 0.72 | 0.04 |
| Final Sat.: | 28 | 372 | 120 | 97 | 309 | 173 | 174 | 334 | 96 | 152 | 449 | 23 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.25 | 0.25 | 0.25 | 0.46 | 0.46 | 0.46 | 0.48 | 0.48 | 0.48 | 0.60 | 0.60 | 0.60 |
| Crit Moves: | | **** | | | | **** | **** | | | | | **** |
| Delay/Veh: | 10.7 | 10.7 | 10.7 | 13.0 | 13.0 | 13.0 | 13.1 | 13.1 | 13.1 | 15.9 | 15.9 | 15.9 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.7 | 10.7 | 10.7 | 13.0 | 13.0 | 13.0 | 13.1 | 13.1 | 13.1 | 15.9 | 15.9 | 15.9 |
| LOS by Move: | B | B | B | B | B | B | B | B | B | C | C | C |
| ApproachDel: | | 10.7 | | | 13.0 | | | 13.1 | | | 15.9 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.7 | | | 13.0 | | | 13.1 | | | 15.9 | |
| LOS by Appr: | | B | | | B | | | B | | | C | |

Marine Science Center

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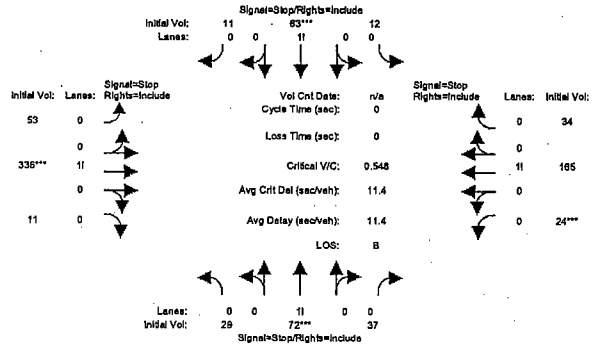
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing PM

Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 336 | 11 | 24 | 165 | 34 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 336 | 11 | 24 | 165 | 34 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 336 | 11 | 24 | 165 | 34 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 336 | 11 | 24 | 165 | 34 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 336 | 11 | 24 | 165 | 34 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 336 | 11 | 24 | 165 | 34 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.21 | 0.52 | 0.27 | 0.14 | 0.73 | 0.13 | 0.13 | 0.84 | 0.03 | 0.11 | 0.74 | 0.15 |
| Final Sat.: | 128 | 318 | 163 | 81 | 427 | 74 | 97 | 614 | 20 | 75 | 516 | 106 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.23 | 0.23 | 0.23 | 0.15 | 0.15 | 0.15 | 0.55 | 0.55 | 0.55 | 0.32 | 0.32 | 0.32 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Delay/Veh: | 9.7 | 9.7 | 9.7 | 9.4 | 9.4 | 9.4 | 13.1 | 13.1 | 13.1 | 10.1 | 10.1 | 10.1 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.7 | 9.7 | 9.7 | 9.4 | 9.4 | 9.4 | 13.1 | 13.1 | 13.1 | 10.1 | 10.1 | 10.1 |
| LOS by Move: | A | A | A | A | A | A | B | B | B | B | B | B |
| ApproachDel: | | 9.7 | | | 9.4 | | | 13.1 | | | 10.1 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 9.7 | | | 9.4 | | | 13.1 | | | 10.1 | |
| LOS by Appr: | | A | | | A | | | B | | | B | |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Marine Science Center

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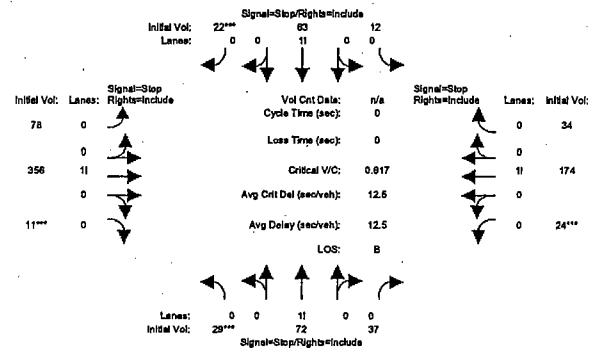
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 PM

Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 336 | 11 | 24 | 165 | 34 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 336 | 11 | 24 | 165 | 34 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 11 | 25 | 20 | 0 | 0 | 9 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 29 | 72 | 37 | 12 | 63 | 22 | 78 | 356 | 11 | 24 | 174 | 34 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 29 | 72 | 37 | 12 | 63 | 22 | 78 | 356 | 11 | 24 | 174 | 34 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 29 | 72 | 37 | 12 | 63 | 22 | 78 | 356 | 11 | 24 | 174 | 34 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 29 | 72 | 37 | 12 | 63 | 22 | 78 | 356 | 11 | 24 | 174 | 34 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.21 | 0.52 | 0.27 | 0.12 | 0.65 | 0.23 | 0.18 | 0.80 | 0.02 | 0.10 | 0.75 | 0.15 |
| Final Sat.: | 123 | 306 | 157 | 70 | 369 | 129 | 126 | 577 | 18 | 70 | 510 | 100 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.24 | 0.24 | 0.24 | 0.17 | 0.17 | 0.17 | 0.62 | 0.62 | 0.62 | 0.34 | 0.34 | 0.34 |
| Crit Moves: | **** | | | | | **** | | | **** | **** | | |
| Delay/Veh: | 10.0 | 10.0 | 10.0 | 9.6 | 9.6 | 9.6 | 15.0 | 15.0 | 15.0 | 10.4 | 10.4 | 10.4 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.0 | 10.0 | 10.0 | 9.6 | 9.6 | 9.6 | 15.0 | 15.0 | 15.0 | 10.4 | 10.4 | 10.4 |
| LOS by Move: | B | B | B | A | A | A | B | B | B | B | B | B |
| ApproachDel: | | 10.0 | | | 9.6 | | | 15.0 | | | 10.4 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.0 | | | 9.6 | | | 15.0 | | | 10.4 | |
| LOS by Appr: | | B | | | A | | | B | | | B | |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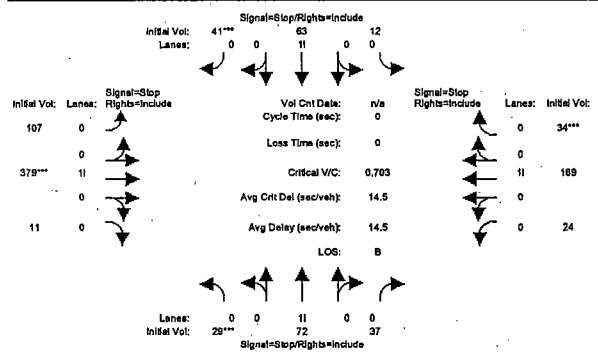
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 336 | 11 | 24 | 165 | 34 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 336 | 11 | 24 | 165 | 34 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 30 | 54 | 43 | 0 | 0 | 24 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 29 | 72 | 37 | 12 | 63 | 41 | 107 | 379 | 11 | 24 | 189 | 34 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 29 | 72 | 37 | 12 | 63 | 41 | 107 | 379 | 11 | 24 | 189 | 34 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 29 | 72 | 37 | 12 | 63 | 41 | 107 | 379 | 11 | 24 | 189 | 34 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 29 | 72 | 37 | 12 | 63 | 41 | 107 | 379 | 11 | 24 | 189 | 34 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.21 | 0.52 | 0.27 | 0.10 | 0.55 | 0.35 | 0.22 | 0.76 | 0.02 | 0.10 | 0.76 | 0.14 |
| Final Sat.: | 117 | 290 | 149 | 57 | 300 | 195 | 152 | 539 | 16 | 64 | 501 | 90 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.25 | 0.25 | 0.25 | 0.21 | 0.21 | 0.21 | 0.70 | 0.70 | 0.70 | 0.38 | 0.38 | 0.38 |
| Crit Moves: | **** | | | | | **** | | **** | | | | **** |
| Delay/Veh: | 10.4 | 10.4 | 10.4 | 10.1 | 10.1 | 10.1 | 18.3 | 18.3 | 18.3 | 11.1 | 11.1 | 11.1 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.4 | 10.4 | 10.4 | 10.1 | 10.1 | 10.1 | 18.3 | 18.3 | 18.3 | 11.1 | 11.1 | 11.1 |
| LOS by Move: | B | B | B | B | B | B | C | C | C | B | B | B |
| ApproachDel: | | 10.4 | | | 10.1 | | | 18.3 | | | 11.1 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.4 | | | 10.1 | | | 18.3 | | | 11.1 | |
| LOS by Appr: | | B | | | B | | | C | | | B | |



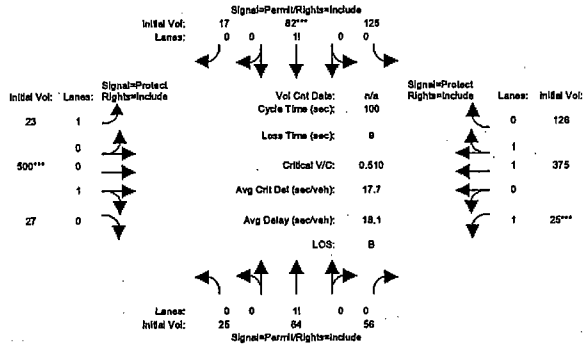


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

## Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]



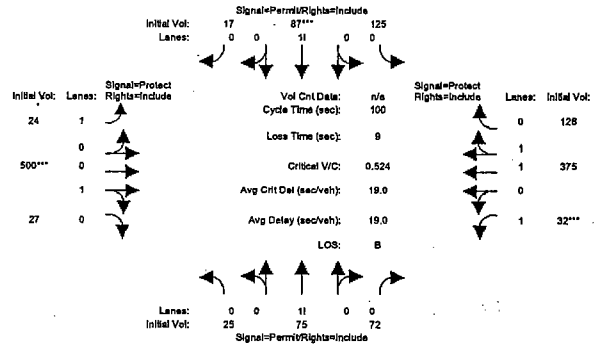

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 25 | 64 | 56 | 125 | 82 | 17 | 23 | 500 | 27 | 25 | 375 | 126 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 25 | 64 | 56 | 125 | 82 | 17 | 23 | 500 | 27 | 25 | 375 | 126 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 25 | 64 | 56 | 125 | 82 | 17 | 23 | 500 | 27 | 25 | 375 | 126 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 25 | 64 | 56 | 125 | 82 | 17 | 23 | 500 | 27 | 25 | 375 | 126 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 25 | 64 | 56 | 125 | 82 | 17 | 23 | 500 | 27 | 25 | 375 | 126 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 25 | 64 | 56 | 125 | 82 | 17 | 23 | 500 | 27 | 25 | 375 | 126 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.86 | 0.86 | 0.86 | 0.72 | 0.72 | 0.72 | 0.93 | 0.97 | 0.97 | 0.93 | 0.90 | 0.90 |
| Lanes: | 0.17 | 0.44 | 0.39 | 0.56 | 0.37 | 0.07 | 1.00 | 0.95 | 0.05 | 1.00 | 1.50 | 0.50 |
| Final Sat.: | 283 | 725 | 635 | 761 | 499 | 104 | 1769 | 1752 | 95 | 1769 | 2547 | 856 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.09 | 0.09 | 0.09 | 0.16 | 0.16 | 0.16 | 0.01 | 0.29 | 0.29 | 0.01 | 0.15 | 0.15 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.05 | 0.56 | 0.56 | 0.03 | 0.54 | 0.54 |
| Volume/Cap: | 0.27 | 0.27 | 0.27 | 0.51 | 0.51 | 0.51 | 0.27 | 0.51 | 0.51 | 0.51 | 0.27 | 0.27 |
| Delay/Veh: | 25.5 | 25.5 | 25.5 | 28.5 | 28.5 | 28.5 | 47.7 | 14.0 | 14.0 | 56.6 | 12.5 | 12.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 25.5 | 25.5 | 25.5 | 28.5 | 28.5 | 28.5 | 47.7 | 14.0 | 14.0 | 56.6 | 12.5 | 12.5 |
| DesignQueue: | 1 | 2 | 2 | 5 | 3 | 1 | 1 | 13 | 1 | 1 | 10 | 3 |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 PM

Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 25 | 64 | 56 | 125 | 82 | 17 | 23 | 500 | 27 | 25 | 375 | 126 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 25 | 64 | 56 | 125 | 82 | 17 | 23 | 500 | 27 | 25 | 375 | 126 |
| Added Vol: | 0 | 11 | 16 | 0 | 5 | 0 | 1 | 0 | 0 | 7 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 25 | 75 | 72 | 125 | 87 | 17 | 24 | 500 | 27 | 32 | 375 | 126 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 25 | 75 | 72 | 125 | 87 | 17 | 24 | 500 | 27 | 32 | 375 | 126 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 25 | 75 | 72 | 125 | 87 | 17 | 24 | 500 | 27 | 32 | 375 | 126 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 25 | 75 | 72 | 125 | 87 | 17 | 24 | 500 | 27 | 32 | 375 | 126 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.87 | 0.87 | 0.87 | 0.70 | 0.70 | 0.70 | 0.93 | 0.97 | 0.97 | 0.93 | 0.90 | 0.90 |
| Lanes: | 0.14 | 0.44 | 0.42 | 0.55 | 0.38 | 0.07 | 1.00 | 0.95 | 0.05 | 1.00 | 1.50 | 0.50 |
| Final Sat.: | 240 | 720 | 691 | 722 | 503 | 98 | 1769 | 1752 | 95 | 1769 | 2547 | 856 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.10 | 0.10 | 0.17 | 0.17 | 0.17 | 0.01 | 0.29 | 0.29 | 0.02 | 0.15 | 0.15 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.05 | 0.54 | 0.54 | 0.03 | 0.53 | 0.53 |
| Volume/Cap: | 0.32 | 0.32 | 0.32 | 0.52 | 0.52 | 0.52 | 0.28 | 0.52 | 0.52 | 0.52 | 0.28 | 0.28 |
| Delay/Veh: | 25.4 | 25.4 | 25.4 | 28.3 | 28.3 | 28.3 | 47.6 | 15.0 | 15.0 | 55.5 | 13.0 | 13.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 25.4 | 25.4 | 25.4 | 28.3 | 28.3 | 28.3 | 47.6 | 15.0 | 15.0 | 55.5 | 13.0 | 13.0 |
| DesignQueue: | 1 | 3 | 3 | 5 | 3 | 1 | 1 | 14 | 1 | 2 | 10 | 3 |



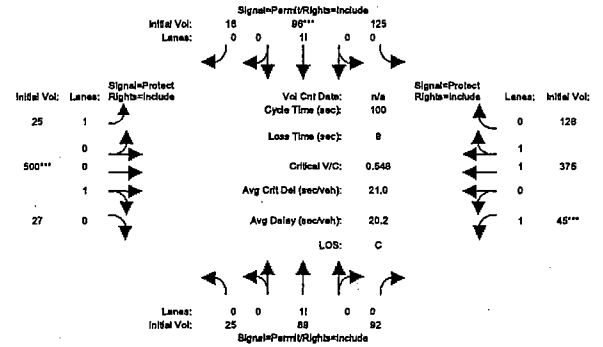


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 25 | 64 | 56 | 125 | 82 | 17 | 23 | 500 | 27 | 25 | 375 | 126 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 25 | 64 | 56 | 125 | 82 | 17 | 23 | 500 | 27 | 25 | 375 | 126 |
| Added Vol: | 0 | 25 | 36 | 0 | 14 | 1 | 2 | 0 | 0 | 20 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 25 | 89 | 92 | 125 | 96 | 18 | 25 | 500 | 27 | 45 | 375 | 126 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 25 | 89 | 92 | 125 | 96 | 18 | 25 | 500 | 27 | 45 | 375 | 126 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 25 | 89 | 92 | 125 | 96 | 18 | 25 | 500 | 27 | 45 | 375 | 126 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 25 | 89 | 92 | 125 | 96 | 18 | 25 | 500 | 27 | 45 | 375 | 126 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.87 | 0.87 | 0.87 | 0.68 | 0.68 | 0.68 | 0.93 | 0.97 | 0.97 | 0.93 | 0.90 | 0.90 |
| Lanes: | 0.12 | 0.43 | 0.45 | 0.52 | 0.40 | 0.08 | 1.00 | 0.95 | 0.05 | 1.00 | 1.50 | 0.50 |
| Final Sat.: | 202 | 718 | 742 | 671 | 515 | 97 | 1769 | 1752 | 95 | 1769 | 2547 | 856 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.12 | 0.12 | 0.12 | 0.19 | 0.19 | 0.19 | 0.01 | 0.29 | 0.29 | 0.03 | 0.15 | 0.15 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.05 | 0.52 | 0.52 | 0.05 | 0.52 | 0.52 |
| Volume/Cap: | 0.36 | 0.36 | 0.36 | 0.55 | 0.55 | 0.55 | 0.28 | 0.55 | 0.55 | 0.55 | 0.28 | 0.28 |
| Delay/Veh: | 25.2 | 25.2 | 25.2 | 28.1 | 28.1 | 28.1 | 47.6 | 16.6 | 16.6 | 54.1 | 13.6 | 13.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 25.2 | 25.2 | 25.2 | 28.1 | 28.1 | 28.1 | 47.6 | 16.6 | 16.6 | 54.1 | 13.6 | 13.6 |
| DesignQueue: | 1 | 3 | 3 | 5 | 4 | 1 | 1 | 14 | 1 | 2 | 10 | 3 |

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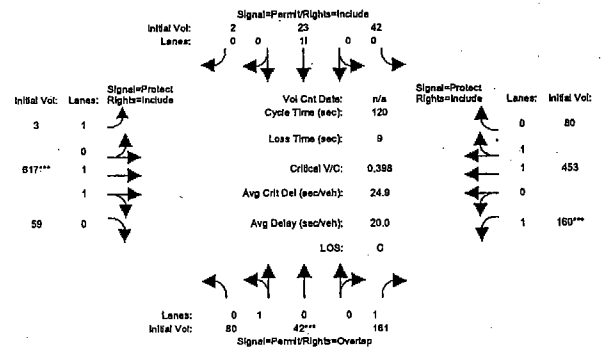
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

## Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 80 | 42 | 181 | 42 | 23 | 2 | 3 | 617 | 59 | 160 | 453 | 80 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 80 | 42 | 181 | 42 | 23 | 2 | 3 | 617 | 59 | 160 | 453 | 80 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 80 | 42 | 181 | 42 | 23 | 2 | 3 | 617 | 59 | 160 | 453 | 80 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 80 | 42 | 181 | 42 | 23 | 2 | 3 | 617 | 59 | 160 | 453 | 80 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 80 | 42 | 181 | 42 | 23 | 2 | 3 | 617 | 59 | 160 | 453 | 80 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 80 | 42 | 181 | 42 | 23 | 2 | 3 | 617 | 59 | 160 | 453 | 80 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.76 | 0.76 | 0.83 | 0.77 | 0.77 | 0.77 | 0.93 | 0.92 | 0.92 | 0.93 | 0.91 | 0.91 |
| Lanes: | 0.66 | 0.34 | 1.00 | 0.63 | 0.34 | 0.03 | 1.00 | 1.83 | 0.17 | 1.00 | 1.70 | 0.30 |
| Final Sat.: | 947 | 497 | 1583 | 917 | 502 | 44 | 1769 | 3187 | 305 | 1769 | 2941 | 519 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.08 | 0.11 | 0.05 | 0.05 | 0.05 | 0.00 | 0.19 | 0.19 | 0.09 | 0.15 | 0.15 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.21 | 0.21 | 0.44 | 0.21 | 0.21 | 0.21 | 0.01 | 0.49 | 0.49 | 0.23 | 0.71 | 0.71 |
| Volume/Cap: | 0.40 | 0.40 | 0.26 | 0.22 | 0.22 | 0.22 | 0.22 | 0.40 | 0.40 | 0.40 | 0.22 | 0.22 |
| Delay/Veh: | 41.6 | 41.6 | 21.5 | 39.4 | 39.4 | 39.4 | 67.1 | 19.8 | 19.8 | 40.1 | 6.2 | 6.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 41.6 | 41.6 | 21.5 | 39.4 | 39.4 | 39.4 | 67.1 | 19.8 | 19.8 | 40.1 | 6.2 | 6.2 |
| DesignQueue: | 4 | 2 | 7 | 2 | 1 | 0 | 0 | 22 | 2 | 8 | 9 | 2 |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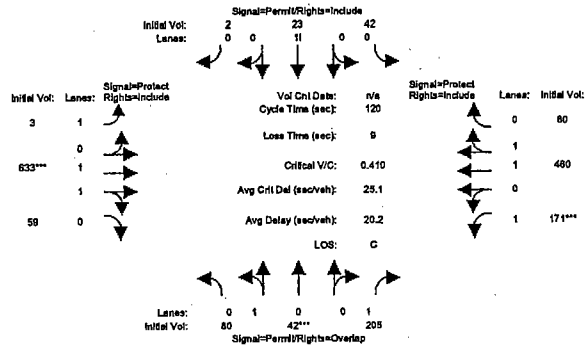
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 PM

## Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 80 | 42 | 181 | 42 | 23 | 2 | 3 | 617 | 59 | 160 | 453 | 80 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 80 | 42 | 181 | 42 | 23 | 2 | 3 | 617 | 59 | 160 | 453 | 80 |
| Added Vol: | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 16 | 0 | 11 | 7 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 80 | 42 | 205 | 42 | 23 | 2 | 3 | 633 | 59 | 171 | 460 | 80 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 80 | 42 | 205 | 42 | 23 | 2 | 3 | 633 | 59 | 171 | 460 | 80 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 80 | 42 | 205 | 42 | 23 | 2 | 3 | 633 | 59 | 171 | 460 | 80 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 80 | 42 | 205 | 42 | 23 | 2 | 3 | 633 | 59 | 171 | 460 | 80 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.76 | 0.76 | 0.83 | 0.77 | 0.77 | 0.77 | 0.93 | 0.92 | 0.92 | 0.93 | 0.91 | 0.91 |
| Lanes: | 0.66 | 0.34 | 1.00 | 0.63 | 0.34 | 0.03 | 1.00 | 1.83 | 0.17 | 1.00 | 1.70 | 0.30 |
| Final Sat.: | 946 | 497 | 1583 | 916 | 502 | 44 | 1769 | 3194 | 298 | 1769 | 2947 | 513 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.08 | 0.13 | 0.05 | 0.05 | 0.05 | 0.00 | 0.20 | 0.20 | 0.10 | 0.16 | 0.16 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.21 | 0.21 | 0.44 | 0.21 | 0.21 | 0.21 | 0.01 | 0.48 | 0.48 | 0.24 | 0.71 | 0.71 |
| Volume/Cap: | 0.41 | 0.41 | 0.29 | 0.22 | 0.22 | 0.22 | 0.22 | 0.41 | 0.41 | 0.41 | 0.22 | 0.22 |
| Delay/Veh: | 42.2 | 42.2 | 21.7 | 40.0 | 40.0 | 40.0 | 67.1 | 20.2 | 20.2 | 39.5 | 6.0 | 6.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 42.2 | 42.2 | 21.7 | 40.0 | 40.0 | 40.0 | 67.1 | 20.2 | 20.2 | 39.5 | 6.0 | 6.0 |
| DesignQueue: | 4 | 2 | 8 | 2 | 1 | 0 | 0 | 23 | 2 | 9 | 9 | 2 |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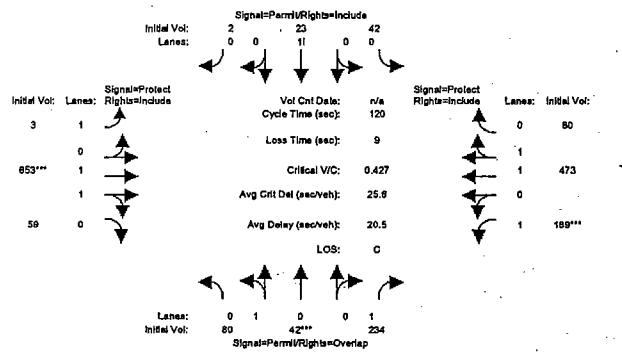
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 80 | 42 | 181 | 42 | 23 | 2 | 3 | 617 | 59 | 160 | 453 | 80 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 80 | 42 | 181 | 42 | 23 | 2 | 3 | 617 | 59 | 160 | 453 | 80 |
| Added Vol: | 0 | 0 | 53 | 0 | 0 | 0 | 0 | 36 | 0 | 29 | 20 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 80 | 42 | 234 | 42 | 23 | 2 | 3 | 653 | 59 | 189 | 473 | 80 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 80 | 42 | 234 | 42 | 23 | 2 | 3 | 653 | 59 | 189 | 473 | 80 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 80 | 42 | 234 | 42 | 23 | 2 | 3 | 653 | 59 | 189 | 473 | 80 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 80 | 42 | 234 | 42 | 23 | 2 | 3 | 653 | 59 | 189 | 473 | 80 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.76 | 0.76 | 0.83 | 0.77 | 0.77 | 0.77 | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 |
| Lanes: | 0.66 | 0.34 | 1.00 | 0.63 | 0.34 | 0.03 | 1.00 | 1.83 | 0.17 | 1.00 | 1.71 | 0.29 |
| Final Sat.: | 944 | 496 | 1583 | 914 | 500 | 44 | 1769 | 3206 | 290 | 1769 | 2959 | 501 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.08 | 0.15 | 0.05 | 0.05 | 0.05 | 0.00 | 0.20 | 0.20 | 0.11 | 0.16 | 0.16 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.20 | 0.20 | 0.45 | 0.20 | 0.20 | 0.20 | 0.01 | 0.48 | 0.48 | 0.25 | 0.72 | 0.72 |
| Volume/Cap: | 0.43 | 0.43 | 0.33 | 0.23 | 0.23 | 0.23 | 0.22 | 0.43 | 0.43 | 0.43 | 0.22 | 0.22 |
| Delay/Veh: | 43.2 | 43.2 | 21.7 | 40.8 | 40.8 | 40.8 | 67.4 | 20.8 | 20.8 | 38.5 | 5.7 | 5.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 43.2 | 43.2 | 21.7 | 40.8 | 40.8 | 40.8 | 67.4 | 20.8 | 20.8 | 38.5 | 5.7 | 5.7 |
| DesignQueue: | 4 | 2 | 9 | 2 | 1 | 0 | 0 | 24 | 2 | 10 | 9 | 2 |





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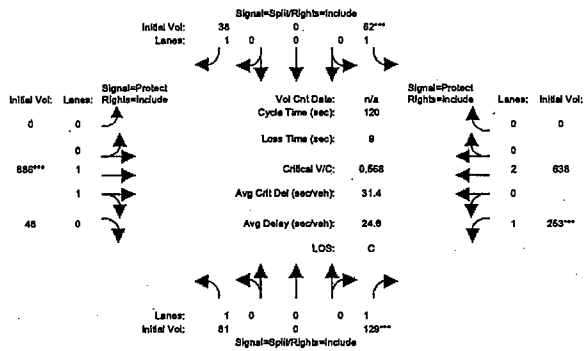
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

## Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 886 | 48 | 253 | 638 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 886 | 48 | 253 | 638 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 886 | 48 | 253 | 638 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 886 | 48 | 253 | 638 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 886 | 48 | 253 | 638 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 886 | 48 | 253 | 638 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.92 | 0.92 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.90 | 0.10 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3329 | 180 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.00 | 0.08 | 0.04 | 0.00 | 0.02 | 0.00 | 0.27 | 0.27 | 0.14 | 0.18 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.14 | 0.00 | 0.14 | 0.06 | 0.00 | 0.06 | 0.00 | 0.47 | 0.47 | 0.25 | 0.72 | 0.00 |
| Volume/Cap: | 0.32 | 0.00 | 0.57 | 0.57 | 0.00 | 0.39 | 0.00 | 0.57 | 0.57 | 0.57 | 0.25 | 0.00 |
| Delay/Veh: | 46.9 | 0.0 | 51.3 | 61.7 | 0.0 | 56.7 | 0.0 | 23.6 | 23.6 | 40.9 | 5.8 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 46.9 | 0.0 | 51.3 | 61.7 | 0.0 | 56.7 | 0.0 | 23.6 | 23.6 | 40.9 | 5.8 | 0.0 |
| DesignQueue: | 5 | 0 | 8 | 4 | 0 | 2 | 0 | 34 | 2 | 13 | 12 | 0 |

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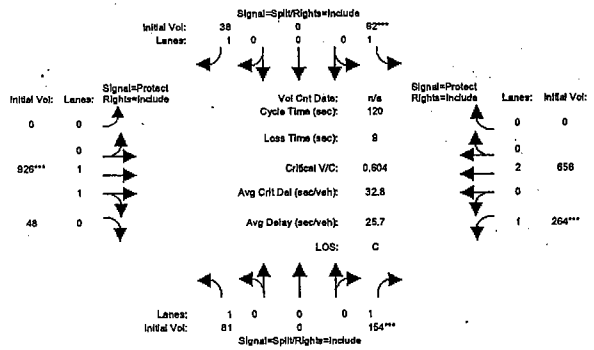
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 PM

## Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 886 | 48 | 253 | 638 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 886 | 48 | 253 | 638 | 0 |
| Added Vol: | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 40 | 0 | 11 | 18 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 81 | 0 | 154 | 62 | 0 | 38 | 0 | 926 | 48 | 264 | 656 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 81 | 0 | 154 | 62 | 0 | 38 | 0 | 926 | 48 | 264 | 656 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 81 | 0 | 154 | 62 | 0 | 38 | 0 | 926 | 48 | 264 | 656 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 81 | 0 | 154 | 62 | 0 | 38 | 0 | 926 | 48 | 264 | 656 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.92 | 0.92 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.90 | 0.10 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3340 | 173 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.00 | 0.10 | 0.04 | 0.00 | 0.02 | 0.00 | 0.28 | 0.28 | 0.15 | 0.19 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.16 | 0.00 | 0.16 | 0.06 | 0.00 | 0.06 | 0.00 | 0.46 | 0.46 | 0.25 | 0.71 | 0.00 |
| Volume/Cap: | 0.28 | 0.00 | 0.60 | 0.60 | 0.00 | 0.41 | 0.00 | 0.60 | 0.60 | 0.60 | 0.26 | 0.00 |
| Delay/Veh: | 44.8 | 0.0 | 50.9 | 65.0 | 0.0 | 57.6 | 0.0 | 25.0 | 25.0 | 42.4 | 6.4 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 44.8 | 0.0 | 50.9 | 65.0 | 0.0 | 57.6 | 0.0 | 25.0 | 25.0 | 42.4 | 6.4 | 0.0 |
| DesignQueue: | 5 | 0 | 9 | 4 | 0 | 2 | 0 | 36 | 2 | 14 | 13 | 0 |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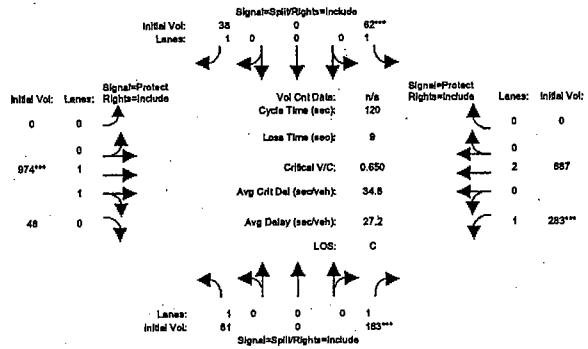
Ex + Ph 1 + Ph 2 PM

## Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 886 | 48 | 253 | 638 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 886 | 48 | 253 | 638 | 0 |
| Added Vol: | 0 | 0 | 54 | 0 | 0 | 0 | 0 | 88 | 0 | 30 | 49 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 81 | 0 | 183 | 62 | 0 | 38 | 0 | 974 | 48 | 283 | 687 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 81 | 0 | 183 | 62 | 0 | 38 | 0 | 974 | 48 | 283 | 687 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 81 | 0 | 183 | 62 | 0 | 38 | 0 | 974 | 48 | 283 | 687 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 81 | 0 | 183 | 62 | 0 | 38 | 0 | 974 | 48 | 283 | 687 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.92 | 0.92 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.91 | 0.09 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3348 | 165 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.00 | 0.12 | 0.04 | 0.00 | 0.02 | 0.00 | 0.29 | 0.29 | 0.16 | 0.19 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.18 | 0.00 | 0.18 | 0.05 | 0.00 | 0.05 | 0.00 | 0.45 | 0.45 | 0.25 | 0.69 | 0.00 |
| Volume/Cap: | 0.26 | 0.00 | 0.65 | 0.65 | 0.00 | 0.45 | 0.00 | 0.65 | 0.65 | 0.65 | 0.28 | 0.00 |
| Delay/Veh: | 42.9 | 0.0 | 51.2 | 70.4 | 0.0 | 58.7 | 0.0 | 26.8 | 26.8 | 44.1 | 7.1 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 42.9 | 0.0 | 51.2 | 70.4 | 0.0 | 58.7 | 0.0 | 26.8 | 26.8 | 44.1 | 7.1 | 0.0 |
| DesignQueue: | 4 | 0 | 10 | 4 | 0 | 2 | 0 | 39 | 2 | 15 | 15 | 0 |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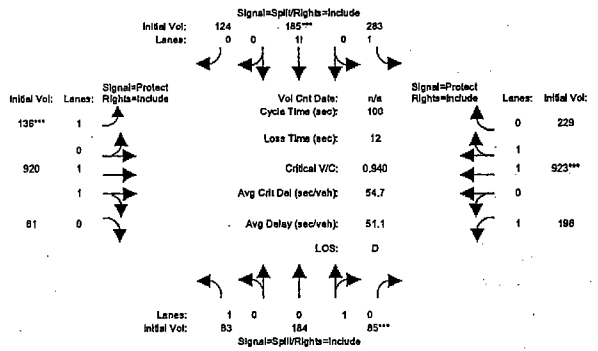
Existing PM

Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 83 | 184 | 85 | 283 | 185 | 124 | 136 | 920 | 81 | 196 | 923 | 229 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 83 | 184 | 85 | 283 | 185 | 124 | 136 | 920 | 81 | 196 | 923 | 229 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 83 | 184 | 85 | 283 | 185 | 124 | 136 | 920 | 81 | 196 | 923 | 229 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 83 | 184 | 85 | 283 | 185 | 124 | 136 | 920 | 81 | 196 | 923 | 229 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 83 | 184 | 85 | 283 | 185 | 124 | 136 | 920 | 81 | 196 | 923 | 229 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 83 | 184 | 85 | 283 | 185 | 124 | 136 | 920 | 81 | 196 | 923 | 229 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.90 | 0.90 |
| Lanes: | 1.00 | 0.68 | 0.32 | 1.31 | 0.41 | 0.28 | 1.00 | 1.84 | 0.16 | 1.00 | 1.60 | 0.40 |
| Final Sat.: | 1736 | 1191 | 550 | 2274 | 711 | 476 | 1769 | 3213 | 283 | 1769 | 2750 | 682 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.15 | 0.15 | 0.12 | 0.26 | 0.26 | 0.08 | 0.29 | 0.29 | 0.11 | 0.34 | 0.34 |
| Crit Moves: | | | **** | | **** | | **** | | | | **** | |
| Green/Cycle: | 0.16 | 0.16 | 0.16 | 0.28 | 0.28 | 0.28 | 0.08 | 0.32 | 0.32 | 0.12 | 0.36 | 0.36 |
| Volume/Cap: | 0.29 | 0.94 | 0.94 | 0.45 | 0.94 | 0.94 | 0.94 | 0.91 | 0.91 | 0.91 | 0.94 | 0.94 |
| Delay/Veh: | 37.2 | 78.7 | 78.7 | 30.1 | 57.6 | 57.6 | 102.5 | 43.3 | 43.3 | 79.6 | 44.9 | 44.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.2 | 78.7 | 78.7 | 30.1 | 57.6 | 57.6 | 102.5 | 43.3 | 43.3 | 79.6 | 44.9 | 44.9 |
| DesignQueue: | 4 | 9 | 4 | 12 | 8 | 5 | 7 | 38 | 3 | 10 | 36 | 9 |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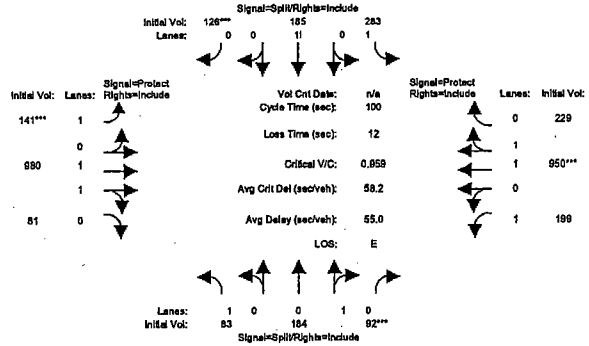
Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 83 | 184 | 85 | 283 | 185 | 124 | 136 | 920 | 81 | 196 | 923 | 229 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 83 | 184 | 85 | 283 | 185 | 124 | 136 | 920 | 81 | 196 | 923 | 229 |
| Added Vol: | 0 | 0 | 7 | 0 | 0 | 2 | 5 | 60 | 0 | 3 | 27 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 83 | 184 | 92 | 283 | 185 | 126 | 141 | 980 | 81 | 199 | 950 | 229 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 83 | 184 | 92 | 283 | 185 | 126 | 141 | 980 | 81 | 199 | 950 | 229 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 83 | 184 | 92 | 283 | 185 | 126 | 141 | 980 | 81 | 199 | 950 | 229 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 83 | 184 | 92 | 283 | 185 | 126 | 141 | 980 | 81 | 199 | 950 | 229 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.90 | 0.90 |
| Lanes: | 1.00 | 0.67 | 0.33 | 1.31 | 0.41 | 0.28 | 1.00 | 1.85 | 0.15 | 1.00 | 1.61 | 0.39 |
| Final Sat.: | 1736 | 1158 | 579 | 2269 | 707 | 481 | 1769 | 3232 | 267 | 1769 | 2768 | 667 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.16 | 0.16 | 0.12 | 0.26 | 0.26 | 0.08 | 0.30 | 0.30 | 0.11 | 0.34 | 0.34 |
| Crit Moves: | | | **** | | | **** | **** | | | | **** | |
| Green/Cycle: | 0.17 | 0.17 | 0.17 | 0.27 | 0.27 | 0.27 | 0.08 | 0.32 | 0.32 | 0.12 | 0.36 | 0.36 |
| Volume/Cap: | 0.29 | 0.96 | 0.96 | 0.46 | 0.96 | 0.96 | 0.96 | 0.94 | 0.94 | 0.94 | 0.96 | 0.96 |
| Delay/Veh: | 37.1 | 83.1 | 83.1 | 30.4 | 61.9 | 61.9 | 107.2 | 48.0 | 48.0 | 89.5 | 48.1 | 48.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.1 | 83.1 | 83.1 | 30.4 | 61.9 | 61.9 | 107.2 | 48.0 | 48.0 | 89.5 | 48.1 | 48.1 |
| DesignQueue: | 4 | 9 | 4 | 12 | 8 | 5 | 7 | 40 | 3 | 10 | 37 | 9 |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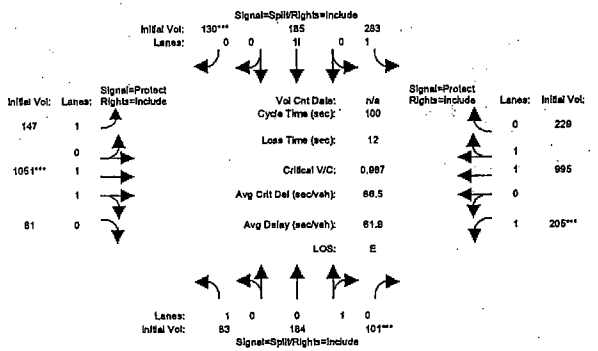
Ex + Ph 1 + Ph 2 PM

## Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 83 | 184 | 85 | 283 | 185 | 124 | 136 | 920 | 81 | 196 | 923 | 229 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 83 | 184 | 85 | 283 | 185 | 124 | 136 | 920 | 81 | 196 | 923 | 229 |
| Added Vol: | 0 | 0 | 16 | 0 | 0 | 6 | 11 | 131 | 0 | 9 | 72 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 83 | 184 | 101 | 283 | 185 | 130 | 147 | 1051 | 81 | 205 | 995 | 229 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 83 | 184 | 101 | 283 | 185 | 130 | 147 | 1051 | 81 | 205 | 995 | 229 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 83 | 184 | 101 | 283 | 185 | 130 | 147 | 1051 | 81 | 205 | 995 | 229 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 83 | 184 | 101 | 283 | 185 | 130 | 147 | 1051 | 81 | 205 | 995 | 229 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.90 | 0.90 |
| Lanes: | 1.00 | 0.65 | 0.35 | 1.31 | 0.41 | 0.28 | 1.00 | 1.86 | 0.14 | 1.00 | 1.63 | 0.37 |
| Final Sat.: | 1736 | 1118 | 613 | 2262 | 700 | 492 | 1769 | 3249 | 250 | 1769 | 2795 | 643 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.16 | 0.16 | 0.13 | 0.26 | 0.26 | 0.08 | 0.32 | 0.32 | 0.12 | 0.36 | 0.36 |
| Crit Moves: | | | **** | | | **** | | **** | | **** | | |
| Green/Cycle: | 0.17 | 0.17 | 0.17 | 0.27 | 0.27 | 0.27 | 0.08 | 0.33 | 0.33 | 0.12 | 0.36 | 0.36 |
| Volume/Cap: | 0.29 | 0.99 | 0.99 | 0.47 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Delay/Veh: | 37.0 | 90.7 | 90.7 | 30.9 | 69.5 | 69.5 | 115.0 | 56.7 | 56.7 | 102.5 | 53.8 | 53.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.0 | 90.7 | 90.7 | 30.9 | 69.5 | 69.5 | 115.0 | 56.7 | 56.7 | 102.5 | 53.8 | 53.8 |
| DesignQueue: | 4 | 9 | 5 | 12 | 8 | 6 | 8 | 43 | 3 | 10 | 39 | 9 |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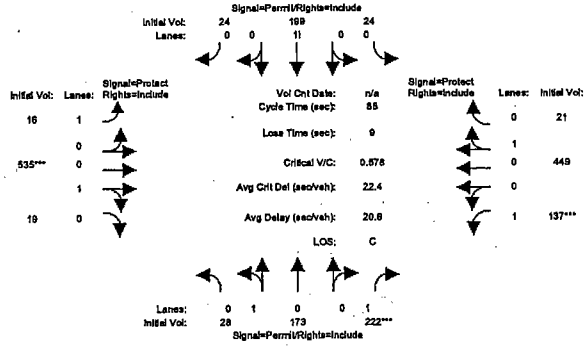
## Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 28 | 173 | 222 | 24 | 199 | 24 | 16 | 535 | 19 | 137 | 449 | 21 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 28 | 173 | 222 | 24 | 199 | 24 | 16 | 535 | 19 | 137 | 449 | 21 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 28 | 173 | 222 | 24 | 199 | 24 | 16 | 535 | 19 | 137 | 449 | 21 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 28 | 173 | 222 | 24 | 199 | 24 | 16 | 535 | 19 | 137 | 449 | 21 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 28 | 173 | 222 | 24 | 199 | 24 | 16 | 535 | 19 | 137 | 449 | 21 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 28 | 173 | 222 | 24 | 199 | 24 | 16 | 535 | 19 | 137 | 449 | 21 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.91 | 0.83 | 0.93 | 0.93 | 0.93 | 0.93 | 0.98 | 0.98 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.14 | 0.86 | 1.00 | 0.10 | 0.80 | 0.10 | 1.00 | 0.97 | 0.03 | 1.00 | 0.96 | 0.04 |
| Final Sat.: | 242 | 1495 | 1583 | 171 | 1420 | 171 | 1769 | 1789 | 64 | 1769 | 1766 | 83 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.12 | 0.12 | 0.14 | 0.14 | 0.14 | 0.14 | 0.01 | 0.30 | 0.30 | 0.08 | 0.25 | 0.25 |
| Crit Moves: | | | **** | | | | | **** | | **** | | |
| Green/Cycle: | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.02 | 0.52 | 0.52 | 0.13 | 0.63 | 0.63 |
| Volume/Cap: | 0.48 | 0.48 | 0.58 | 0.58 | 0.58 | 0.58 | 0.40 | 0.58 | 0.58 | 0.58 | 0.40 | 0.40 |
| Delay/Veh: | 28.4 | 28.4 | 30.5 | 30.3 | 30.3 | 30.3 | 47.6 | 15.0 | 15.0 | 38.1 | 8.1 | 8.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 28.4 | 28.4 | 30.5 | 30.3 | 30.3 | 30.3 | 47.6 | 15.0 | 15.0 | 38.1 | 8.1 | 8.1 |
| DesignQueue: | 1 | 6 | 8 | 1 | 7 | 1 | 1 | 13 | 0 | 6 | 8 | 0 |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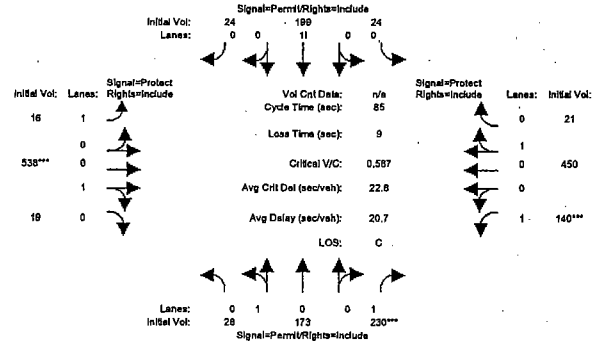
Ex + Ph 1 PM

## Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 28 | 173 | 222 | 24 | 199 | 24 | 16 | 535 | 19 | 137 | 449 | 21 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 28 | 173 | 222 | 24 | 199 | 24 | 16 | 535 | 19 | 137 | 449 | 21 |
| Added Vol: | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 1 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 28 | 173 | 230 | 24 | 199 | 24 | 16 | 538 | 19 | 140 | 450 | 21 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 28 | 173 | 230 | 24 | 199 | 24 | 16 | 538 | 19 | 140 | 450 | 21 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 28 | 173 | 230 | 24 | 199 | 24 | 16 | 538 | 19 | 140 | 450 | 21 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 28 | 173 | 230 | 24 | 199 | 24 | 16 | 538 | 19 | 140 | 450 | 21 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.92 | 0.92 | 0.83 | 0.93 | 0.93 | 0.93 | 0.93 | 0.98 | 0.98 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.14 | 0.86 | 1.00 | 0.10 | 0.80 | 0.10 | 1.00 | 0.97 | 0.03 | 1.00 | 0.96 | 0.04 |
| Final Sat.: | 243 | 1500 | 1583 | 171 | 1420 | 171 | 1769 | 1789 | 63 | 1769 | 1767 | 82 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.12 | 0.12 | 0.15 | 0.14 | 0.14 | 0.14 | 0.01 | 0.30 | 0.30 | 0.08 | 0.25 | 0.25 |
| Crit Moves: | | | **** | | | | | **** | | **** | | |
| Green/Cycle: | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.02 | 0.51 | 0.51 | 0.13 | 0.62 | 0.62 |
| Volume/Cap: | 0.47 | 0.47 | 0.59 | 0.57 | 0.57 | 0.57 | 0.41 | 0.59 | 0.59 | 0.59 | 0.41 | 0.41 |
| Delay/Veh: | 28.0 | 28.0 | 30.5 | 29.7 | 29.7 | 29.7 | 47.8 | 15.4 | 15.4 | 38.3 | 8.3 | 8.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 28.0 | 28.0 | 30.5 | 29.7 | 29.7 | 29.7 | 47.8 | 15.4 | 15.4 | 38.3 | 8.3 | 8.3 |
| DesignQueue: | 1 | 6 | 8 | 1 | 7 | 1 | 1 | 13 | 0 | 6 | 9 | 0 |





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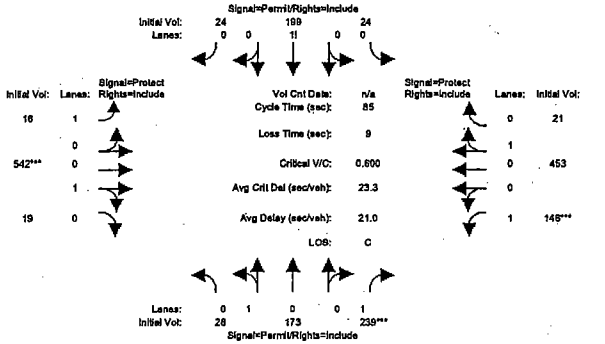
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 28 | 173 | 222 | 24 | 199 | 24 | 16 | 535 | 19 | 137 | 449 | 21 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 28 | 173 | 222 | 24 | 199 | 24 | 16 | 535 | 19 | 137 | 449 | 21 |
| Added Vol: | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 7 | 0 | 9 | 4 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 28 | 173 | 239 | 24 | 199 | 24 | 16 | 542 | 19 | 146 | 453 | 21 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 28 | 173 | 239 | 24 | 199 | 24 | 16 | 542 | 19 | 146 | 453 | 21 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 28 | 173 | 239 | 24 | 199 | 24 | 16 | 542 | 19 | 146 | 453 | 21 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 28 | 173 | 239 | 24 | 199 | 24 | 16 | 542 | 19 | 146 | 453 | 21 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.92 | 0.92 | 0.83 | 0.93 | 0.93 | 0.93 | 0.93 | 0.98 | 0.98 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.14 | 0.86 | 1.00 | 0.10 | 0.80 | 0.10 | 1.00 | 0.97 | 0.03 | 1.00 | 0.96 | 0.04 |
| Final Sat.: | 244 | 1505 | 1583 | 171 | 1420 | 171 | 1769 | 1790 | 63 | 1769 | 1767 | 82 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.11 | 0.11 | 0.15 | 0.14 | 0.14 | 0.14 | 0.01 | 0.30 | 0.30 | 0.08 | 0.26 | 0.26 |
| Crit Moves: | | | **** | | | | | **** | | **** | | |
| Green/Cycle: | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.02 | 0.50 | 0.50 | 0.14 | 0.62 | 0.62 |
| Volume/Cap: | 0.46 | 0.46 | 0.60 | 0.56 | 0.56 | 0.56 | 0.41 | 0.60 | 0.60 | 0.60 | 0.41 | 0.41 |
| Delay/Veh: | 27.6 | 27.6 | 30.6 | 29.2 | 29.2 | 29.2 | 48.0 | 16.0 | 16.0 | 38.6 | 8.5 | 8.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 27.6 | 27.6 | 30.6 | 29.2 | 29.2 | 29.2 | 48.0 | 16.0 | 16.0 | 38.6 | 8.5 | 8.5 |
| DesignQueue: | 1 | 6 | 9 | 1 | 7 | 1 | 1 | 14 | 0 | 6 | 9 | 0 |

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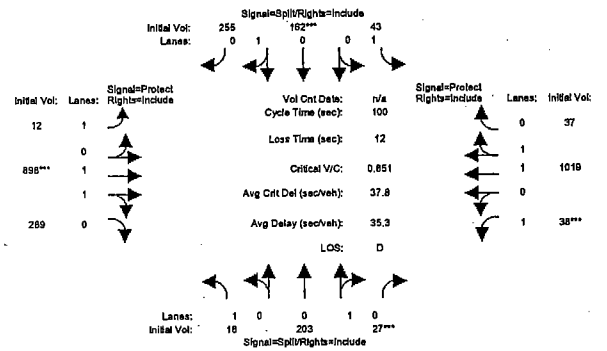
2000 HCM Operations (Future Volume Alternative)
Existing PM

## Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 18 | 203 | 27 | 43 | 162 | 255 | 12 | 898 | 289 | 38 | 1019 | 37 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 18 | 203 | 27 | 43 | 162 | 255 | 12 | 898 | 289 | 38 | 1019 | 37 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 18 | 203 | 27 | 43 | 162 | 255 | 12 | 898 | 289 | 38 | 1019 | 37 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 18 | 203 | 27 | 43 | 162 | 255 | 12 | 898 | 289 | 38 | 1019 | 37 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 18 | 203 | 27 | 43 | 162 | 255 | 12 | 898 | 289 | 38 | 1019 | 37 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 18 | 203 | 27 | 43 | 162 | 255 | 12 | 898 | 289 | 38 | 1019 | 37 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.96 | 0.96 | 0.93 | 0.89 | 0.89 | 0.91 | 0.88 | 0.88 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.88 | 0.12 | 1.00 | 0.39 | 0.61 | 1.00 | 1.51 | 0.49 | 1.00 | 1.93 | 0.07 |
| Final Sat.: | 1769 | 1614 | 215 | 1769 | 657 | 1034 | 1736 | 2533 | 815 | 1736 | 3334 | 121 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.13 | 0.13 | 0.02 | 0.25 | 0.25 | 0.01 | 0.35 | 0.35 | 0.02 | 0.31 | 0.31 |
| Crit Moves: | | | **** | | **** | | | **** | | | **** | |
| Green/Cycle: | 0.15 | 0.15 | 0.15 | 0.29 | 0.29 | 0.29 | 0.01 | 0.42 | 0.42 | 0.03 | 0.43 | 0.43 |
| Volume/Cap: | 0.07 | 0.85 | 0.85 | 0.08 | 0.85 | 0.85 | 0.71 | 0.85 | 0.85 | 0.85 | 0.71 | 0.71 |
| Delay/Veh: | 36.8 | 63.4 | 63.4 | 25.9 | 46.8 | 46.8 | 134.5 | 31.6 | 31.6 | 128.5 | 24.8 | 24.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 36.8 | 63.4 | 63.4 | 25.9 | 46.8 | 46.8 | 134.5 | 31.6 | 31.6 | 128.5 | 24.8 | 24.8 |
| DesignQueue: | 1 | 10 | 1 | 2 | 7 | 11 | 1 | 32 | 10 | 2 | 35 | 1 |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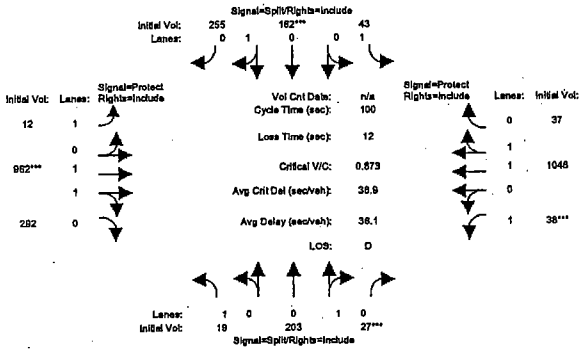
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 PM

## Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 18 | 203 | 27 | 43 | 162 | 255 | 12 | 898 | 289 | 38 | 1019 | 37 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 18 | 203 | 27 | 43 | 162 | 255 | 12 | 898 | 289 | 38 | 1019 | 37 |
| Added Vol: | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 3 | 0 | 29 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 19 | 203 | 27 | 43 | 162 | 255 | 12 | 962 | 292 | 38 | 1048 | 37 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 19 | 203 | 27 | 43 | 162 | 255 | 12 | 962 | 292 | 38 | 1048 | 37 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 19 | 203 | 27 | 43 | 162 | 255 | 12 | 962 | 292 | 38 | 1048 | 37 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 19 | 203 | 27 | 43 | 162 | 255 | 12 | 962 | 292 | 38 | 1048 | 37 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.96 | 0.96 | 0.93 | 0.89 | 0.89 | 0.91 | 0.88 | 0.88 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.88 | 0.12 | 1.00 | 0.39 | 0.61 | 1.00 | 1.53 | 0.47 | 1.00 | 1.93 | 0.07 |
| Final Sat.: | 1769 | 1614 | 215 | 1769 | 657 | 1034 | 1736 | 2571 | 780 | 1736 | 3338 | 118 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.13 | 0.13 | 0.02 | 0.25 | 0.25 | 0.01 | 0.37 | 0.37 | 0.02 | 0.31 | 0.31 |
| Crit Moves: | | | **** | | **** | | | **** | | | **** | |
| Green/Cycle: | 0.14 | 0.14 | 0.14 | 0.28 | 0.28 | 0.28 | 0.01 | 0.43 | 0.43 | 0.03 | 0.44 | 0.44 |
| Volume/Cap: | 0.07 | 0.87 | 0.87 | 0.09 | 0.87 | 0.87 | 0.71 | 0.87 | 0.87 | 0.87 | 0.71 | 0.71 |
| Delay/Veh: | 37.2 | 67.7 | 67.7 | 26.5 | 50.3 | 50.3 | 135.0 | 32.3 | 32.3 | 137.4 | 24.1 | 24.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.2 | 67.7 | 67.7 | 26.5 | 50.3 | 50.3 | 135.0 | 32.3 | 32.3 | 137.4 | 24.1 | 24.1 |
| DesignQueue: | 1 | 10 | 1 | 2 | 7 | 11 | 1 | 33 | 10 | 2 | 35 | 1 |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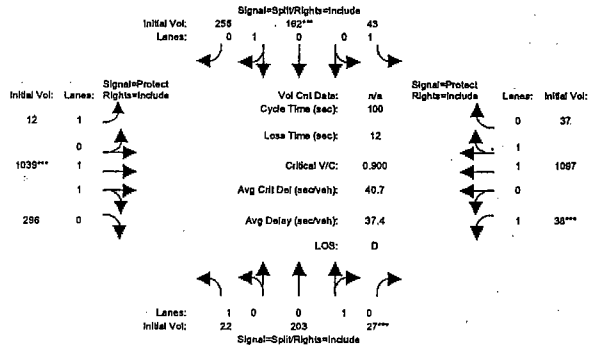
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 18 | 203 | 27 | 43 | 162 | 255 | 12 | 898 | 289 | 38 | 1019 | 37 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 18 | 203 | 27 | 43 | 162 | 255 | 12 | 898 | 289 | 38 | 1019 | 37 |
| Added Vol: | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 141 | 7 | 0 | 78 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 22 | 203 | 27 | 43 | 162 | 255 | 12 | 1039 | 296 | 38 | 1097 | 37 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 22 | 203 | 27 | 43 | 162 | 255 | 12 | 1039 | 296 | 38 | 1097 | 37 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 22 | 203 | 27 | 43 | 162 | 255 | 12 | 1039 | 296 | 38 | 1097 | 37 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 22 | 203 | 27 | 43 | 162 | 255 | 12 | 1039 | 296 | 38 | 1097 | 37 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.96 | 0.96 | 0.93 | 0.89 | 0.89 | 0.91 | 0.88 | 0.88 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.88 | 0.12 | 1.00 | 0.39 | 0.61 | 1.00 | 1.56 | 0.44 | 1.00 | 1.93 | 0.07 |
| Final Sat.: | 1769 | 1614 | 215 | 1769 | 657 | 1034 | 1736 | 2614 | 745 | 1736 | 3343 | 113 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.13 | 0.13 | 0.02 | 0.25 | 0.25 | 0.01 | 0.40 | 0.40 | 0.02 | 0.33 | 0.33 |
| Crit Moves: | | | **** | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.14 | 0.14 | 0.14 | 0.27 | 0.27 | 0.27 | 0.01 | 0.44 | 0.44 | 0.02 | 0.46 | 0.46 |
| Volume/Cap: | 0.09 | 0.90 | 0.90 | 0.09 | 0.90 | 0.90 | 0.72 | 0.90 | 0.90 | 0.90 | 0.72 | 0.72 |
| Delay/Veh: | 37.6 | 73.7 | 73.7 | 27.1 | 55.2 | 55.2 | 140.3 | 33.7 | 33.7 | 148.6 | 23.6 | 23.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.6 | 73.7 | 73.7 | 27.1 | 55.2 | 55.2 | 140.3 | 33.7 | 33.7 | 148.6 | 23.6 | 23.6 |
| DesignQueue: | 1 | 10 | 1 | 2 | 7 | 11 | 1 | 36 | 10 | 2 | 36 | 1 |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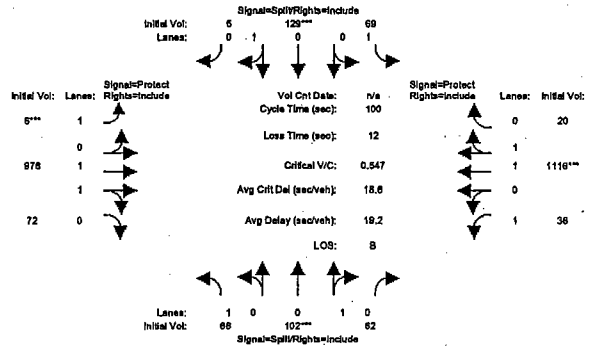
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

## Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 66 | 102 | 62 | 69 | 129 | 5 | 6 | 978 | 72 | 36 | 1116 | 20 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 66 | 102 | 62 | 69 | 129 | 5 | 6 | 978 | 72 | 36 | 1116 | 20 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 66 | 102 | 62 | 69 | 129 | 5 | 6 | 978 | 72 | 36 | 1116 | 20 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 66 | 102 | 62 | 69 | 129 | 5 | 6 | 978 | 72 | 36 | 1116 | 20 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 66 | 102 | 62 | 69 | 129 | 5 | 6 | 978 | 72 | 36 | 1116 | 20 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 66 | 102 | 62 | 69 | 129 | 5 | 6 | 978 | 72 | 36 | 1116 | 20 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.94 | 0.94 | 0.95 | 0.99 | 0.99 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.62 | 0.38 | 1.00 | 0.96 | 0.04 | 1.00 | 1.86 | 0.14 | 1.00 | 1.96 | 0.04 |
| Final Sat.: | 1805 | 1114 | 677 | 1805 | 1818 | 70 | 1805 | 3329 | 245 | 1805 | 3536 | 63 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.09 | 0.09 | 0.04 | 0.07 | 0.07 | 0.00 | 0.29 | 0.29 | 0.02 | 0.32 | 0.32 |
| Crit Moves: | | **** | | | **** | | **** | | | | **** | |
| Green/Cycle: | 0.17 | 0.17 | 0.17 | 0.13 | 0.13 | 0.13 | 0.01 | 0.55 | 0.55 | 0.04 | 0.58 | 0.58 |
| Volume/Cap: | 0.22 | 0.55 | 0.55 | 0.29 | 0.55 | 0.55 | 0.55 | 0.54 | 0.54 | 0.54 | 0.55 | 0.55 |
| Delay/Veh: | 36.4 | 40.3 | 40.3 | 40.1 | 43.4 | 43.4 | 97.0 | 14.9 | 14.9 | 55.8 | 13.4 | 13.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 36.4 | 40.3 | 40.3 | 40.1 | 43.4 | 43.4 | 97.0 | 14.9 | 14.9 | 55.8 | 13.4 | 13.4 |
| DesignQueue: | 3 | 5 | 3 | 3 | 6 | 0 | 0 | 27 | 2 | 2 | 28 | 1 |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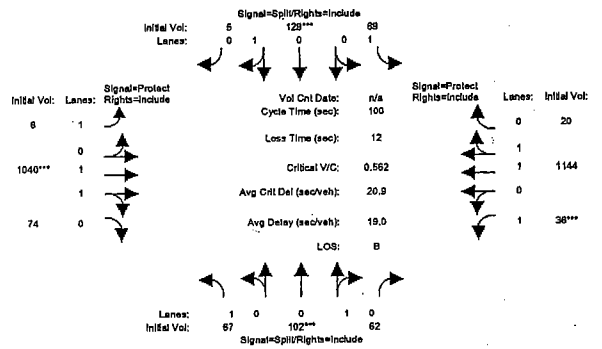
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 PM

## Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 66 | 102 | 62 | 69 | 129 | 5 | 6 | 978 | 72 | 36 | 1116 | 20 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 66 | 102 | 62 | 69 | 129 | 5 | 6 | 978 | 72 | 36 | 1116 | 20 |
| Added Vol: | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 2 | 0 | 28 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 67 | 102 | 62 | 69 | 129 | 5 | 6 | 1040 | 74 | 36 | 1144 | 20 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 67 | 102 | 62 | 69 | 129 | 5 | 6 | 1040 | 74 | 36 | 1144 | 20 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 67 | 102 | 62 | 69 | 129 | 5 | 6 | 1040 | 74 | 36 | 1144 | 20 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 67 | 102 | 62 | 69 | 129 | 5 | 6 | 1040 | 74 | 36 | 1144 | 20 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.94 | 0.94 | 0.95 | 0.99 | 0.99 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.62 | 0.38 | 1.00 | 0.96 | 0.04 | 1.00 | 1.87 | 0.13 | 1.00 | 1.97 | 0.03 |
| Final Sat.: | 1805 | 1114 | 677 | 1805 | 1818 | 70 | 1805 | 3336 | 237 | 1805 | 3537 | 62 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.09 | 0.09 | 0.04 | 0.07 | 0.07 | 0.00 | 0.31 | 0.31 | 0.02 | 0.32 | 0.32 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Green/Cycle: | 0.16 | 0.16 | 0.16 | 0.13 | 0.13 | 0.13 | 0.01 | 0.56 | 0.56 | 0.04 | 0.58 | 0.58 |
| Volume/Cap: | 0.23 | 0.56 | 0.56 | 0.30 | 0.56 | 0.56 | 0.55 | 0.56 | 0.56 | 0.56 | 0.55 | 0.55 |
| Delay/Veh: | 36.8 | 41.0 | 41.0 | 40.4 | 44.1 | 44.1 | 99.7 | 14.7 | 14.7 | 58.3 | 13.1 | 13.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 36.8 | 41.0 | 41.0 | 40.4 | 44.1 | 44.1 | 99.7 | 14.7 | 14.7 | 58.3 | 13.1 | 13.1 |
| DesignQueue: | 3 | 5 | 3 | 3 | 6 | 0 | 0 | 28 | 2 | 2 | 29 | 1 |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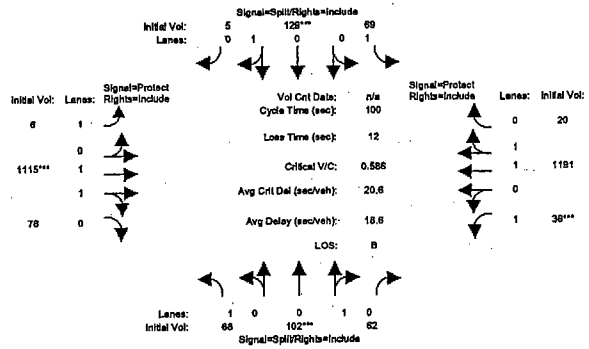
Ex + Ph 1 + Ph 2 PM

## Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 66 | 102 | 62 | 69 | 129 | 5 | 6 | 978 | 72 | 36 | 1116 | 20 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 66 | 102 | 62 | 69 | 129 | 5 | 6 | 978 | 72 | 36 | 1116 | 20 |
| Added Vol: | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 4 | 0 | 75 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 68 | 102 | 62 | 69 | 129 | 5 | 6 | 1115 | 76 | 36 | 1191 | 20 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 68 | 102 | 62 | 69 | 129 | 5 | 6 | 1115 | 76 | 36 | 1191 | 20 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 68 | 102 | 62 | 69 | 129 | 5 | 6 | 1115 | 76 | 36 | 1191 | 20 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 68 | 102 | 62 | 69 | 129 | 5 | 6 | 1115 | 76 | 36 | 1191 | 20 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.94 | 0.94 | 0.95 | 0.99 | 0.99 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.62 | 0.38 | 1.00 | 0.96 | 0.04 | 1.00 | 1.87 | 0.13 | 1.00 | 1.97 | 0.03 |
| Final Sat.: | 1805 | 1114 | 677 | 1805 | 1818 | 70 | 1805 | 3346 | 228 | 1805 | 3540 | 59 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.09 | 0.09 | 0.04 | 0.07 | 0.07 | 0.00 | 0.33 | 0.33 | 0.02 | 0.34 | 0.34 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Green/Cycle: | 0.16 | 0.16 | 0.16 | 0.12 | 0.12 | 0.12 | 0.01 | 0.57 | 0.57 | 0.03 | 0.60 | 0.60 |
| Volume/Cap: | 0.24 | 0.59 | 0.59 | 0.32 | 0.59 | 0.59 | 0.56 | 0.59 | 0.59 | 0.59 | 0.56 | 0.56 |
| Delay/Veh: | 37.4 | 42.4 | 42.4 | 41.0 | 45.5 | 45.5 | 104.6 | 14.4 | 14.4 | 61.4 | 12.6 | 12.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.4 | 42.4 | 42.4 | 41.0 | 45.5 | 45.5 | 104.6 | 14.4 | 14.4 | 61.4 | 12.6 | 12.6 |
| DesignQueue: | 3 | 5 | 3 | 3 | 6 | 0 | 0 | 29 | 2 | 2 | 29 | 0 |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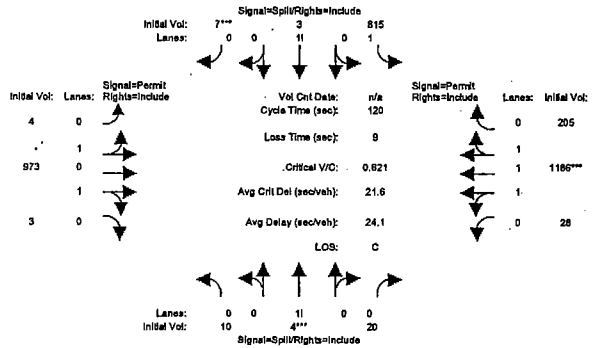
Existing PM

Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 973 | 3 | 28 | 1186 | 205 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 973 | 3 | 28 | 1186 | 205 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 973 | 3 | 28 | 1186 | 205 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 973 | 3 | 28 | 1186 | 205 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 973 | 3 | 28 | 1186 | 205 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 973 | 3 | 28 | 1186 | 205 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.89 | 0.89 | 0.89 | 0.93 | 0.93 | 0.93 | 0.88 | 0.88 | 0.88 | 0.78 | 0.78 | 0.78 |
| Lanes: | 0.29 | 0.12 | 0.59 | 1.97 | 0.01 | 0.02 | 0.01 | 1.98 | 0.01 | 0.06 | 2.51 | 0.43 |
| Final Sat.: | 497 | 199 | 995 | 3503 | 13 | 30 | 14 | 3333 | 10 | 88 | 3723 | 644 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.02 | 0.02 | 0.23 | 0.24 | 0.24 | 0.29 | 0.29 | 0.29 | 0.32 | 0.32 | 0.32 |
| Crit Moves: | | **** | | | | **** | | | | | **** | |
| Green/Cycle: | 0.03 | 0.03 | 0.03 | 0.38 | 0.38 | 0.38 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 |
| Volume/Cap: | 0.62 | 0.62 | 0.62 | 0.61 | 0.62 | 0.62 | 0.57 | 0.57 | 0.57 | 0.62 | 0.62 | 0.62 |
| Delay/Veh: | 77.2 | 77.2 | 77.2 | 31.0 | 31.1 | 31.1 | 20.5 | 20.5 | 20.5 | 21.4 | 21.4 | 21.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 77.2 | 77.2 | 77.2 | 31.0 | 31.1 | 31.1 | 20.5 | 20.5 | 20.5 | 21.4 | 21.4 | 21.4 |
| DesignQueue: | 1 | 0 | 1 | 36 | 0 | 0 | 0 | 34 | 0 | 1 | 41 | 7 |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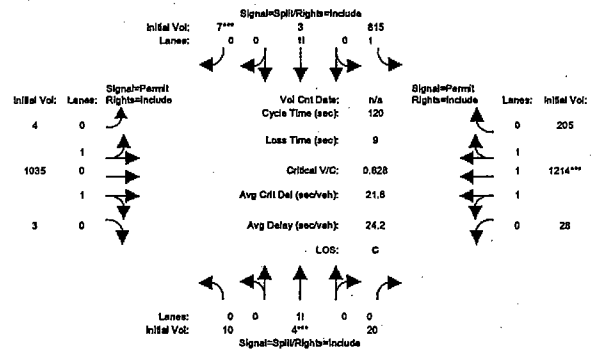
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 PM

Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 973 | 3 | 28 | 1186 | 205 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 973 | 3 | 28 | 1186 | 205 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 0 | 0 | 28 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 1035 | 3 | 28 | 1214 | 205 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 1035 | 3 | 28 | 1214 | 205 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 1035 | 3 | 28 | 1214 | 205 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 1035 | 3 | 28 | 1214 | 205 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.89 | 0.89 | 0.89 | 0.93 | 0.93 | 0.93 | 0.88 | 0.88 | 0.88 | 0.78 | 0.78 | 0.78 |
| Lanes: | 0.29 | 0.12 | 0.59 | 1.97 | 0.01 | 0.02 | 0.01 | 1.98 | 0.01 | 0.06 | 2.52 | 0.42 |
| Final Sat.: | 497 | 199 | 995 | 3503 | 13 | 30 | 13 | 3335 | 10 | 86 | 3733 | 630 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.02 | 0.02 | 0.23 | 0.24 | 0.24 | 0.31 | 0.31 | 0.31 | 0.33 | 0.33 | 0.33 |
| Crit Moves: | | **** | | | | **** | | | | | **** | |
| Green/Cycle: | 0.03 | 0.03 | 0.03 | 0.38 | 0.38 | 0.38 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Volume/Cap: | 0.63 | 0.63 | 0.63 | 0.62 | 0.63 | 0.63 | 0.60 | 0.60 | 0.60 | 0.63 | 0.63 | 0.63 |
| Delay/Veh: | 78.5 | 78.5 | 78.5 | 31.4 | 31.6 | 31.6 | 20.8 | 20.8 | 20.8 | 21.2 | 21.2 | 21.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 78.5 | 78.5 | 78.5 | 31.4 | 31.6 | 31.6 | 20.8 | 20.8 | 20.8 | 21.2 | 21.2 | 21.2 |
| DesignQueue: | 1 | 0 | 1 | 36 | 0 | 0 | 0 | 36 | 0 | 1 | 42 | 7 |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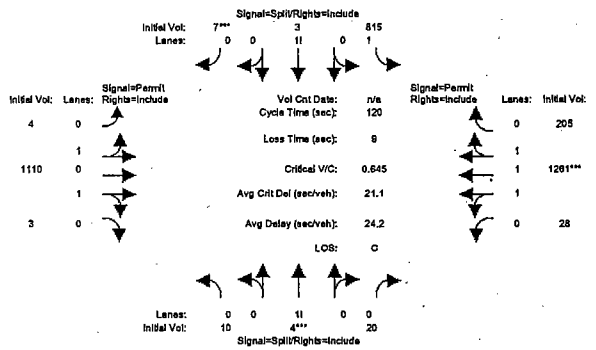
Ex + Ph 1 + Ph 2 PM

## Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 973 | 3 | 28 | 1186 | 205 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 973 | 3 | 28 | 1186 | 205 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 0 | 0 | 75 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 1110 | 3 | 28 | 1261 | 205 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 1110 | 3 | 28 | 1261 | 205 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 1110 | 3 | 28 | 1261 | 205 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 10 | 4 | 20 | 815 | 3 | 7 | 4 | 1110 | 3 | 28 | 1261 | 205 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.89 | 0.89 | 0.89 | 0.93 | 0.93 | 0.93 | 0.88 | 0.88 | 0.88 | 0.77 | 0.77 | 0.77 |
| Lanes: | 0.29 | 0.12 | 0.59 | 1.97 | 0.01 | 0.02 | 0.01 | 1.98 | 0.01 | 0.06 | 2.53 | 0.41 |
| Final Sat.: | 497 | 199 | 995 | 3503 | 13 | 30 | 12 | 3336 | 9 | 82 | 3696 | 601 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.02 | 0.02 | 0.23 | 0.24 | 0.24 | 0.33 | 0.33 | 0.33 | 0.34 | 0.34 | 0.34 |
| Crit Moves: | | **** | | | | **** | | | | | **** | |
| Green/Cycle: | 0.03 | 0.03 | 0.03 | 0.37 | 0.37 | 0.37 | 0.53 | 0.53 | 0.53 | 0.53 | 0.53 | 0.53 |
| Volume/Cap: | 0.65 | 0.65 | 0.65 | 0.64 | 0.65 | 0.65 | 0.63 | 0.63 | 0.63 | 0.65 | 0.65 | 0.65 |
| Delay/Veh: | 81.8 | 81.8 | 81.8 | 32.6 | 32.8 | 32.8 | 20.7 | 20.7 | 20.7 | 20.9 | 20.9 | 20.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 81.8 | 81.8 | 81.8 | 32.6 | 32.8 | 32.8 | 20.7 | 20.7 | 20.7 | 20.9 | 20.9 | 20.9 |
| DesignQueue: | 1 | 0 | 1 | 37 | 0 | 0 | 0 | 38 | 0 | 1 | 43 | 7 |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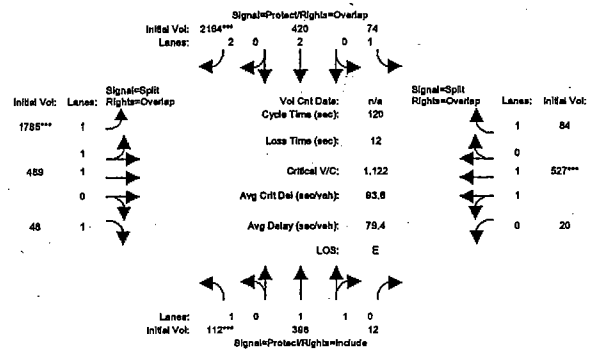
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

## Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 112 | 398 | 12 | 74 | 420 | 2164 | 1785 | 489 | 48 | 20 | 527 | 84 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 112 | 398 | 12 | 74 | 420 | 2164 | 1785 | 489 | 48 | 20 | 527 | 84 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 112 | 398 | 12 | 74 | 420 | 2164 | 1785 | 489 | 48 | 20 | 527 | 84 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 112 | 398 | 12 | 74 | 420 | 2164 | 1785 | 489 | 48 | 20 | 527 | 84 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 112 | 398 | 12 | 74 | 420 | 2164 | 1785 | 489 | 48 | 20 | 527 | 84 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 112 | 398 | 12 | 74 | 420 | 2164 | 1785 | 489 | 48 | 20 | 527 | 84 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.93 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.94 | 0.06 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.07 | 1.93 | 1.00 |
| Final Sat.: | 1769 | 3421 | 103 | 1736 | 3473 | 2734 | 3341 | 1670 | 1554 | 129 | 3402 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.12 | 0.12 | 0.04 | 0.12 | 0.79 | 0.53 | 0.29 | 0.03 | 0.15 | 0.15 | 0.05 |
| Crit Moves: | **** | | | | | **** | **** | | | | **** | |
| Green/Cycle: | 0.06 | 0.21 | 0.21 | 0.08 | 0.23 | 0.71 | 0.48 | 0.48 | 0.53 | 0.14 | 0.14 | 0.21 |
| Volume/Cap: | 1.12 | 0.56 | 0.56 | 0.56 | 0.53 | 1.12 | 1.12 | 0.61 | 0.06 | 1.12 | 1.12 | 0.25 |
| Delay/Veh: | 183.3 | 43.4 | 43.4 | 58.6 | 41.2 | 80.0 | 93.5 | 23.6 | 13.5 | 130.3 | 130 | 39.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 183.3 | 43.4 | 43.4 | 58.6 | 41.2 | 80.0 | 93.5 | 23.6 | 13.5 | 130.3 | 130 | 39.5 |
| DesignQueue: | 7 | 22 | 1 | 5 | 22 | 50 | 71 | 18 | 2 | 1 | 31 | 4 |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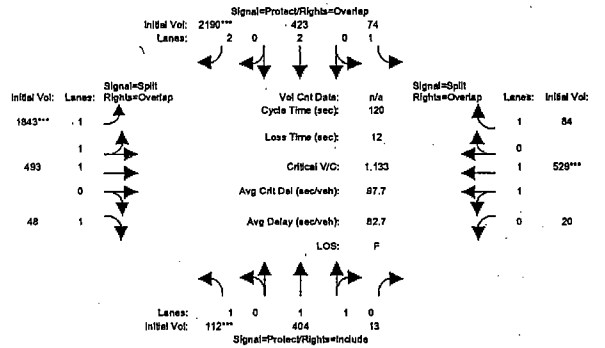
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 PM

Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 112 | 398 | 12 | 74 | 420 | 2164 | 1785 | 489 | 48 | 20 | 527 | 84 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 112 | 398 | 12 | 74 | 420 | 2164 | 1785 | 489 | 48 | 20 | 527 | 84 |
| Added Vol: | 0 | 6 | 1 | 0 | 3 | 26 | 58 | 4 | 0 | 0 | 2 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 112 | 404 | 13 | 74 | 423 | 2190 | 1843 | 493 | 48 | 20 | 529 | 84 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 112 | 404 | 13 | 74 | 423 | 2190 | 1843 | 493 | 48 | 20 | 529 | 84 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 112 | 404 | 13 | 74 | 423 | 2190 | 1843 | 493 | 48 | 20 | 529 | 84 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 112 | 404 | 13 | 74 | 423 | 2190 | 1843 | 493 | 48 | 20 | 529 | 84 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.93 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.94 | 0.06 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.07 | 1.93 | 1.00 |
| Final Sat.: | 1769 | 3410 | 110 | 1736 | 3473 | 2734 | 3341 | 1670 | 1554 | 129 | 3402 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.12 | 0.12 | 0.04 | 0.12 | 0.80 | 0.55 | 0.30 | 0.03 | 0.16 | 0.16 | 0.05 |
| Crit Moves: | **** | | | | | *** | **** | | | | **** | |
| Green/Cycle: | 0.06 | 0.20 | 0.20 | 0.07 | 0.22 | 0.71 | 0.49 | 0.49 | 0.54 | 0.14 | 0.14 | 0.21 |
| Volume/Cap: | 1.13 | 0.58 | 0.58 | 0.58 | 0.55 | 1.13 | 1.13 | 0.61 | 0.06 | 1.13 | 1.13 | 0.25 |
| Delay/Veh: | 187.5 | 44.5 | 44.5 | 60.7 | 42.5 | 84.5 | 97.3 | 22.7 | 13.0 | 134.5 | 135 | 39.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 187.5 | 44.5 | 44.5 | 60.7 | 42.5 | 84.5 | 97.3 | 22.7 | 13.0 | 134.5 | 135 | 39.9 |
| DesignQueue: | 7 | 22 | 1 | 5 | 23 | 50 | 72 | 18 | 1 | 1 | 32 | 4 |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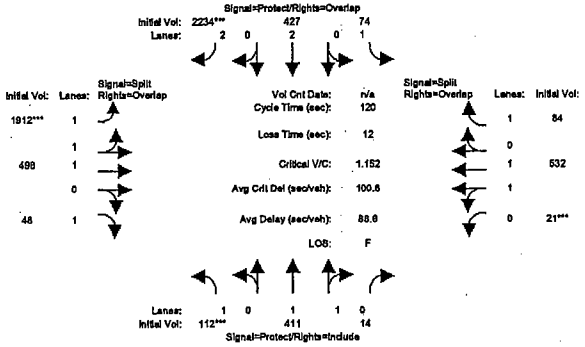
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 112 | 398 | 12 | 74 | 420 | 2164 | 1785 | 489 | 48 | 20 | 527 | 84 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 112 | 398 | 12 | 74 | 420 | 2164 | 1785 | 489 | 48 | 20 | 527 | 84 |
| Added Vol: | 0 | 13 | 2 | 0 | 7 | 70 | 127 | 9 | 0 | 1 | 5 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 112 | 411 | 14 | 74 | 427 | 2234 | 1912 | 498 | 48 | 21 | 532 | 84 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 112 | 411 | 14 | 74 | 427 | 2234 | 1912 | 498 | 48 | 21 | 532 | 84 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 112 | 411 | 14 | 74 | 427 | 2234 | 1912 | 498 | 48 | 21 | 532 | 84 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 112 | 411 | 14 | 74 | 427 | 2234 | 1912 | 498 | 48 | 21 | 532 | 84 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.93 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.93 | 0.07 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.08 | 1.92 | 1.00 |
| Final Sat.: | 1769 | 3404 | 116 | 1736 | 3473 | 2734 | 3341 | 1670 | 1554 | 134 | 3397 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.12 | 0.12 | 0.04 | 0.12 | 0.82 | 0.57 | 0.30 | 0.03 | 0.16 | 0.16 | 0.05 |
| Crit Moves: | **** | | | | | **** | **** | | | | **** | |
| Green/Cycle: | 0.05 | 0.20 | 0.20 | 0.07 | 0.21 | 0.71 | 0.50 | 0.50 | 0.55 | 0.14 | 0.14 | 0.21 |
| Volume/Cap: | 1.15 | 0.61 | 0.61 | 0.61 | 0.58 | 1.15 | 1.15 | 0.60 | 0.06 | 1.15 | 1.15 | 0.26 |
| Delay/Veh: | 194.7 | 45.5 | 45.5 | 63.1 | 43.6 | 92.4 | 104.7 | 21.9 | 12.5 | 141.9 | 142 | 40.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 194.7 | 45.5 | 45.5 | 63.1 | 43.6 | 92.4 | 104.7 | 21.9 | 12.5 | 141.9 | 142 | 40.4 |
| DesignQueue: | 7 | 23 | 1 | 5 | 23 | 51 | 74 | 18 | 1 | 1 | 32 | 5 |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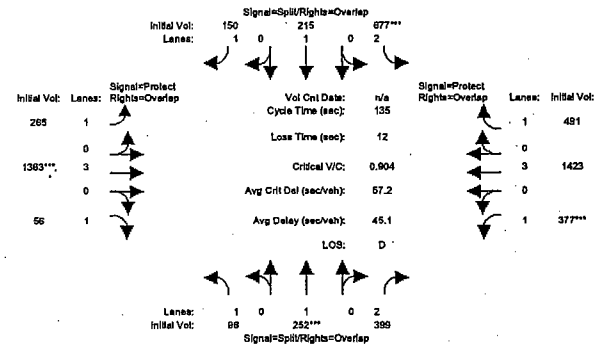
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

## Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 96 | 252 | 399 | 677 | 215 | 150 | 265 | 1363 | 56 | 377 | 1423 | 491 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 96 | 252 | 399 | 677 | 215 | 150 | 265 | 1363 | 56 | 377 | 1423 | 491 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 96 | 252 | 399 | 677 | 215 | 150 | 265 | 1363 | 56 | 377 | 1423 | 491 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 96 | 252 | 399 | 677 | 215 | 150 | 265 | 1363 | 56 | 377 | 1423 | 491 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 96 | 252 | 399 | 677 | 215 | 150 | 265 | 1363 | 56 | 377 | 1423 | 491 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 96 | 252 | 399 | 677 | 215 | 150 | 265 | 1363 | 56 | 377 | 1423 | 491 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.14 | 0.14 | 0.20 | 0.12 | 0.09 | 0.15 | 0.27 | 0.04 | 0.21 | 0.28 | 0.31 |
| Crit Moves: | | **** | | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.15 | 0.15 | 0.39 | 0.22 | 0.22 | 0.39 | 0.17 | 0.30 | 0.45 | 0.24 | 0.36 | 0.58 |
| Volume/Cap: | 0.36 | 0.90 | 0.37 | 0.90 | 0.53 | 0.24 | 0.86 | 0.90 | 0.08 | 0.90 | 0.78 | 0.54 |
| Delay/Veh: | 46.7 | 80.5 | 26.7 | 60.1 | 42.8 | 24.7 | 69.9 | 48.6 | 19.1 | 67.2 | 36.5 | 16.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 46.7 | 80.5 | 26.7 | 60.1 | 42.8 | 24.7 | 69.9 | 48.6 | 19.1 | 67.2 | 36.5 | 16.2 |
| DesignQueue: | 6 | 15 | 17 | 37 | 12 | 6 | 15 | 68 | 2 | 20 | 65 | 15 |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Level Of Service Computation Report
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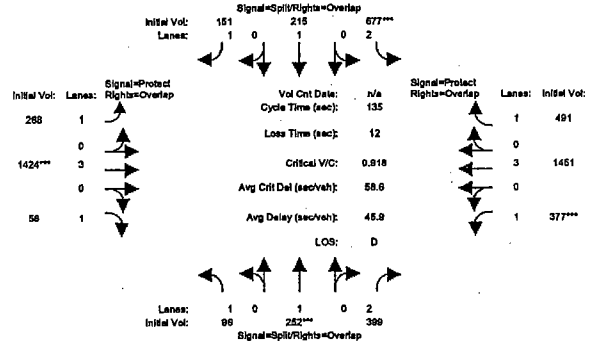
Ex + Ph 1 PM

## Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 96 | 252 | 399 | 677 | 215 | 150 | 265 | 1363 | 56 | 377 | 1423 | 491 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 96 | 252 | 399 | 677 | 215 | 150 | 265 | 1363 | 56 | 377 | 1423 | 491 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 61 | 0 | 0 | 28 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 96 | 252 | 399 | 677 | 215 | 151 | 268 | 1424 | 56 | 377 | 1451 | 491 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 96 | 252 | 399 | 677 | 215 | 151 | 268 | 1424 | 56 | 377 | 1451 | 491 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 96 | 252 | 399 | 677 | 215 | 151 | 268 | 1424 | 56 | 377 | 1451 | 491 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 96 | 252 | 399 | 677 | 215 | 151 | 268 | 1424 | 56 | 377 | 1451 | 491 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.14 | 0.14 | 0.20 | 0.12 | 0.10 | 0.15 | 0.28 | 0.04 | 0.21 | 0.29 | 0.31 |
| Crit Moves: | | **** | | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.15 | 0.15 | 0.38 | 0.21 | 0.21 | 0.39 | 0.18 | 0.31 | 0.45 | 0.23 | 0.36 | 0.58 |
| Volume/Cap: | 0.37 | 0.92 | 0.38 | 0.92 | 0.54 | 0.24 | 0.86 | 0.92 | 0.08 | 0.92 | 0.79 | 0.54 |
| Delay/Veh: | 47.0 | 83.8 | 27.2 | 62.4 | 43.2 | 24.8 | 68.5 | 49.3 | 18.7 | 70.2 | 36.7 | 16.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 47.0 | 83.8 | 27.2 | 62.4 | 43.2 | 24.8 | 68.5 | 49.3 | 18.7 | 70.2 | 36.7 | 16.3 |
| DesignQueue: | 6 | 15 | 17 | 37 | 12 | 6 | 15 | 71 | 2 | 20 | 66 | 15 |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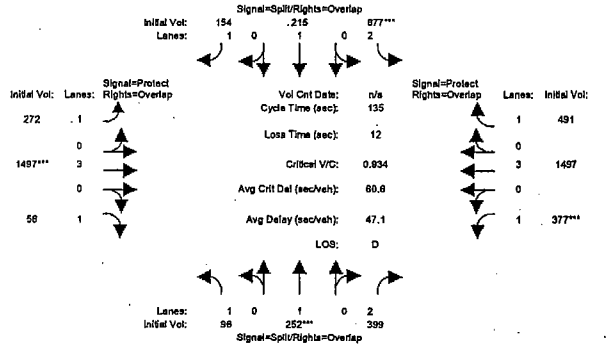
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 96 | 252 | 399 | 677 | 215 | 150 | 265 | 1363 | 56 | 377 | 1423 | 491 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 96 | 252 | 399 | 677 | 215 | 150 | 265 | 1363 | 56 | 377 | 1423 | 491 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 4 | 7 | 134 | 0 | 0 | 74 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 96 | 252 | 399 | 677 | 215 | 154 | 272 | 1497 | 56 | 377 | 1497 | 491 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 96 | 252 | 399 | 677 | 215 | 154 | 272 | 1497 | 56 | 377 | 1497 | 491 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 96 | 252 | 399 | 677 | 215 | 154 | 272 | 1497 | 56 | 377 | 1497 | 491 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 96 | 252 | 399 | 677 | 215 | 154 | 272 | 1497 | 56 | 377 | 1497 | 491 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.14 | 0.14 | 0.20 | 0.12 | 0.10 | 0.15 | 0.29 | 0.04 | 0.21 | 0.29 | 0.31 |
| Crit Moves: | | **** | | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.14 | 0.14 | 0.37 | 0.21 | 0.21 | 0.39 | 0.18 | 0.32 | 0.46 | 0.23 | 0.36 | 0.57 |
| Volume/Cap: | 0.37 | 0.93 | 0.38 | 0.93 | 0.55 | 0.25 | 0.85 | 0.93 | 0.08 | 0.93 | 0.81 | 0.54 |
| Delay/Veh: | 47.3 | 88.0 | 27.7 | 65.5 | 43.8 | 24.8 | 67.1 | 50.3 | 18.2 | 74.0 | 37.3 | 16.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 47.3 | 88.0 | 27.7 | 65.5 | 43.8 | 24.8 | 67.1 | 50.3 | 18.2 | 74.0 | 37.3 | 16.4 |
| DesignQueue: | 6 | 15 | 17 | 37 | 12 | 6 | 15 | 73 | 2 | 20 | 68 | 15 |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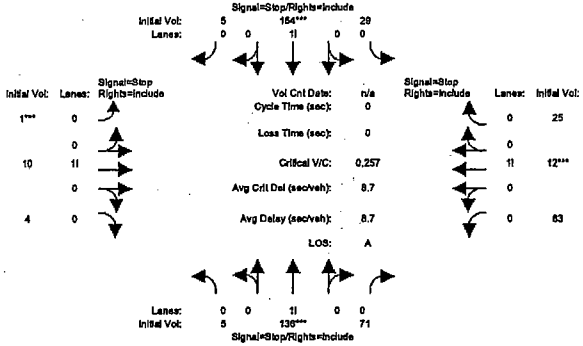
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing PM

## Intersection #18: Western/Meder [N/S: Western E/w: Meder]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 136 | 71 | 29 | 154 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 5 | 136 | 71 | 29 | 154 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 5 | 136 | 71 | 29 | 154 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 5 | 136 | 71 | 29 | 154 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 5 | 136 | 71 | 29 | 154 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 5 | 136 | 71 | 29 | 154 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.02 | 0.65 | 0.33 | 0.15 | 0.82 | 0.03 | 0.06 | 0.67 | 0.27 | 0.69 | 0.10 | 0.21 |
| Final Sat.: | 19 | 530 | 277 | 121 | 642 | 21 | 46 | 462 | 185 | 488 | 71 | 147 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.26 | 0.26 | 0.26 | 0.24 | 0.24 | 0.24 | 0.02 | 0.02 | 0.02 | 0.17 | 0.17 | 0.17 |
| Crit Moves: | | **** | | | **** | | **** | | | | **** | |
| Delay/Veh: | 8.6 | 8.6 | 8.6 | 8.8 | 8.8 | 8.8 | 7.9 | 7.9 | 7.9 | 8.7 | 8.7 | 8.7 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 8.6 | 8.6 | 8.6 | 8.8 | 8.8 | 8.8 | 7.9 | 7.9 | 7.9 | 8.7 | 8.7 | 8.7 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | | 8.6 | | | 8.8 | | | 7.9 | | | 8.7 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 8.6 | | | 8.8 | | | 7.9 | | | 8.7 | |
| LOS by Appr: | | A | | | A | | | A | | | A | |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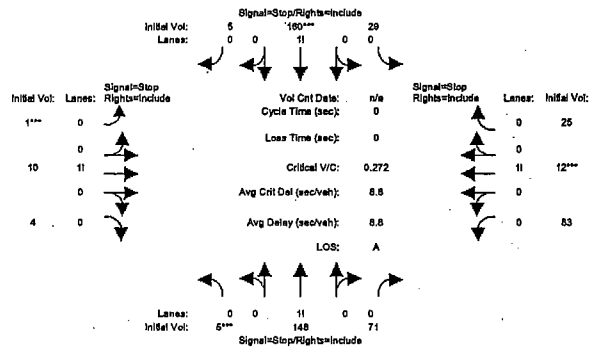
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 PM

## Intersection #18: Western/Meder [N/S: Western E/w: Meder]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 136 | 71 | 29 | 154 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 5 | 136 | 71 | 29 | 154 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Added Vol: | 0 | 12 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 5 | 148 | 71 | 29 | 160 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 5 | 148 | 71 | 29 | 160 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 5 | 148 | 71 | 29 | 160 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 5 | 148 | 71 | 29 | 160 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.02 | 0.66 | 0.32 | 0.15 | 0.82 | 0.03 | 0.06 | 0.67 | 0.27 | 0.69 | 0.10 | 0.21 |
| Final Sat.: | 18 | 544 | 261 | 117 | 644 | 20 | 46 | 456 | 182 | 483 | 70 | 145 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.27 | 0.27 | 0.27 | 0.25 | 0.25 | 0.25 | 0.02 | 0.02 | 0.02 | 0.17 | 0.17 | 0.17 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |
| Delay/Veh: | 8.8 | 8.8 | 8.8 | 8.9 | 8.9 | 8.9 | 7.9 | 7.9 | 7.9 | 8.7 | 8.7 | 8.7 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 8.8 | 8.8 | 8.8 | 8.9 | 8.9 | 8.9 | 7.9 | 7.9 | 7.9 | 8.7 | 8.7 | 8.7 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | | 8.8 | | | 8.9 | | | 7.9 | | | 8.7 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 8.8 | | | 8.9 | | | 7.9 | | | 8.7 | |
| LOS by Appr: | | A | | | A | | | A | | | A | |





Marina Science Center

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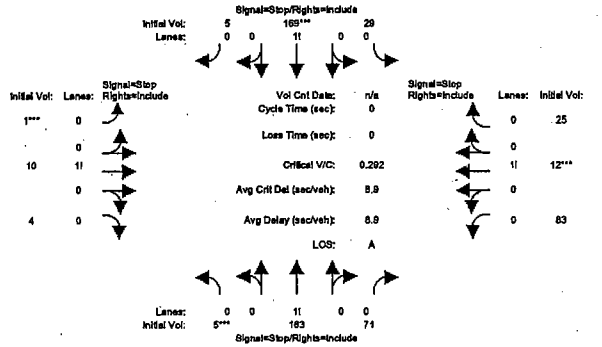
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #18: Western/Meder [N/S: Western E/w: Meder]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 136 | 71 | 29 | 154 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 5 | 136 | 71 | 29 | 154 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Added Vol: | 0 | 27 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 5 | 163 | 71 | 29 | 169 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 5 | 163 | 71 | 29 | 169 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 5 | 163 | 71 | 29 | 169 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 5 | 163 | 71 | 29 | 169 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.02 | 0.68 | 0.30 | 0.14 | 0.84 | 0.02 | 0.06 | 0.67 | 0.27 | 0.69 | 0.10 | 0.21 |
| Final Sat.: | 17 | 558 | 243 | 111 | 648 | 19 | 45 | 449 | 179 | 477 | 69 | 144 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.29 | 0.29 | 0.29 | 0.26 | 0.26 | 0.26 | 0.02 | 0.02 | 0.02 | 0.17 | 0.17 | 0.17 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |
| Delay/Veh: | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 8.0 | 8.0 | 8.0 | 8.8 | 8.8 | 8.8 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 8.0 | 8.0 | 8.0 | 8.8 | 8.8 | 8.8 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | | 9.0 | | | 9.0 | | | 8.0 | | | 8.8 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 9.0 | | | 9.0 | | | 8.0 | | | 8.8 | |
| LOS by Appr: | | A | | | A | | | A | | | A | |

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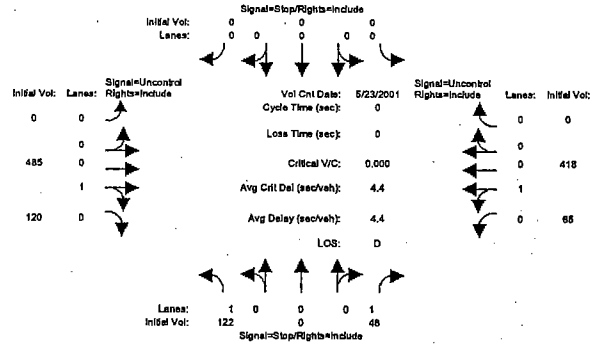
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #19: High/Western [N/S: Western E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 23 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 122 | 0 | 48 | 0 | 0 | 0 | 0 | 485 | 120 | 65 | 418 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 122 | 0 | 48 | 0 | 0 | 0 | 0 | 485 | 120 | 65 | 418 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 122 | 0 | 48 | 0 | 0 | 0 | 0 | 485 | 120 | 65 | 418 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 122 | 0 | 48 | 0 | 0 | 0 | 0 | 485 | 120 | 65 | 418 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 122 | 0 | 48 | 0 | 0 | 0 | 0 | 485 | 120 | 65 | 418 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 1093 | xxxx | 545 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 605 | xxxx | xxxxx |
| Potent Cap.: | 239 | xxxx | 542 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 983 | xxxx | xxxxx |
| Move Cap.: | 227 | xxxx | 542 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 983 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 38.0 | xxxx | 12.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.9 | xxxx | xxxxx |
| LOS by Move: | E | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.9 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 30.7 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | D | | | * | | | * | | | * | | |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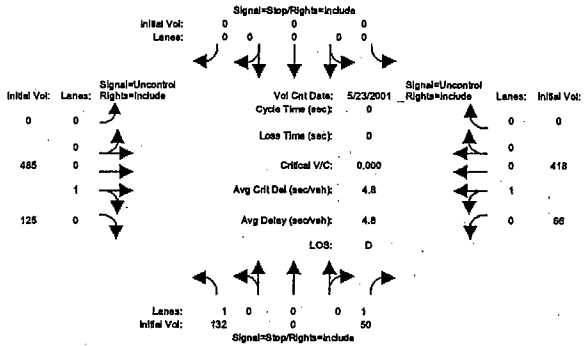
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 PM

Intersection #19: High/Western [N/S: Western E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 23 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 122 | 0 | 48 | 0 | 0 | 0 | 0 | 485 | 120 | 65 | 418 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 122 | 0 | 48 | 0 | 0 | 0 | 0 | 485 | 120 | 65 | 418 | 0 |
| Added Vol: | 10 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 132 | 0 | 50 | 0 | 0 | 0 | 0 | 485 | 125 | 66 | 418 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 132 | 0 | 50 | 0 | 0 | 0 | 0 | 485 | 125 | 66 | 418 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 132 | 0 | 50 | 0 | 0 | 0 | 0 | 485 | 125 | 66 | 418 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | 1098 | xxxx | 547 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 610 | xxxx | xxxxx |
| Potent Cap.: | 238 | xxxx | 540 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 979 | xxxx | xxxxx |
| Move Cap.: | 225 | xxxx | 540 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 979 | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | 41.4 | xxxx | 12.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.9 | xxxx | xxxxx |
| LOS by Move: | E | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.9 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 33.4 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | D | | | * | | | * | | | * | | |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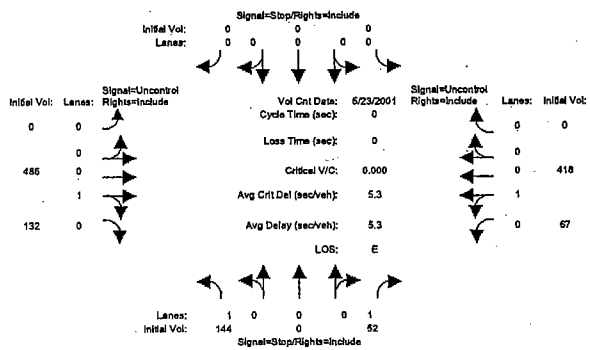
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #19: High/Western [N/S: Western E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module: >> Count Date: 23 May 2001 <<** | | | | | | | | | | | | |
| Base Vol: | 122 | 0 | 48 | 0 | 0 | 0 | 0 | 485 | 120 | 65 | 418 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 122 | 0 | 48 | 0 | 0 | 0 | 0 | 485 | 120 | 65 | 418 | 0 |
| Added Vol: | 22 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 12 | 2 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 144 | 0 | 52 | 0 | 0 | 0 | 0 | 485 | 132 | 67 | 418 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 144 | 0 | 52 | 0 | 0 | 0 | 0 | 485 | 132 | 67 | 418 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 144 | 0 | 52 | 0 | 0 | 0 | 0 | 485 | 132 | 67 | 418 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 4.1 | xxxx | xxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 2.2 | xxxx | xxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1103 | xxxx | 551 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 617 | xxxx | xxxx |
| Potent Cap.: | 236 | xxxx | 538 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 973 | xxxx | xxxx |
| Move Cap.: | 223 | xxxx | 538 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 973 | xxxx | xxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 46.5 | xxxx | 12.4 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 9.0 | xxxx | xxxxx |
| LOS by Move: | E | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 9.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 37.5 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | E | | | * | | | * | | | * | |





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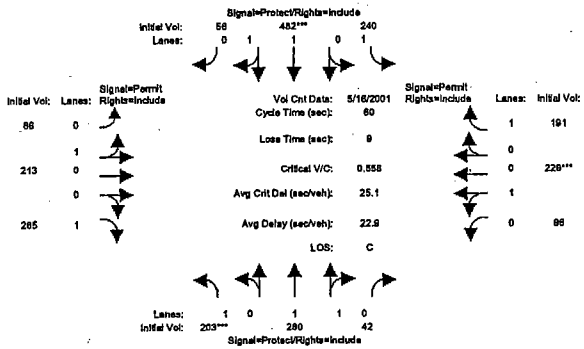
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

## Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module: >> Count Date: 16 May 2001 <<** | | | | | | | | | | | | |
| Base Vol: | 203 | 280 | 42 | 240 | 482 | 56 | 66 | 213 | 285 | 96 | 229 | 191 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 203 | 280 | 42 | 240 | 482 | 56 | 66 | 213 | 285 | 96 | 229 | 191 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 203 | 280 | 42 | 240 | 482 | 56 | 66 | 213 | 285 | 96 | 229 | 191 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 203 | 280 | 42 | 240 | 482 | 56 | 66 | 213 | 285 | 96 | 229 | 191 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 203 | 280 | 42 | 240 | 482 | 56 | 66 | 213 | 285 | 96 | 229 | 191 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 203 | 280 | 42 | 240 | 482 | 56 | 66 | 213 | 285 | 96 | 229 | 191 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.82 | 0.82 | 0.83 | 0.76 | 0.76 | 0.83 |
| Lanes: | 1.00 | 1.74 | 0.26 | 1.00 | 1.79 | 0.21 | 0.24 | 0.76 | 1.00 | 0.30 | 0.70 | 1.00 |
| Final Sat.: | 1769 | 3018 | 453 | 1769 | 3119 | 362 | 368 | 1188 | 1583 | 426 | 1015 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.11 | 0.09 | 0.09 | 0.14 | 0.15 | 0.15 | 0.18 | 0.18 | 0.18 | 0.23 | 0.23 | 0.12 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.21 | 0.20 | 0.20 | 0.29 | 0.28 | 0.28 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 |
| Volume/Cap: | 0.56 | 0.47 | 0.47 | 0.47 | 0.56 | 0.56 | 0.44 | 0.44 | 0.45 | 0.56 | 0.56 | 0.30 |
| Delay/Veh: | 30.4 | 29.0 | 29.0 | 24.2 | 25.4 | 25.4 | 17.8 | 17.8 | 17.8 | 19.5 | 19.5 | 16.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 30.4 | 29.0 | 29.0 | 24.2 | 25.4 | 25.4 | 17.8 | 17.8 | 17.8 | 19.5 | 19.5 | 16.4 |
| DesignQueue: | 7 | 10 | 2 | 8 | 16 | 2 | 2 | 6 | 8 | 3 | 6 | 5 |

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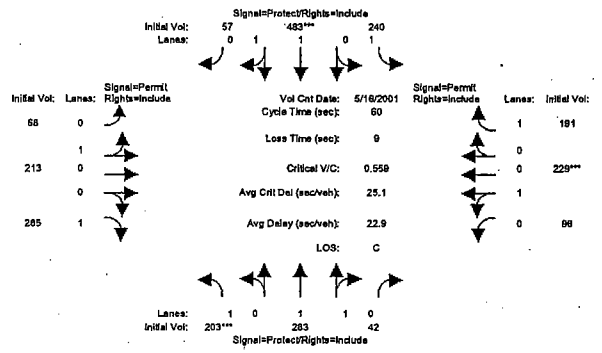
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 PM

Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Module: >> Count Date: 16 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 203 | 280 | 42 | 240 | 482 | 56 | 66 | 213 | 285 | 96 | 229 | 191 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 203 | 280 | 42 | 240 | 482 | 56 | 66 | 213 | 285 | 96 | 229 | 191 |
| Added Vol: | 0 | 3 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 203 | 283 | 42 | 240 | 483 | 57 | 68 | 213 | 285 | 96 | 229 | 191 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 203 | 283 | 42 | 240 | 483 | 57 | 68 | 213 | 285 | 96 | 229 | 191 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 203 | 283 | 42 | 240 | 483 | 57 | 68 | 213 | 285 | 96 | 229 | 191 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 203 | 283 | 42 | 240 | 483 | 57 | 68 | 213 | 285 | 96 | 229 | 191 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.81 | 0.81 | 0.83 | 0.76 | 0.76 | 0.83 |
| Lanes: | 1.00 | 1.74 | 0.26 | 1.00 | 1.79 | 0.21 | 0.24 | 0.76 | 1.00 | 0.30 | 0.70 | 1.00 |
| Final Sat.: | 1769 | 3022 | 449 | 1769 | 3114 | 367 | 374 | 1170 | 1583 | 424 | 1012 | 1583 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.11 | 0.09 | 0.09 | 0.14 | 0.16 | 0.16 | 0.18 | 0.18 | 0.18 | 0.23 | 0.23 | 0.12 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.21 | 0.20 | 0.20 | 0.29 | 0.28 | 0.28 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 |
| Volume/Cap: | 0.56 | 0.48 | 0.48 | 0.48 | 0.56 | 0.56 | 0.45 | 0.45 | 0.44 | 0.56 | 0.56 | 0.30 |
| Delay/Veh: | 30.5 | 29.0 | 29.0 | 24.3 | 25.5 | 25.5 | 17.8 | 17.8 | 17.8 | 19.5 | 19.5 | 16.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 30.5 | 29.0 | 29.0 | 24.3 | 25.5 | 25.5 | 17.8 | 17.8 | 17.8 | 19.5 | 19.5 | 16.4 |
| DesignQueue: | 7 | 10 | 2 | 8 | 16 | 2 | 2 | 6 | 8 | 3 | 6 | 5 |





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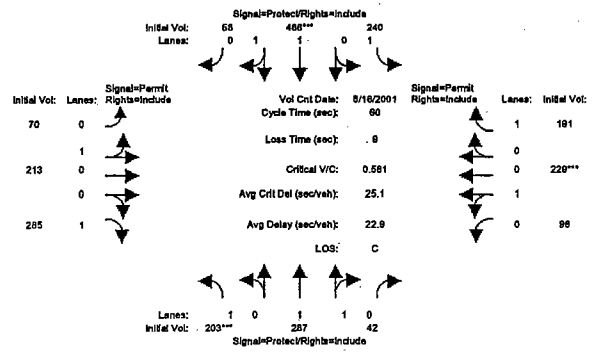
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Module: >> Count Date: 16 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 203 | 280 | 42 | 240 | 482 | 56 | 66 | 213 | 285 | 96 | 229 | 191 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 203 | 280 | 42 | 240 | 482 | 56 | 66 | 213 | 285 | 96 | 229 | 191 |
| Added Vol: | 0 | 7 | 0 | 0 | 4 | 2 | 4 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 203 | 287 | 42 | 240 | 486 | 58 | 70 | 213 | 285 | 96 | 229 | 191 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 203 | 287 | 42 | 240 | 486 | 58 | 70 | 213 | 285 | 96 | 229 | 191 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 203 | 287 | 42 | 240 | 486 | 58 | 70 | 213 | 285 | 96 | 229 | 191 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 203 | 287 | 42 | 240 | 486 | 58 | 70 | 213 | 285 | 96 | 229 | 191 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.80 | 0.80 | 0.83 | 0.75 | 0.75 | 0.83 |
| Lanes: | 1.00 | 1.74 | 0.26 | 1.00 | 1.79 | 0.21 | 0.25 | 0.75 | 1.00 | 0.30 | 0.70 | 1.00 |
| Final Sat.: | 1769 | 3028 | 443 | 1769 | 3110 | 371 | 376 | 1145 | 1583 | 423 | 1009 | 1583 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.11 | 0.09 | 0.09 | 0.14 | 0.16 | 0.16 | 0.19 | 0.19 | 0.18 | 0.23 | 0.23 | 0.12 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.20 | 0.20 | 0.20 | 0.28 | 0.28 | 0.28 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 |
| Volume/Cap: | 0.56 | 0.48 | 0.48 | 0.48 | 0.56 | 0.56 | 0.46 | 0.46 | 0.45 | 0.56 | 0.56 | 0.30 |
| Delay/Veh: | 30.6 | 28.9 | 28.9 | 24.4 | 25.4 | 25.4 | 18.0 | 18.0 | 17.8 | 19.6 | 19.6 | 16.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 30.6 | 28.9 | 28.9 | 24.4 | 25.4 | 25.4 | 18.0 | 18.0 | 17.8 | 19.6 | 19.6 | 16.4 |
| DesignQueue: | 7 | 10 | 2 | 8 | 16 | 2 | 2 | 6 | 8 | 3 | 6 | 5 |

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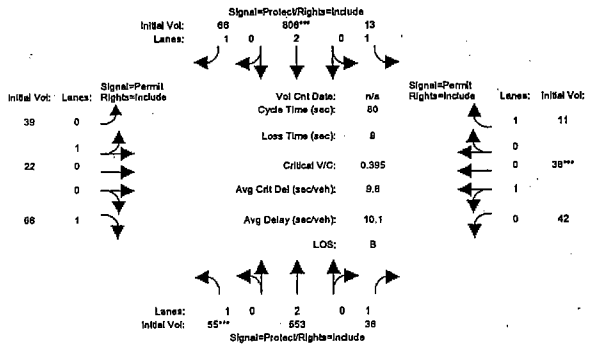
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

## Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 553 | 36 | 13 | 806 | 66 | 39 | 22 | 66 | 33 | 38 | 11 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 55 | 553 | 36 | 13 | 806 | 66 | 39 | 22 | 66 | 33 | 38 | 11 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 |
| Initial Fut: | 55 | 553 | 36 | 13 | 806 | 66 | 39 | 22 | 66 | 42 | 38 | 11 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| PHF Volume: | 62 | 621 | 40 | 15 | 906 | 74 | 44 | 25 | 74 | 47 | 43 | 12 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 62 | 621 | 40 | 15 | 906 | 74 | 44 | 25 | 74 | 47 | 43 | 12 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 62 | 621 | 40 | 15 | 906 | 74 | 44 | 25 | 74 | 47 | 43 | 12 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.76 | 0.76 | 0.83 | 0.80 | 0.80 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.64 | 0.36 | 1.00 | 0.52 | 0.48 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 929 | 524 | 1583 | 796 | 720 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.18 | 0.03 | 0.01 | 0.26 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.01 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.09 | 0.70 | 0.70 | 0.03 | 0.65 | 0.65 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Volume/Cap: | 0.39 | 0.25 | 0.04 | 0.25 | 0.39 | 0.07 | 0.31 | 0.31 | 0.31 | 0.39 | 0.39 | 0.05 |
| Delay/Veh: | 36.1 | 4.3 | 3.6 | 39.9 | 6.7 | 5.2 | 31.1 | 31.1 | 31.1 | 31.8 | 31.8 | 29.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 36.1 | 4.3 | 3.6 | 39.9 | 6.7 | 5.2 | 31.1 | 31.1 | 31.1 | 31.8 | 31.8 | 29.2 |
| DesignQueue: | 3 | 9 | 1 | 1 | 15 | 1 | 2 | 1 | 3 | 2 | 2 | 0 |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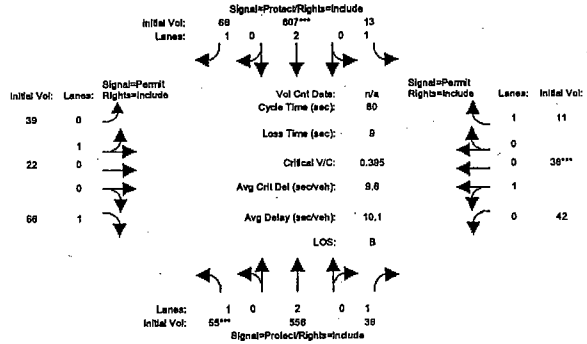
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 PM

## Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 553 | 36 | 13 | 806 | 66 | 39 | 22 | 66 | 33 | 38 | 11 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 55 | 553 | 36 | 13 | 806 | 66 | 39 | 22 | 66 | 33 | 38 | 11 |
| Added Vol: | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 |
| Initial Fut: | 55 | 556 | 36 | 13 | 807 | 66 | 39 | 22 | 66 | 42 | 38 | 11 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| PHF Volume: | 62 | 625 | 40 | 15 | 907 | 74 | 44 | 25 | 74 | 47 | 43 | 12 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 62 | 625 | 40 | 15 | 907 | 74 | 44 | 25 | 74 | 47 | 43 | 12 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 62 | 625 | 40 | 15 | 907 | 74 | 44 | 25 | 74 | 47 | 43 | 12 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.76 | 0.76 | 0.83 | 0.80 | 0.80 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.64 | 0.36 | 1.00 | 0.52 | 0.48 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 929 | 524 | 1583 | 796 | 720 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.18 | 0.03 | 0.01 | 0.26 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.01 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.09 | 0.70 | 0.70 | 0.03 | 0.65 | 0.65 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Volume/Cap: | 0.39 | 0.25 | 0.04 | 0.25 | 0.39 | 0.07 | 0.31 | 0.31 | 0.31 | 0.39 | 0.39 | 0.05 |
| Delay/Veh: | 36.1 | 4.3 | 3.6 | 40.0 | 6.7 | 5.2 | 31.2 | 31.2 | 31.1 | 31.8 | 31.8 | 29.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 36.1 | 4.3 | 3.6 | 40.0 | 6.7 | 5.2 | 31.2 | 31.2 | 31.1 | 31.8 | 31.8 | 29.2 |
| DesignQueue: | 3 | 9 | 1 | 1 | 15 | 1 | 2 | 1 | 3 | 2 | 2 | 0 |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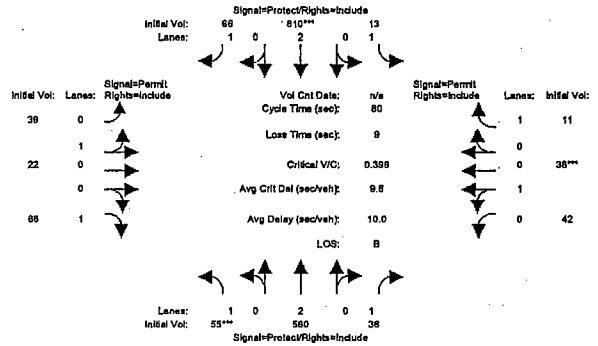
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 553 | 36 | 13 | 806 | 66 | 39 | 22 | 66 | 33 | 38 | 11 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 55 | 553 | 36 | 13 | 806 | 66 | 39 | 22 | 66 | 33 | 38 | 11 |
| Added Vol: | 0 | 7 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 |
| Initial Fut: | 55 | 560 | 36 | 13 | 810 | 66 | 39 | 22 | 66 | 42 | 38 | 11 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| PHF Volume: | 62 | 629 | 40 | 15 | 910 | 74 | 44 | 25 | 74 | 47 | 43 | 12 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 62 | 629 | 40 | 15 | 910 | 74 | 44 | 25 | 74 | 47 | 43 | 12 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 62 | 629 | 40 | 15 | 910 | 74 | 44 | 25 | 74 | 47 | 43 | 12 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.76 | 0.76 | 0.83 | 0.80 | 0.80 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.64 | 0.36 | 1.00 | 0.52 | 0.48 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 927 | 523 | 1583 | 796 | 720 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.18 | 0.03 | 0.01 | 0.26 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.01 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.09 | 0.71 | 0.71 | 0.03 | 0.65 | 0.65 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Volume/Cap: | 0.40 | 0.25 | 0.04 | 0.25 | 0.40 | 0.07 | 0.32 | 0.32 | 0.31 | 0.40 | 0.40 | 0.05 |
| Delay/Veh: | 36.1 | 4.3 | 3.6 | 40.0 | 6.7 | 5.2 | 31.2 | 31.2 | 31.1 | 31.9 | 31.9 | 29.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 36.1 | 4.3 | 3.6 | 40.0 | 6.7 | 5.2 | 31.2 | 31.2 | 31.1 | 31.9 | 31.9 | 29.2 |
| DesignQueue: | 3 | 9 | 1 | 1 | 15 | 1 | 2 | 1 | 3 | 2 | 2 | 0 |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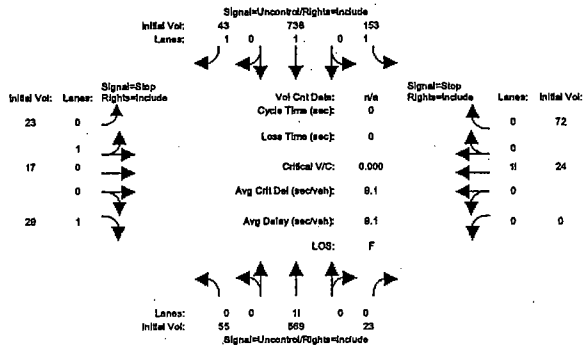
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

## Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 569 | 23 | 153 | 736 | 43 | 23 | 17 | 29 | 0 | 24 | 72 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 55 | 569 | 23 | 153 | 736 | 43 | 23 | 17 | 29 | 0 | 24 | 72 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 55 | 569 | 23 | 153 | 736 | 43 | 23 | 17 | 29 | 0 | 24 | 72 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 55 | 569 | 23 | 153 | 736 | 43 | 23 | 17 | 29 | 0 | 24 | 72 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 55 | 569 | 23 | 153 | 736 | 43 | 23 | 17 | 29 | 0 | 24 | 72 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | xxxxx | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | xxxxx | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 779 | xxxx | xxxxx | 592 | xxxx | xxxxx | 1781 | 1744 | 736 | xxxx | 1776 | 581 |
| Potent Cap.: | 847 | xxxx | xxxxx | 994 | xxxx | xxxxx | 65 | 87 | 422 | xxxx | 84 | 518 |
| Move Cap.: | 847 | xxxx | xxxxx | 994 | xxxx | xxxxx | 34 | 69 | 422 | xxxx | 66 | 518 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 9.5 | xxxx | xxxxx | 9.3 | xxxx | xxxxx | xxxxx | xxxx | 14.2 | xxxxx | xxxx | xxxxx |
| LOS by Move: | A | * | * | A | * | * | * | * | B | * | * | * |
| Movement: | LT | - LTR | - RT | LT | - LTR | - RT | LT | - LTR | - RT | LT | - LTR | - RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 43 | xxxx | xxxxx | xxxx | xxxx | 191 |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 259.0 | xxxx | xxxxx | xxxxx | xxxx | 41.5 |
| Shared LOS: | * | * | * | * | * | * | F | * | * | * | * | E |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 156.1 | | | 41.5 | | |
| ApproachLOS: | * | | | * | | | F | | | E | | |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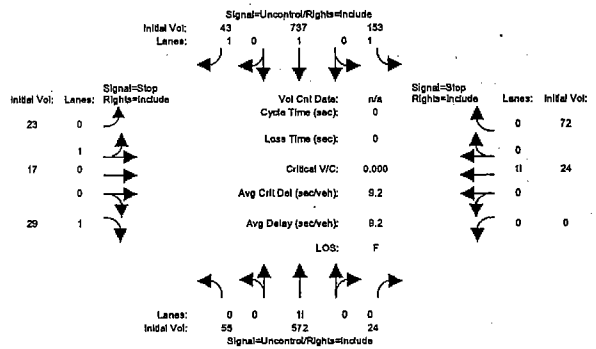
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 PM

## Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 569 | 23 | 153 | 736 | 43 | 23 | 17 | 29 | 0 | 24 | 72 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 55 | 569 | 23 | 153 | 736 | 43 | 23 | 17 | 29 | 0 | 24 | 72 |
| Added Vol: | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 55 | 572 | 24 | 153 | 737 | 43 | 23 | 17 | 29 | 0 | 24 | 72 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 55 | 572 | 24 | 153 | 737 | 43 | 23 | 17 | 29 | 0 | 24 | 72 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 55 | 572 | 24 | 153 | 737 | 43 | 23 | 17 | 29 | 0 | 24 | 72 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | xxxxx | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | xxxxx | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 780 | xxxx | xxxxx | 596 | xxxx | xxxxx | 1785 | 1749 | 737 | xxxx | 1780 | 584 |
| Potent Cap.: | 846 | xxxx | xxxxx | 990 | xxxx | xxxxx | 64 | 87 | 422 | xxxx | 83 | 515 |
| Move Cap.: | 846 | xxxx | xxxxx | 990 | xxxx | xxxxx | 33 | 68 | 422 | xxxx | 66 | 515 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 9.5 | xxxx | xxxxx | 9.3 | xxxx | xxxxx | xxxxx | xxxx | 14.2 | xxxxx | xxxx | xxxxx |
| LOS by Move: | A | * | * | A | * | * | * | * | B | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 43 | xxxx | xxxxx | xxxx | xxxx | 190 |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 263.8 | xxxx | xxxxx | xxxxx | xxxx | 42.0 |
| Shared LOS: | * | * | * | * | * | * | F | * | * | * | * | E |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 158.9 | | | 42.0 | | |
| ApproachLOS: | * | | | * | | | F | | | E | | |





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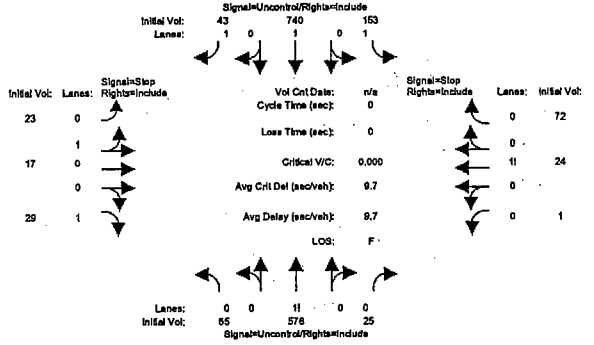
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 569 | 23 | 153 | 736 | 43 | 23 | 17 | 29 | 0 | 24 | 72 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 55 | 569 | 23 | 153 | 736 | 43 | 23 | 17 | 29 | 0 | 24 | 72 |
| Added Vol: | 0 | 7 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 55 | 576 | 25 | 153 | 740 | 43 | 23 | 17 | 29 | 1 | 24 | 72 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 55 | 576 | 25 | 153 | 740 | 43 | 23 | 17 | 29 | 1 | 24 | 72 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 55 | 576 | 25 | 153 | 740 | 43 | 23 | 17 | 29 | 1 | 24 | 72 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 783 | xxxx | xxxxx | 601 | xxxx | xxxxx | 1793 | 1757 | 740 | 1789 | 1788 | 589 |
| Potent Cap.: | 844 | xxxx | xxxxx | 986 | xxxx | xxxxx | 63 | 86 | 420 | 64 | 82 | 512 |
| Move Cap.: | 844 | xxxx | xxxxx | 986 | xxxx | xxxxx | 33 | 68 | 420 | 40 | 65 | 512 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 9.6 | xxxx | xxxxx | 9.3 | xxxx | xxxxx | xxxxx | xxxx | 14.2 | xxxxx | xxxx | xxxxx |
| LOS by Move: | A | * | * | A | * | * | * | * | B | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 42 | xxxx | xxxxx | xxxx | 181 | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 271.7 | xxxx | xxxxx | xxxxx | 45.8 | xxxxx |
| Shared LOS: | * | * | * | * | * | * | F | * | * | * | E | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 163.5 | | | 45.8 | | |
| ApproachLOS: | * | | | * | | | F | | | E | | |

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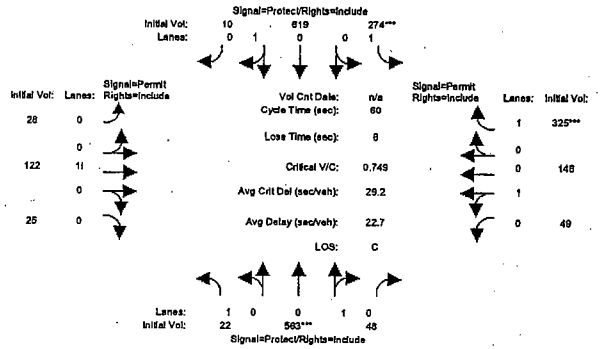
2000 HCM Operations (Future Volume Alternative)
Existing PM

## Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 22 | 499 | 48 | 209 | 532 | 10 | 28 | 121 | 25 | 49 | 145 | 284 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 22 | 499 | 48 | 209 | 532 | 10 | 28 | 121 | 25 | 49 | 145 | 284 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 64 | 0 | 65 | 87 | 0 | 0 | 1 | 0 | 0 | 1 | 41 |
| Initial Fut: | 22 | 563 | 48 | 274 | 619 | 10 | 28 | 122 | 25 | 49 | 146 | 325 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 22 | 563 | 48 | 274 | 619 | 10 | 28 | 122 | 25 | 49 | 146 | 325 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 22 | 563 | 48 | 274 | 619 | 10 | 28 | 122 | 25 | 49 | 146 | 325 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 22 | 563 | 48 | 274 | 619 | 10 | 28 | 122 | 25 | 49 | 146 | 325 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.97 | 0.97 | 0.93 | 0.98 | 0.98 | 0.90 | 0.90 | 0.90 | 0.89 | 0.89 | 0.83 |
| Lanes: | 1.00 | 0.92 | 0.08 | 1.00 | 0.98 | 0.02 | 0.16 | 0.70 | 0.14 | 0.25 | 0.75 | 1.00 |
| Final Sat.: | 1769 | 1695 | 145 | 1769 | 1829 | 30 | 274 | 1196 | 245 | 425 | 1266 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.33 | 0.33 | 0.15 | 0.34 | 0.34 | 0.10 | 0.10 | 0.10 | 0.12 | 0.12 | 0.21 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.02 | 0.44 | 0.44 | 0.21 | 0.63 | 0.63 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Volume/Cap: | 0.54 | 0.75 | 0.75 | 0.75 | 0.54 | 0.54 | 0.37 | 0.37 | 0.37 | 0.42 | 0.42 | 0.75 |
| Delay/Veh: | 52.4 | 22.4 | 22.4 | 38.1 | 8.9 | 8.9 | 24.0 | 24.0 | 24.0 | 24.4 | 24.4 | 33.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 52.4 | 22.4 | 22.4 | 38.1 | 8.9 | 8.9 | 24.0 | 24.0 | 24.0 | 24.4 | 24.4 | 33.6 |
| DesignQueue: | 1 | 15 | 1 | 10 | 11 | 0 | 1 | 4 | 1 | 2 | 5 | 11 |





Marina Science Center

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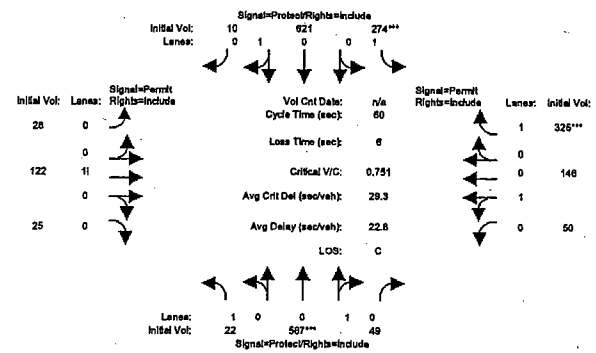
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 PM

## Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 22 | 499 | 48 | 209 | 532 | 10 | 28 | 121 | 25 | 49 | 145 | 284 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 22 | 499 | 48 | 209 | 532 | 10 | 28 | 121 | 25 | 49 | 145 | 284 |
| Added Vol: | 0 | 4 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Campus Incr: | 0 | 64 | 0 | 65 | 87 | 0 | 0 | 1 | 0 | 0 | 1 | 41 |
| Initial Fut: | 22 | 567 | 49 | 274 | 621 | 10 | 28 | 122 | 25 | 50 | 146 | 325 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 22 | 567 | 49 | 274 | 621 | 10 | 28 | 122 | 25 | 50 | 146 | 325 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 22 | 567 | 49 | 274 | 621 | 10 | 28 | 122 | 25 | 50 | 146 | 325 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 22 | 567 | 49 | 274 | 621 | 10 | 28 | 122 | 25 | 50 | 146 | 325 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.97 | 0.97 | 0.93 | 0.98 | 0.98 | 0.90 | 0.90 | 0.90 | 0.88 | 0.88 | 0.83 |
| Lanes: | 1.00 | 0.92 | 0.08 | 1.00 | 0.98 | 0.02 | 0.16 | 0.70 | 0.14 | 0.26 | 0.74 | 1.00 |
| Final Sat.: | 1769 | 1693 | 146 | 1769 | 1829 | 29 | 274 | 1196 | 245 | 429 | 1252 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.33 | 0.33 | 0.15 | 0.34 | 0.34 | 0.10 | 0.10 | 0.10 | 0.12 | 0.12 | 0.21 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.02 | 0.45 | 0.45 | 0.21 | 0.63 | 0.63 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Volume/Cap: | 0.54 | 0.75 | 0.75 | 0.75 | 0.54 | 0.54 | 0.37 | 0.37 | 0.37 | 0.43 | 0.43 | 0.75 |
| Delay/Veh: | 52.5 | 22.4 | 22.4 | 38.3 | 8.9 | 8.9 | 24.0 | 24.0 | 24.0 | 24.6 | 24.6 | 33.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 52.5 | 22.4 | 22.4 | 38.3 | 8.9 | 8.9 | 24.0 | 24.0 | 24.0 | 24.6 | 24.6 | 33.8 |
| DesignQueue: | 1 | 15 | 1 | 10 | 11 | 0 | 1 | 4 | 1 | 2 | 5 | 11 |

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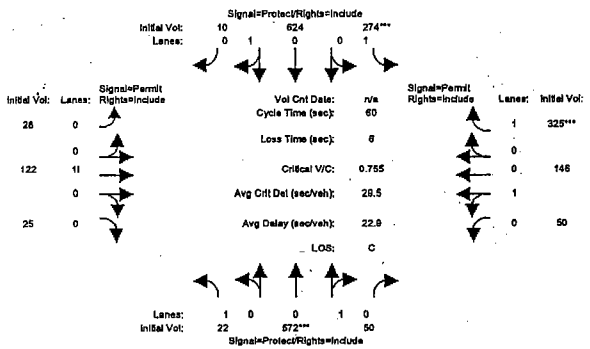
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

## Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 22 | 499 | 48 | 209 | 532 | 10 | 28 | 121 | 25 | 49 | 145 | 284 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 22 | 499 | 48 | 209 | 532 | 10 | 28 | 121 | 25 | 49 | 145 | 284 |
| Added Vol: | 0 | 9 | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Campus Incr: | 0 | 64 | 0 | 65 | 87 | 0 | 0 | 1 | 0 | 0 | 1 | 41 |
| Initial Fut: | 22 | 572 | 50 | 274 | 624 | 10 | 28 | 122 | 25 | 50 | 146 | 325 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 22 | 572 | 50 | 274 | 624 | 10 | 28 | 122 | 25 | 50 | 146 | 325 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 22 | 572 | 50 | 274 | 624 | 10 | 28 | 122 | 25 | 50 | 146 | 325 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 22 | 572 | 50 | 274 | 624 | 10 | 28 | 122 | 25 | 50 | 146 | 325 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.97 | 0.97 | 0.93 | 0.98 | 0.98 | 0.90 | 0.90 | 0.90 | 0.88 | 0.88 | 0.83 |
| Lanes: | 1.00 | 0.92 | 0.08 | 1.00 | 0.98 | 0.02 | 0.16 | 0.70 | 0.14 | 0.26 | 0.74 | 1.00 |
| Final Sat.: | 1769 | 1692 | 148 | 1769 | 1829 | 29 | 274 | 1196 | 245 | 429 | 1252 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.34 | 0.34 | 0.15 | 0.34 | 0.34 | 0.10 | 0.10 | 0.10 | 0.12 | 0.12 | 0.21 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.02 | 0.45 | 0.45 | 0.21 | 0.63 | 0.63 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Volume/Cap: | 0.54 | 0.75 | 0.75 | 0.75 | 0.54 | 0.54 | 0.38 | 0.38 | 0.38 | 0.43 | 0.43 | 0.75 |
| Delay/Veh: | 52.7 | 22.4 | 22.4 | 38.6 | 8.8 | 8.8 | 24.1 | 24.1 | 24.1 | 24.6 | 24.6 | 34.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 52.7 | 22.4 | 22.4 | 38.6 | 8.8 | 8.8 | 24.1 | 24.1 | 24.1 | 24.6 | 24.6 | 34.1 |
| DesignQueue: | 1 | 15 | 1 | 10 | 11 | 0 | 1 | 4 | 1 | 2 | 5 | 11 |





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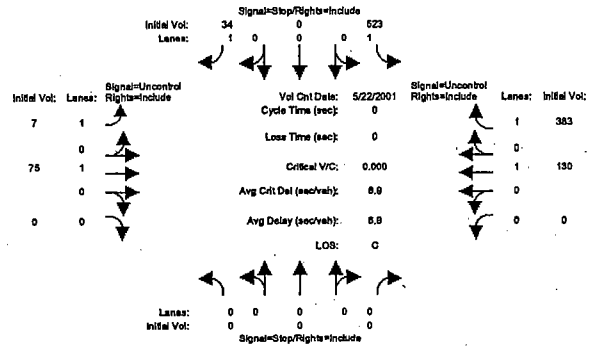
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

## Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** >> Count Date: 22 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 75 | 0 | 0 | 130 | 383 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 75 | 0 | 0 | 130 | 383 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 75 | 0 | 0 | 130 | 383 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 75 | 0 | 0 | 130 | 383 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 75 | 0 | 0 | 130 | 383 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 219 | xxxx | 130 | 513 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 774 | xxxx | 925 | 1063 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 770 | xxxx | 925 | 1063 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 19.0 | xxxx | 9.0 | 8.4 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | C | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 18.4 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | C | | | * | | | * | | |

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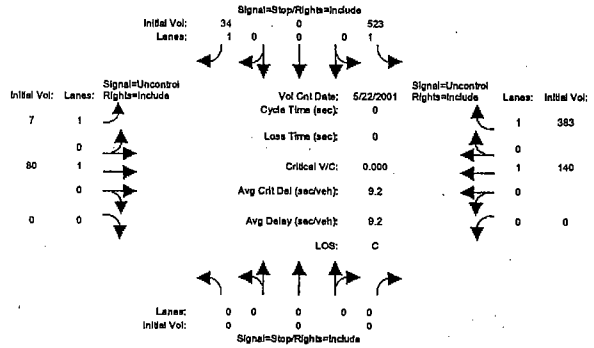
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 PM

Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 22 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 75 | 0 | 0 | 130 | 383 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 75 | 0 | 0 | 130 | 383 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 10 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 80 | 0 | 0 | 140 | 383 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 80 | 0 | 0 | 140 | 383 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 80 | 0 | 0 | 140 | 383 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 234 | xxxx | 140 | 523 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 759 | xxxx | 913 | 1054 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 755 | xxxx | 913 | 1054 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 19.8 | xxxx | 9.1 | 8.4 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | C | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 19.1 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | C | | | * | | | * | | |





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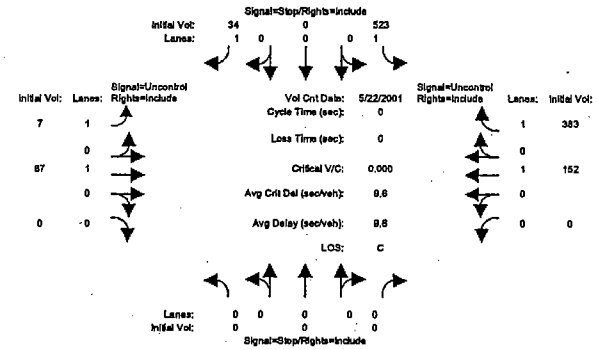
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex + Ph 1 + Ph 2 PM

Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume Module: >> Count Date: 22 May 2001 << | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 75 | 0 | 0 | 130 | 383 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 75 | 0 | 0 | 130 | 383 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 22 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 87 | 0 | 0 | 152 | 383 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 87 | 0 | 0 | 152 | 383 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 523 | 0 | 34 | 7 | 87 | 0 | 0 | 152 | 383 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 253 | xxxx | 152 | 535 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 740 | xxxx | 900 | 1043 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 736 | xxxx | 900 | 1043 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 20.9 | xxxx | 9.2 | 8.5 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | C | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 20.2 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | C | | | * | | | * | | |

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Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

| Intersection | | 2010 No Project AM | | | | 2010 Plus Phase 1 AM | | | | 2010 No Project PM | | | | | | 2010 Plus Phase 1 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LOS | Avg Del (sec) | Crit V/C | Avg Crit Del (sec) | LOS | Avg Del (sec) | Crit V/C | Avg Crit Del (sec) | LOS | Avg Del (sec) | Crit V/C | Crit V/C Change | Avg Crit Del (sec) | Avg Crit Del Change | LOS | Avg Del (sec) | Crit V/C | Avg Crit Del (sec) |
| #1 | Delaware/Shaffer [N/S:Shaffer E/W:Delaware] | A | 1.8 | 0.000 | 1.8 | B | 0.8 | 0.000 | 0.8 | A | 1.5 | 0.000 | + 0.000 | 1.5 | + 0.6 | B | 0.5 | 0.000 | 0.5 |
| #2 | Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware] | A | 8.1 | 0.218 | 8.1 | A | 8.6 | 0.300 | 8.6 | A | 8.6 | 0.182 | - 0.118 | 8.6 | - 0.0 | A | 9.3 | 0.308 | 9.3 |
| #3 | Delaware/Swanton [N/S: Swanton E/W: Delaware] | B | 3.8 | 0.000 | 3.8 | B | 3.6 | 0.000 | 3.6 | B | 3.5 | 0.000 | + 0.000 | 3.5 | - 0.1 | B | 3.2 | 0.000 | 3.2 |
| #4 | Bay/Laguna [N/S:Laguna E/W: Bay] | B | 4.3 | 0.000 | 4.3 | B | 4.4 | 0.000 | 4.4 | B | 4.6 | 0.000 | + 0.000 | 4.6 | + 0.2 | C | 4.9 | 0.000 | 4.9 |
| #5 | SR 1/Shaffer [N/S: Shaffer E/w: SR 1] | B | 2.8 | 0.000 | 2.8 | B | 2.8 | 0.000 | 2.8 | B | 2.8 | 0.000 | + 0.000 | 2.8 | + 0.0 | B | 2.9 | 0.000 | 2.9 |
| #6 | Delaware/Swift [N/S: Swift E/W: Delaware] | B | 12.8 | 0.547 | 12.8 | B | 14.3 | 0.611 | 14.3 | B | 12.6 | 0.577 | - 0.034 | 12.6 | - 1.7 | B | 14.0 | 0.632 | 14.0 |
| #7 | Delaware/Almar [N/S: Almar E/W: Delaware] | B | 10.1 | 0.433 | 10.1 | B | 10.6 | 0.466 | 10.6 | B | 13.5 | 0.657 | + 0.191 | 13.5 | + 2.9 | C | 15.4 | 0.731 | 15.4 |
| #8 | SR 1/Western [N/S: Western E/w: SR 1] | C | 24.0 | 0.487 | 26.0 | C | 24.4 | 0.503 | 26.9 | C | 22.5 | 0.669 | + 0.166 | 23.5 | - 3.4 | C | 23.4 | 0.686 | 25.1 |
| #9 | SR 1/Swift [N/S: Swift E/w: SR 1] | C | 23.3 | 0.425 | 31.4 | C | 23.3 | 0.440 | 31.4 | C | 22.2 | 0.492 | + 0.052 | 27.0 | - 4.4 | C | 22.4 | 0.504 | 27.3 |
| #10 | Mission/Almar [N/S: Almar E/w: Mission] | C | 21.1 | 0.539 | 28.5 | C | 22.0 | 0.567 | 30.1 | C | 24.4 | 0.671 | + 0.103 | 32.5 | + 2.4 | C | 25.9 | 0.706 | 34.5 |
| #11 | Mission/Bay [N/S: Bay E/w: Mission] | D | 37.9 | 0.831 | 38.2 | D | 39.0 | 0.854 | 41.1 | F | 104.6 | 1.166 | + 0.312 | 126.0 | + 84.9 | F | 113.4 | 1.184 | 133.3 |
| #12 | Laurel/California [N/S: California E/w: Laurel] | C | 21.4 | 0.550 | 25.5 | C | 21.5 | 0.555 | 25.7 | C | 25.7 | 0.729 | + 0.173 | 28.7 | + 3.0 | C | 26.0 | 0.732 | 28.9 |
| #13 | Mission/Laurel [N/S: Laurel E/w: Mission] | C | 24.7 | 0.710 | 23.6 | C | 24.8 | 0.719 | 23.6 | D | 41.8 | 0.933 | + 0.214 | 51.0 | + 27.5 | D | 43.8 | 0.955 | 54.4 |
| #14 | Mission/Walnut [N/S: Walnut E/w: Mission] | C | 23.7 | 0.637 | 26.4 | C | 23.7 | 0.645 | 26.3 | B | 19.5 | 0.586 | - 0.059 | 20.7 | - 5.6 | B | 19.2 | 0.606 | 20.5 |
| #15 | Mission/Union [N/S: Union E/w: Mission] | C | 28.3 | 0.780 | 28.4 | C | 28.4 | 0.787 | 28.5 | C | 29.3 | 0.812 | + 0.024 | 27.0 | - 1.4 | C | 29.6 | 0.822 | 27.2 |
| #16 | Mission/Chestnut [N/S: Chestnut E/w: Mission] | F | 81.5 | 1.154 | 112.8 | F | 85.3 | 1.164 | 116.9 | F | 162.6 | 1.375 | + 0.210 | 199.1 | + 82.2 | F | 166.5 | 1.386 | 207.3 |
| #17 | Mission/River [N/S: River E/w: Mission] | D | 45.3 | 0.987 | 64.7 | D | 45.9 | 0.993 | 65.8 | E | 68.2 | 1.070 | + 0.077 | 95.6 | + 29.8 | E | 70.7 | 1.083 | 99.9 |
| #18 | Western/Meder [N/S: Western E/w: Meder] | A | 8.9 | 0.339 | 8.9 | A | 9.0 | 0.347 | 9.0 | A | 9.7 | 0.357 | + 0.010 | 9.7 | + 0.8 | A | 9.9 | 0.372 | 9.9 |
| #19 | High/Western [N/S: Western E/w: High] | F | 11.8 | 0.000 | 11.8 | F | 12.8 | 0.000 | 12.8 | F | 17.0 | 0.000 | + 0.000 | 17.0 | + 4.2 | F | 19.9 | 0.000 | 19.9 |
| #20 | High/Bay [N/S: Bay E/w: High] | C | 20.5 | 0.609 | 22.5 | C | 20.5 | 0.609 | 22.5 | C | 27.7 | 0.760 | + 0.151 | 31.6 | + 9.1 | C | 27.8 | 0.762 | 31.6 |
| #21 | Bay/Iowa [N/S: Bay E/w: Iowa] | B | 11.4 | 0.397 | 9.6 | B | 11.4 | 0.397 | 9.6 | A | 9.9 | 0.512 | + 0.115 | 9.6 | - 0.0 | A | 9.9 | 0.512 | 9.6 |
| #22 | Bay/Escalona [N/S: Bay E/w: Escalana] | F | 13.6 | 0.000 | 13.6 | F | 14.0 | 0.000 | 14.0 | F | 132.0 | 0.000 | + 0.000 | 132.0 | + 118.0 | F | 137.9 | 0.000 | 137.9 |
| #23 | Bay/King [N/S: Bay E/w: King] | C | 22.2 | 0.717 | 27.1 | C | 22.2 | 0.719 | 27.1 | C | 28.0 | 0.865 | + 0.146 | 37.8 | + 10.7 | C | 28.2 | 0.868 | 38.1 |
| #24 | Empire Grade/Heller [N/S: Heller E/w: Empire Grade] | C | 4.1 | 0.000 | 4.1 | C | 4.1 | 0.000 | 4.1 | F | 35.8 | 0.000 | + 0.000 | 35.8 | + 31.6 | F | 38.7 | 0.000 | 38.7 |

Marine Science Center

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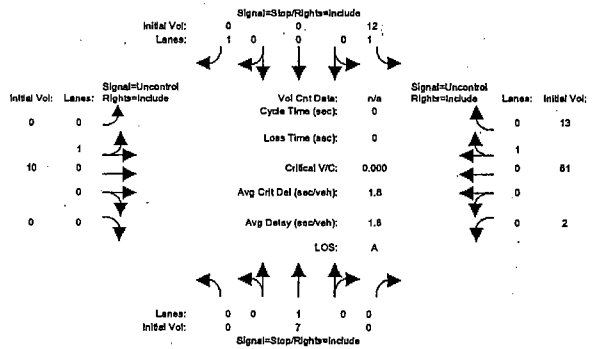
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 No Project AM

Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 6 | 0 | 11 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 12 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 0 | 7 | 0 | 12 | 0 | 0 | 0 | 10 | 0 | 2 | 51 | 13 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 7 | 0 | 12 | 0 | 0 | 0 | 10 | 0 | 2 | 51 | 13 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 7 | 0 | 12 | 0 | 0 | 0 | 10 | 0 | 2 | 51 | 13 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 7 | 0 | 12 | 0 | 0 | 0 | 10 | 0 | 2 | 51 | 13 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | 6.6 | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | xxxxx | 4.1 | xxxxx | 3.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | 78 | xxxxx | 75 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 10 | xxxx | xxxxx |
| Potent Cap.: | xxxx | 801 | xxxxx | 901 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1590 | xxxx | xxxxx |
| Move Cap.: | xxxx | 800 | xxxxx | 894 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1590 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | 9.5 | xxxxx | 9.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.3 | xxxx | xxxxx |
| LOS by Move: | * | A | * | A | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | | 9.5 | | | 9.1 | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | A | | | A | | | * | | | * | |





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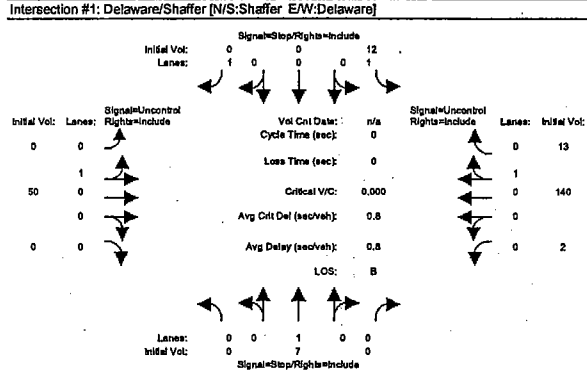
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]



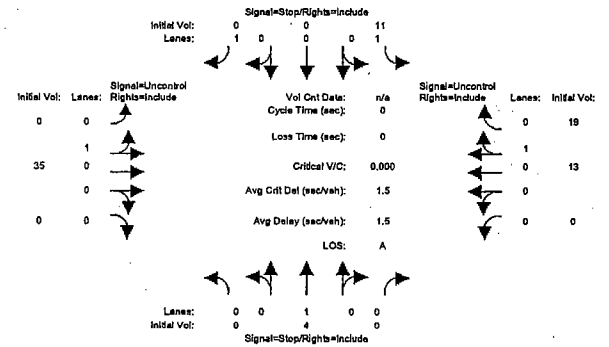

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 6 | 0 | 11 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 12 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 0 | 7 | 0 | 12 | 0 | 0 | 0 | 10 | 0 | 2 | 51 | 13 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 89 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 7 | 0 | 12 | 0 | 0 | 0 | 50 | 0 | 2 | 140 | 13 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 7 | 0 | 12 | 0 | 0 | 0 | 50 | 0 | 2 | 140 | 13 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 7 | 0 | 12 | 0 | 0 | 0 | 50 | 0 | 2 | 140 | 13 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | 6.6 | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | xxxxx | 4.1 | xxxxx | 3.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | 207 | xxxxx | 204 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 50 | xxxx | xxxxx |
| Potent Cap.: | xxxx | 679 | xxxxx | 741 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1538 | xxxx | xxxxx |
| Move Cap.: | xxxx | 678 | xxxxx | 735 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1538 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | 10.4 | xxxxx | 10.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.3 | xxxx | xxxxx |
| LOS by Move: | * | B | * | A | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | | 10.4 | | | 10.0 | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | A | | | * | | | * | |

Marina Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 No Project PM

Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 4 | 0 | 10 | 0 | 0 | 0 | 32 | 0 | 0 | 12 | 17 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 0 | 4 | 0 | 11 | 0 | 0 | 0 | 35 | 0 | 0 | 13 | 19 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 4 | 0 | 11 | 0 | 0 | 0 | 35 | 0 | 0 | 13 | 19 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 4 | 0 | 11 | 0 | 0 | 0 | 35 | 0 | 0 | 13 | 19 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 4 | 0 | 11 | 0 | 0 | 0 | 35 | 0 | 0 | 13 | 19 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | 6.6 | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | 4.1 | xxxxx | 3.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | 67 | xxxxx | 60 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | 812 | xxxxx | 921 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | 812 | xxxxx | 917 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | 9.5 | xxxxx | 9.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | A | * | A | * | * | * | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | | 9.5 | | | 9.0 | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | A | | | A | | | * | | | * | |





Marina Science Center

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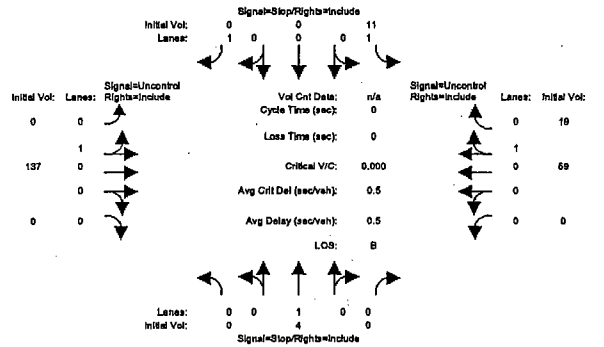
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 4 | 0 | 10 | 0 | 0 | 0 | 32 | 0 | 0 | 12 | 17 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 0 | 4 | 0 | 11 | 0 | 0 | 0 | 35 | 0 | 0 | 13 | 19 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 102 | 0 | 0 | 46 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 4 | 0 | 11 | 0 | 0 | 0 | 137 | 0 | 0 | 59 | 19 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 4 | 0 | 11 | 0 | 0 | 0 | 137 | 0 | 0 | 59 | 19 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 4 | 0 | 11 | 0 | 0 | 0 | 137 | 0 | 0 | 59 | 19 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | 6.6 | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | 4.1 | xxxxx | 3.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | 215 | xxxxx | 208 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | 672 | xxxxx | 737 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | 672 | xxxxx | 733 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | 10.4 | xxxxx | 10.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | B | * | A | * | * | * | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | | 10.4 | | | 10.0 | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | A | | | * | | | * | |

Marine Science Center

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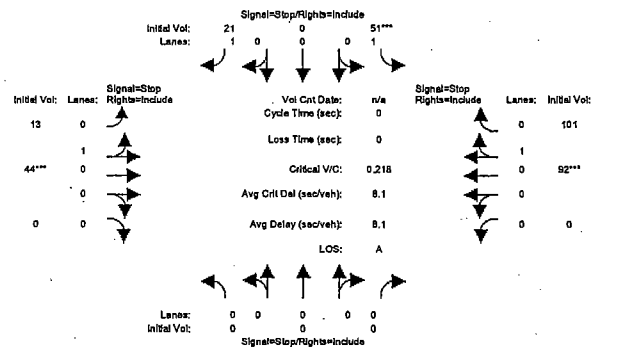
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 No Project AM

Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 40 | 0 | 0 | 84 | 92 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 0 | 0 | 0 | 51 | 0 | 21 | 13 | 44 | 0 | 0 | 92 | 101 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 51 | 0 | 21 | 13 | 44 | 0 | 0 | 92 | 101 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 51 | 0 | 21 | 13 | 44 | 0 | 0 | 92 | 101 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 51 | 0 | 21 | 13 | 44 | 0 | 0 | 92 | 101 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 51 | 0 | 21 | 13 | 44 | 0 | 0 | 92 | 101 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.23 | 0.77 | 0.00 | 0.00 | 0.48 | 0.52 |
| Final Sat.: | 0 | 0 | 0 | 631 | 0 | 798 | 182 | 606 | 0 | 0 | 424 | 464 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.08 | xxxx | 0.03 | 0.07 | 0.07 | xxxx | xxxx | 0.22 | 0.22 |
| Crit Moves: | | | | **** | | | | **** | | | **** | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 8.7 | 0.0 | 7.1 | 7.8 | 7.8 | 0.0 | 0.0 | 8.1 | 8.1 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 8.7 | 0.0 | 7.1 | 7.8 | 7.8 | 0.0 | 0.0 | 8.1 | 8.1 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | | 8.2 | | | 7.8 | | | 8.1 | |
| Delay Adj: | xxxxx | | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | xxxxxx | | | | 8.2 | | | 7.8 | | | 8.1 | |
| LOS by Appr: | * | | | | A | | | A | | | A | |



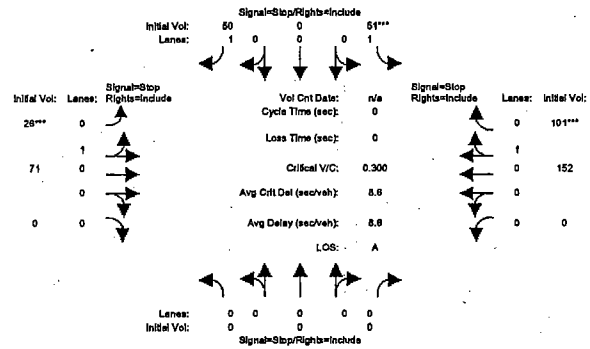


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]



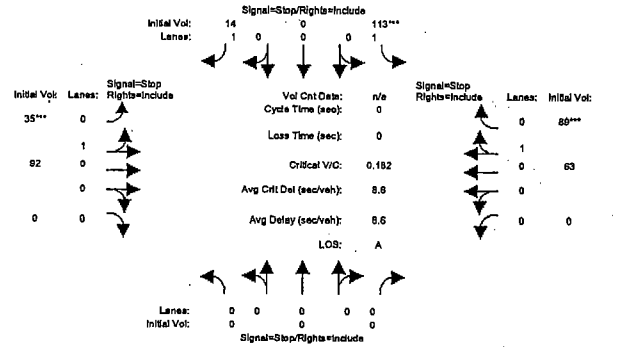

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 40 | 0 | 0 | 84 | 92 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 0 | 0 | 0 | 51 | 0 | 21 | 13 | 44 | 0 | 0 | 92 | 101 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 29 | 13 | 27 | 0 | 0 | 60 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 51 | 0 | 50 | 26 | 71 | 0 | 0 | 152 | 101 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 51 | 0 | 50 | 26 | 71 | 0 | 0 | 152 | 101 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 51 | 0 | 50 | 26 | 71 | 0 | 0 | 152 | 101 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 51 | 0 | 50 | 26 | 71 | 0 | 0 | 152 | 101 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.27 | 0.73 | 0.00 | 0.00 | 0.60 | 0.40 |
| Final Sat.: | 0 | 0 | 0 | 601 | 0 | 750 | 204 | 554 | 0 | 0 | 508 | 337 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.08 | xxxx | 0.07 | 0.13 | 0.13 | xxxx | xxxx | 0.30 | 0.30 |
| Crit Moves: | | | | **** | | | **** | | | | | **** |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 8.9 | 0.0 | 7.5 | 8.3 | 8.3 | 0.0 | 0.0 | 8.9 | 8.9 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 8.9 | 0.0 | 7.5 | 8.3 | 8.3 | 0.0 | 0.0 | 8.9 | 8.9 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | | 8.2 | | | 8.3 | | | 8.9 | |
| Delay Adj: | xxxxx | | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | xxxxxx | | | | 8.2 | | | 8.3 | | | 8.9 | |
| LOS by Appr: | * | | | | A | | | A | | | A | |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 No Project PM

Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 84 | 0 | 0 | 57 | 81 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 0 | 0 | 0 | 113 | 0 | 14 | 35 | 92 | 0 | 0 | 63 | 89 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 113 | 0 | 14 | 35 | 92 | 0 | 0 | 63 | 89 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 113 | 0 | 14 | 35 | 92 | 0 | 0 | 63 | 89 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 113 | 0 | 14 | 35 | 92 | 0 | 0 | 63 | 89 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 113 | 0 | 14 | 35 | 92 | 0 | 0 | 63 | 89 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.28 | 0.72 | 0.00 | 0.00 | 0.41 | 0.59 |
| Final Sat.: | 0 | 0 | 0 | 621 | 0 | 783 | 209 | 549 | 0 | 0 | 344 | 489 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.18 | xxxx | 0.02 | 0.17 | 0.17 | xxxx | xxxx | 0.18 | 0.18 |
| Crit Moves: | | | | **** | | | **** | | | | | **** |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 9.5 | 0.0 | 7.2 | 8.5 | 8.5 | 0.0 | 0.0 | 8.1 | 8.1 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 9.5 | 0.0 | 7.2 | 8.5 | 8.5 | 0.0 | 0.0 | 8.1 | 8.1 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | 9.2 | | | 8.5 | | | 8.1 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 9.2 | | | 8.5 | | | 8.1 | | |
| LOS by Appr: | * | | | A | | | A | | | A | | |



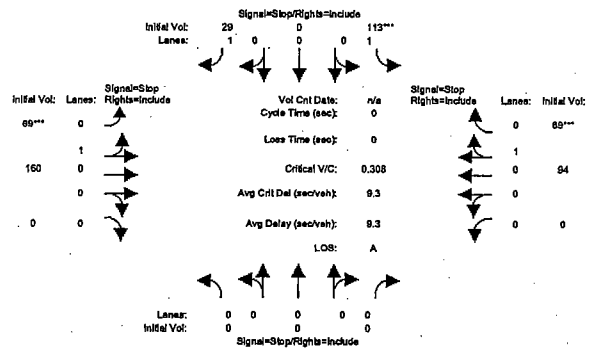


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]



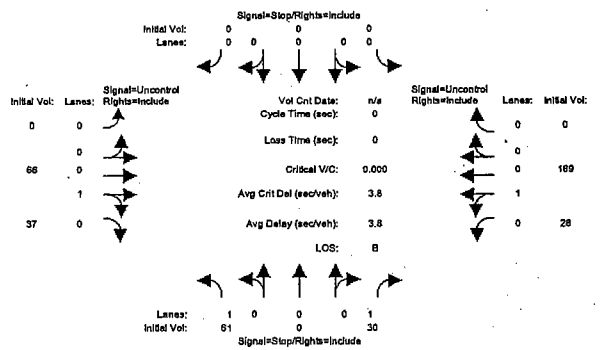

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 84 | 0 | 0 | 57 | 81 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 0 | 0 | 0 | 113 | 0 | 14 | 35 | 92 | 0 | 0 | 63 | 89 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 15 | 34 | 68 | 0 | 0 | 31 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 113 | 0 | 29 | 69 | 160 | 0 | 0 | 94 | 89 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 113 | 0 | 29 | 69 | 160 | 0 | 0 | 94 | 89 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 113 | 0 | 29 | 69 | 160 | 0 | 0 | 94 | 89 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 113 | 0 | 29 | 69 | 160 | 0 | 0 | 94 | 89 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.30 | 0.70 | 0.00 | 0.00 | 0.51 | 0.49 |
| Final Sat.: | 0 | 0 | 0 | 583 | 0 | 722 | 224 | 520 | 0 | 0 | 404 | 384 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.19 | xxxx | 0.04 | 0.31 | 0.31 | xxxx | xxxx | 0.23 | 0.23 |
| Crit Moves: | | | | **** | | | **** | | | | | **** |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 9.9 | 0.0 | 7.6 | 9.7 | 9.7 | 0.0 | 0.0 | 8.7 | 8.7 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 9.9 | 0.0 | 7.6 | 9.7 | 9.7 | 0.0 | 0.0 | 8.7 | 8.7 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | 9.4 | | | 9.7 | | | 8.7 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 9.4 | | | 9.7 | | | 8.7 | | |
| LOS by Appr: | * | | | A | | | A | | | A | | |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 No Project AM

Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 60 | 34 | 25 | 154 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 61 | 0 | 30 | 0 | 0 | 0 | 0 | 66 | 37 | 28 | 169 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 61 | 0 | 30 | 0 | 0 | 0 | 0 | 66 | 37 | 28 | 169 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 61 | 0 | 30 | 0 | 0 | 0 | 0 | 66 | 37 | 28 | 169 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 61 | 0 | 30 | 0 | 0 | 0 | 0 | 66 | 37 | 28 | 169 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 309 | xxxx | 85 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 103 | xxxx | xxxxx |
| Potent Cap.: | 683 | xxxx | 974 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1470 | xxxx | xxxxx |
| Move Cap.: | 673 | xxxx | 974 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1470 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 10.9 | xxxx | 8.8 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.5 | xxxx | xxxxx |
| LOS by Move: | B | * | A | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.5 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 10.2 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |



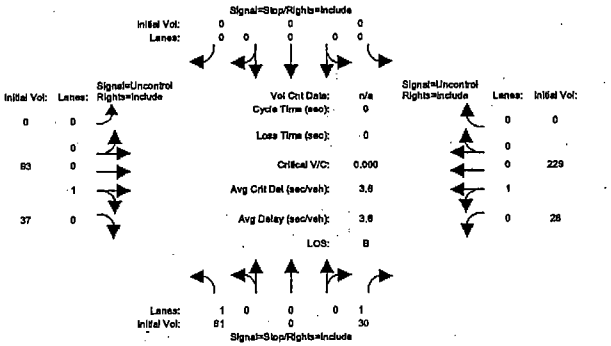


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]



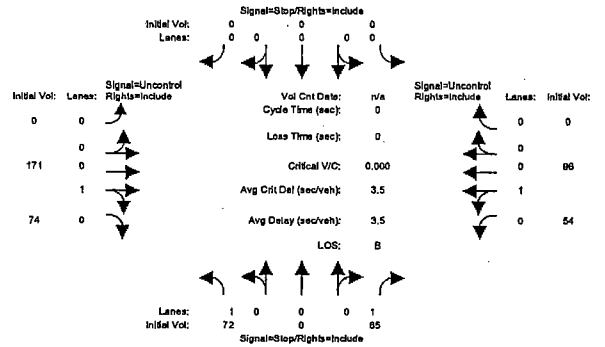

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 60 | 34 | 25 | 154 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 61 | 0 | 30 | 0 | 0 | 0 | 0 | 66 | 37 | 28 | 169 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 0 | 60 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 61 | 0 | 30 | 0 | 0 | 0 | 0 | 93 | 37 | 28 | 229 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 61 | 0 | 30 | 0 | 0 | 0 | 0 | 93 | 37 | 28 | 229 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 61 | 0 | 30 | 0 | 0 | 0 | 0 | 93 | 37 | 28 | 229 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 396 | xxxx | 112 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 130 | xxxx | xxxxx |
| Potent Cap.: | 609 | xxxx | 941 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1437 | xxxx | xxxxx |
| Move Cap.: | 600 | xxxx | 941 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1437 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 11.7 | xxxx | 8.9 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.6 | xxxx | xxxxx |
| LOS by Move: | B | * | A | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.6 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 10.8 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 No Project PM

Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 155 | 67 | 49 | 87 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 72 | 0 | 85 | 0 | 0 | 0 | 0 | 171 | 74 | 54 | 96 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 72 | 0 | 85 | 0 | 0 | 0 | 0 | 171 | 74 | 54 | 96 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 72 | 0 | 85 | 0 | 0 | 0 | 0 | 171 | 74 | 54 | 96 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 72 | 0 | 85 | 0 | 0 | 0 | 0 | 171 | 74 | 54 | 96 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 411 | xxxx | 207 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 244 | xxxx | xxxxx |
| Potent Cap.: | 597 | xxxx | 833 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1305 | xxxx | xxxxx |
| Move Cap.: | 578 | xxxx | 833 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1305 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 12.1 | xxxx | 9.8 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.9 | xxxx | xxxxx |
| LOS by Move: | B | * | A | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.9 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 10.9 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |





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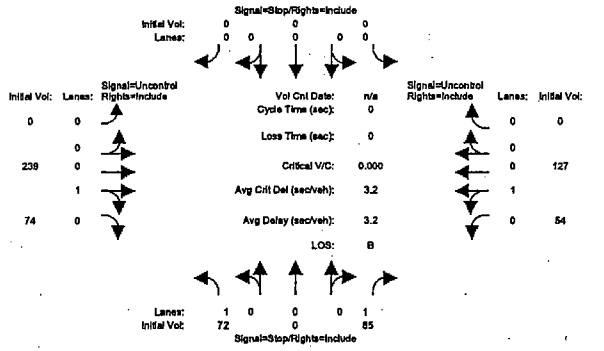
Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 155 | 67 | 49 | 87 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 72 | 0 | 85 | 0 | 0 | 0 | 0 | 171 | 74 | 54 | 96 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 0 | 0 | 31 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 72 | 0 | 85 | 0 | 0 | 0 | 0 | 238 | 74 | 54 | 127 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 72 | 0 | 85 | 0 | 0 | 0 | 0 | 238 | 74 | 54 | 127 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 72 | 0 | 85 | 0 | 0 | 0 | 0 | 238 | 74 | 54 | 127 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 510 | xxxx | 275 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 312 | xxxx | xxxxx |
| Potent Cap.: | 523 | xxxx | 763 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1231 | xxxx | xxxxx |
| Move Cap.: | 505 | xxxx | 763 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1231 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 13.3 | xxxx | 10.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.1 | xxxx | xxxxx |
| LOS by Move: | B | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.1 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 11.7 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |

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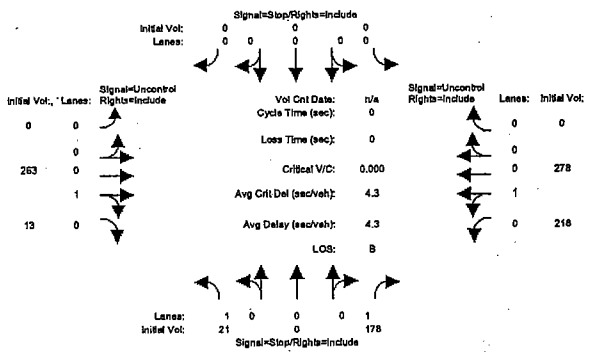
## Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 19 | 0 | 162 | 0 | 0 | 0 | 0 | 239 | 12 | 198 | 253 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 21 | 0 | 178 | 0 | 0 | 0 | 0 | 263 | 13 | 218 | 278 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 21 | 0 | 178 | 0 | 0 | 0 | 0 | 263 | 13 | 218 | 278 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 21 | 0 | 178 | 0 | 0 | 0 | 0 | 263 | 13 | 218 | 278 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 21 | 0 | 178 | 0 | 0 | 0 | 0 | 263 | 13 | 218 | 278 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 983 | xxxx | 270 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 276 | xxxx | xxxxx |
| Potent Cap.: | 278 | xxxx | 774 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1298 | xxxx | xxxxx |
| Move Cap.: | 237 | xxxx | 774 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1298 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 21.6 | xxxx | 11.0 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.3 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.3 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 12.1 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |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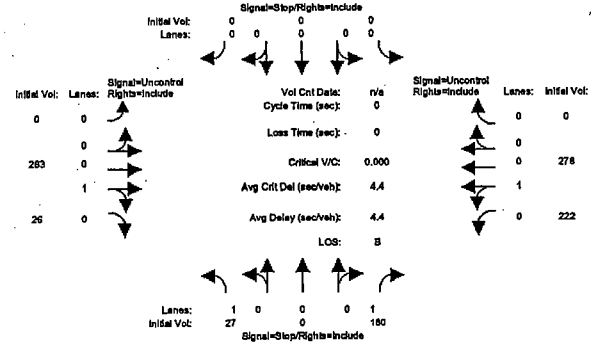
## Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 19 | 0 | 162 | 0 | 0 | 0 | 0 | 239 | 12 | 198 | 253 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 21 | 0 | 178 | 0 | 0 | 0 | 0 | 263 | 13 | 218 | 278 | 0 |
| Added Vol: | 6 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 13 | 4 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 27 | 0 | 180 | 0 | 0 | 0 | 0 | 263 | 26 | 222 | 278 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 27 | 0 | 180 | 0 | 0 | 0 | 0 | 263 | 26 | 222 | 278 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 27 | 0 | 180 | 0 | 0 | 0 | 0 | 263 | 26 | 222 | 278 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 998 | xxxx | 276 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 289 | xxxx | xxxxx |
| Potent Cap.: | 273 | xxxx | 768 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1284 | xxxx | xxxxx |
| Move Cap.: | 231 | xxxx | 768 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1284 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 22.6 | xxxx | 11.1 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.4 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.4 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 12.6 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |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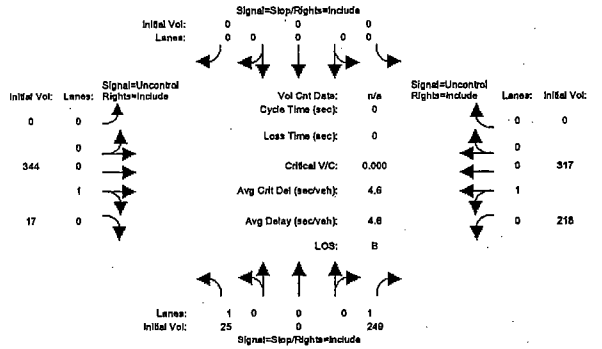
Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 23 | 0 | 226 | 0 | 0 | 0 | 0 | 313 | 15 | 198 | 288 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 25 | 0 | 249 | 0 | 0 | 0 | 0 | 344 | 17 | 218 | 317 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 25 | 0 | 249 | 0 | 0 | 0 | 0 | 344 | 17 | 218 | 317 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 25 | 0 | 249 | 0 | 0 | 0 | 0 | 344 | 17 | 218 | 317 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 25 | 0 | 249 | 0 | 0 | 0 | 0 | 344 | 17 | 218 | 317 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1105 | xxxx | 353 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 361 | xxxx | xxxxx |
| Potent Cap.: | 235 | xxxx | 696 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1209 | xxxx | xxxxx |
| Move Cap.: | 198 | xxxx | 696 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1209 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 25.8 | xxxx | 13.0 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.6 | xxxx | xxxxx |
| LOS by Move: | D | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.6 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 14.2 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |





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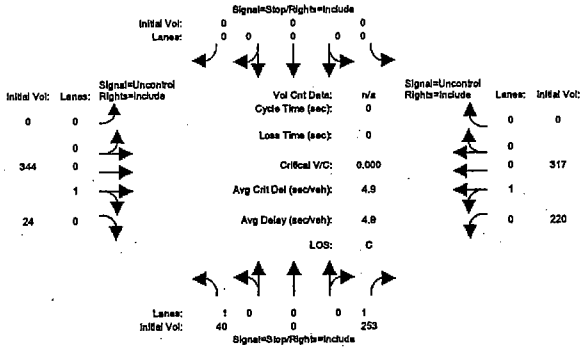
Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 23 | 0 | 226 | 0 | 0 | 0 | 0 | 313 | 15 | 198 | 288 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 25 | 0 | 249 | 0 | 0 | 0 | 0 | 344 | 17 | 218 | 317 | 0 |
| Added Vol: | 15 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 7 | 2 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 40 | 0 | 253 | 0 | 0 | 0 | 0 | 344 | 24 | 220 | 317 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 40 | 0 | 253 | 0 | 0 | 0 | 0 | 344 | 24 | 220 | 317 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 40 | 0 | 253 | 0 | 0 | 0 | 0 | 344 | 24 | 220 | 317 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1112 | xxxx | 356 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 368 | xxxx | xxxxx |
| Potent Cap.: | 233 | xxxx | 693 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1202 | xxxx | xxxxx |
| Move Cap.: | 196 | xxxx | 693 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1202 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 28.1 | xxxx | 13.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.7 | xxxx | xxxxx |
| LOS by Move: | D | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.7 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 15.2 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | C | | | * | | | * | | | * | | |

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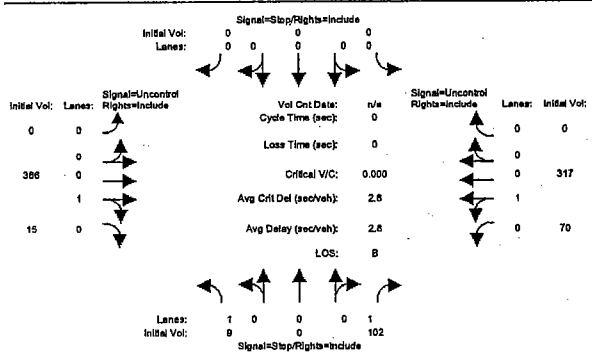
Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 0 | 93 | 0 | 0 | 0 | 0 | 351 | 14 | 64 | 288 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 9 | 0 | 102 | 0 | 0 | 0 | 0 | 386 | 15 | 70 | 317 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 9 | 0 | 102 | 0 | 0 | 0 | 0 | 386 | 15 | 70 | 317 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 9 | 0 | 102 | 0 | 0 | 0 | 0 | 386 | 15 | 70 | 317 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 9 | 0 | 102 | 0 | 0 | 0 | 0 | 386 | 15 | 70 | 317 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 851 | xxxx | 394 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 402 | xxxx | xxxxx |
| Potent Cap.: | 333 | xxxx | 660 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1168 | xxxx | xxxxx |
| Move Cap.: | 317 | xxxx | 660 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1168 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 16.7 | xxxx | 11.5 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.3 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.3 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 11.9 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |





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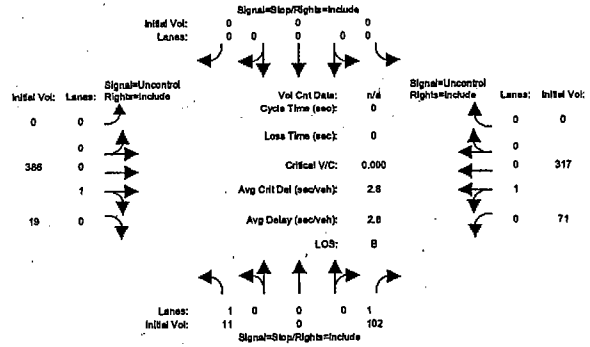
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 0 | 93 | 0 | 0 | 0 | 0 | 351 | 14 | 64 | 288 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 9 | 0 | 102 | 0 | 0 | 0 | 0 | 386 | 15 | 70 | 317 | 0 |
| Added Vol: | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 11 | 0 | 102 | 0 | 0 | 0 | 0 | 386 | 19 | 71 | 317 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 11 | 0 | 102 | 0 | 0 | 0 | 0 | 386 | 19 | 71 | 317 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 11 | 0 | 102 | 0 | 0 | 0 | 0 | 386 | 19 | 71 | 317 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 855 | xxxx | 396 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 406 | xxxx | xxxxx |
| Potent Cap.: | 331 | xxxx | 658 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1164 | xxxx | xxxxx |
| Move Cap.: | 315 | xxxx | 658 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1164 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 16.8 | xxxx | 11.5 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.3 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.3 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 12.0 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |

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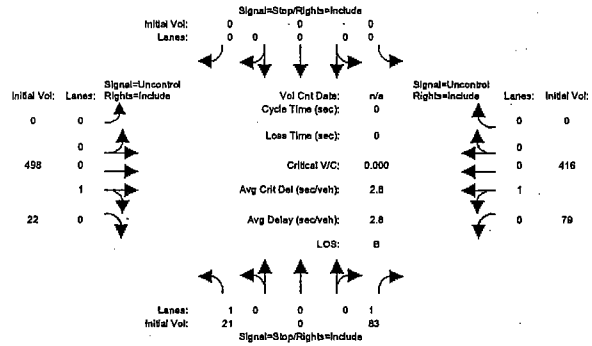
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 No Project PM

Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 19 | 0 | 75 | 0 | 0 | 0 | 0 | 453 | 20 | 72 | 378 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 21 | 0 | 83 | 0 | 0 | 0 | 0 | 498 | 22 | 79 | 416 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 21 | 0 | 83 | 0 | 0 | 0 | 0 | 498 | 22 | 79 | 416 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 21 | 0 | 83 | 0 | 0 | 0 | 0 | 498 | 22 | 79 | 416 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 21 | 0 | 83 | 0 | 0 | 0 | 0 | 498 | 22 | 79 | 416 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1083 | xxxx | 509 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 520 | xxxx | xxxxx |
| Potent Cap.: | 242 | xxxx | 568 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1056 | xxxx | xxxxx |
| Move Cap.: | 228 | xxxx | 568 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1056 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 22.4 | xxxx | 12.4 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.7 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.7 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 14.4 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |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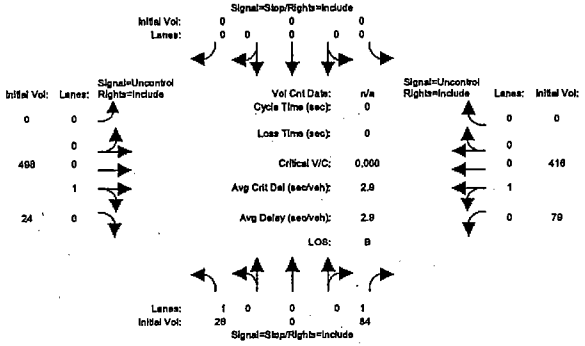
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 19 | 0 | 75 | 0 | 0 | 0 | 0 | 453 | 20 | 72 | 378 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 21 | 0 | 83 | 0 | 0 | 0 | 0 | 498 | 22 | 79 | 416 | 0 |
| Added Vol: | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 26 | 0 | 84 | 0 | 0 | 0 | 0 | 498 | 24 | 79 | 416 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 26 | 0 | 84 | 0 | 0 | 0 | 0 | 498 | 24 | 79 | 416 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 26 | 0 | 84 | 0 | 0 | 0 | 0 | 498 | 24 | 79 | 416 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1085 | xxxx | 510 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 522 | xxxx | xxxxx |
| Potent Cap.: | 242 | xxxx | 567 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1054 | xxxx | xxxxx |
| Move Cap.: | 228 | xxxx | 567 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1054 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 22.8 | xxxx | 12.4 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.7 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.7 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 14.9 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |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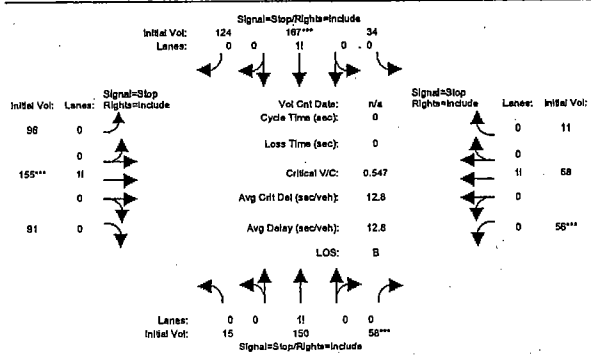
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 No Project AM

Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 14 | 136 | 53 | 31 | 152 | 113 | 87 | 141 | 83 | 51 | 53 | 10 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 15 | 150 | 58 | 34 | 167 | 124 | 96 | 155 | 91 | 56 | 58 | 11 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 15 | 150 | 58 | 34 | 167 | 124 | 96 | 155 | 91 | 56 | 58 | 11 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 15 | 150 | 58 | 34 | 167 | 124 | 96 | 155 | 91 | 56 | 58 | 11 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 15 | 150 | 58 | 34 | 167 | 124 | 96 | 155 | 91 | 56 | 58 | 11 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 15 | 150 | 58 | 34 | 167 | 124 | 96 | 155 | 91 | 56 | 58 | 11 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.07 | 0.67 | 0.26 | 0.10 | 0.52 | 0.38 | 0.28 | 0.45 | 0.27 | 0.45 | 0.46 | 0.09 |
| Final Sat.: | 41 | 401 | 156 | 67 | 327 | 243 | 175 | 283 | 167 | 240 | 250 | 47 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.37 | 0.37 | 0.37 | 0.51 | 0.51 | 0.51 | 0.55 | 0.55 | 0.55 | 0.23 | 0.23 | 0.23 |
| Crit Moves: | | | **** | | **** | | | **** | | **** | | |
| Delay/Veh: | 11.4 | 11.4 | 11.4 | 13.2 | 13.2 | 13.2 | 14.1 | 14.1 | 14.1 | 10.5 | 10.5 | 10.5 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 11.4 | 11.4 | 11.4 | 13.2 | 13.2 | 13.2 | 14.1 | 14.1 | 14.1 | 10.5 | 10.5 | 10.5 |
| LOS by Move: | B | B | B | B | B | B | B | B | B | B | B | B |
| ApproachDel: | | 11.4 | | | 13.2 | | | 14.1 | | | 10.5 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 11.4 | | | 13.2 | | | 14.1 | | | 10.5 | |
| LOS by Appr: | | B | | | B | | | B | | | B | |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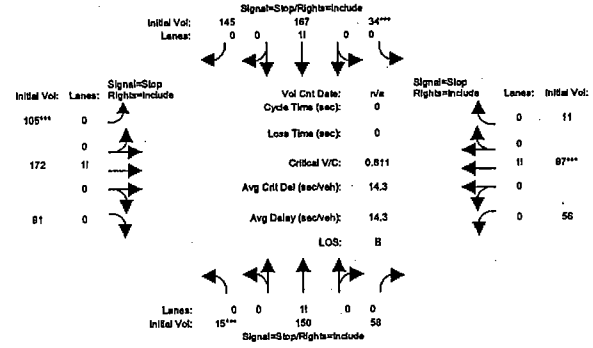
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 14 | 136 | 53 | 31 | 152 | 113 | 87 | 141 | 83 | 51 | 53 | 10 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 15 | 150 | 58 | 34 | 167 | 124 | 96 | 155 | 91 | 56 | 58 | 11 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 21 | 9 | 17 | 0 | 0 | 39 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 15 | 150 | 58 | 34 | 167 | 145 | 105 | 172 | 91 | 56 | 97 | 11 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 15 | 150 | 58 | 34 | 167 | 145 | 105 | 172 | 91 | 56 | 97 | 11 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 15 | 150 | 58 | 34 | 167 | 145 | 105 | 172 | 91 | 56 | 97 | 11 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 15 | 150 | 58 | 34 | 167 | 145 | 105 | 172 | 91 | 56 | 97 | 11 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.07 | 0.67 | 0.26 | 0.10 | 0.48 | 0.42 | 0.28 | 0.47 | 0.25 | 0.34 | 0.59 | 0.07 |
| Final Sat.: | 39 | 375 | 146 | 60 | 293 | 255 | 171 | 281 | 149 | 177 | 308 | 35 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.40 | 0.40 | 0.40 | 0.57 | 0.57 | 0.57 | 0.61 | 0.61 | 0.61 | 0.32 | 0.32 | 0.32 |
| Crit Moves: | **** | | | **** | | | **** | | | | **** | |
| Delay/Veh: | 12.2 | 12.2 | 12.2 | 14.8 | 14.8 | 14.8 | 16.2 | 16.2 | 16.2 | 11.6 | 11.6 | 11.6 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 12.2 | 12.2 | 12.2 | 14.8 | 14.8 | 14.8 | 16.2 | 16.2 | 16.2 | 11.6 | 11.6 | 11.6 |
| LOS by Move: | B | B | B | B | B | B | C | C | C | B | B | B |
| ApproachDel: | | 12.2 | | | 14.8 | | | 16.2 | | | 11.6 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 12.2 | | | 14.8 | | | 16.2 | | | 11.6 | |
| LOS by Appr: | | B | | | B | | | C | | | B | |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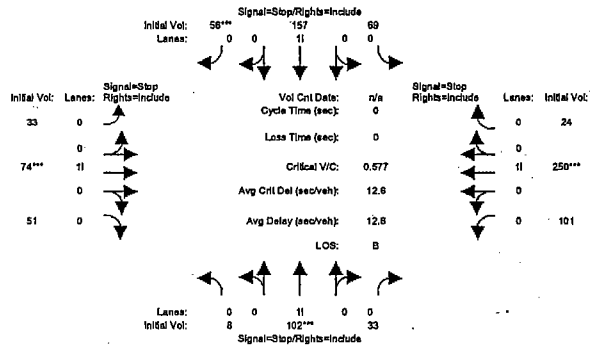
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 No Project PM

Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 7 | 93 | 30 | 63 | 143 | 51 | 30 | 67 | 46 | 92 | 227 | 22 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 8 | 102 | 33 | 69 | 157 | 56 | 33 | 74 | 51 | 101 | 250 | 24 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 8 | 102 | 33 | 69 | 157 | 56 | 33 | 74 | 51 | 101 | 250 | 24 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 8 | 102 | 33 | 69 | 157 | 56 | 33 | 74 | 51 | 101 | 250 | 24 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 8 | 102 | 33 | 69 | 157 | 56 | 33 | 74 | 51 | 101 | 250 | 24 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 8 | 102 | 33 | 69 | 157 | 56 | 33 | 74 | 51 | 101 | 250 | 24 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.05 | 0.72 | 0.23 | 0.24 | 0.56 | 0.20 | 0.21 | 0.47 | 0.32 | 0.27 | 0.67 | 0.06 |
| Final Sat.: | 31 | 412 | 133 | 152 | 344 | 123 | 126 | 281 | 193 | 175 | 433 | 42 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.25 | 0.25 | 0.25 | 0.46 | 0.46 | 0.46 | 0.26 | 0.26 | 0.26 | 0.58 | 0.58 | 0.58 |
| Crit Moves: | | **** | | | | **** | | **** | | | **** | |
| Delay/Veh: | 10.2 | 10.2 | 10.2 | 12.5 | 12.5 | 12.5 | 10.2 | 10.2 | 10.2 | 14.7 | 14.7 | 14.7 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.2 | 10.2 | 10.2 | 12.5 | 12.5 | 12.5 | 10.2 | 10.2 | 10.2 | 14.7 | 14.7 | 14.7 |
| LOS by Move: | B | B | B | B | B | B | B | B | B | B | B | B |
| ApproachDel: | | 10.2 | | | 12.5 | | | 10.2 | | | 14.7 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.2 | | | 12.5 | | | 10.2 | | | 14.7 | |
| LOS by Appr: | | B | | | B | | | B | | | B | |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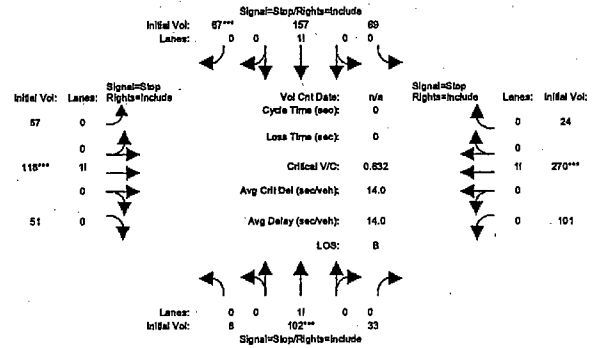
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 7 | 93 | 30 | 63 | 143 | 51 | 30 | 67 | 46 | 92 | 227 | 22 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 8 | 102 | 33 | 69 | 157 | 56 | 33 | 74 | 51 | 101 | 250 | 24 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 11 | 24 | 44 | 0 | 0 | 20 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 8 | 102 | 33 | 69 | 157 | 67 | 57 | 118 | 51 | 101 | 270 | 24 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 8 | 102 | 33 | 69 | 157 | 67 | 57 | 118 | 51 | 101 | 270 | 24 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 8 | 102 | 33 | 69 | 157 | 67 | 57 | 118 | 51 | 101 | 270 | 24 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 8 | 102 | 33 | 69 | 157 | 67 | 57 | 118 | 51 | 101 | 270 | 24 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.05 | 0.72 | 0.23 | 0.24 | 0.53 | 0.23 | 0.25 | 0.53 | 0.22 | 0.26 | 0.68 | 0.06 |
| Final Sat.: | 29 | 380 | 122 | 138 | 314 | 134 | 147 | 304 | 131 | 160 | 427 | 38 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.27 | 0.27 | 0.27 | 0.50 | 0.50 | 0.50 | 0.39 | 0.39 | 0.39 | 0.63 | 0.63 | 0.63 |
| Crit Moves: | | **** | | | | **** | | **** | | | **** | |
| Delay/Veh: | 10.8 | 10.8 | 10.8 | 13.7 | 13.7 | 13.7 | 11.8 | 11.8 | 11.8 | 16.7 | 16.7 | 16.7 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.8 | 10.8 | 10.8 | 13.7 | 13.7 | 13.7 | 11.8 | 11.8 | 11.8 | 16.7 | 16.7 | 16.7 |
| LOS by Move: | B | B | B | B | B | B | B | B | B | C | C | C |
| ApproachDel: | | 10.8 | | | 13.7 | | | 11.8 | | | 16.7 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.8 | | | 13.7 | | | 11.8 | | | 16.7 | |
| LOS by Appr: | | B | | | B | | | B | | | C | |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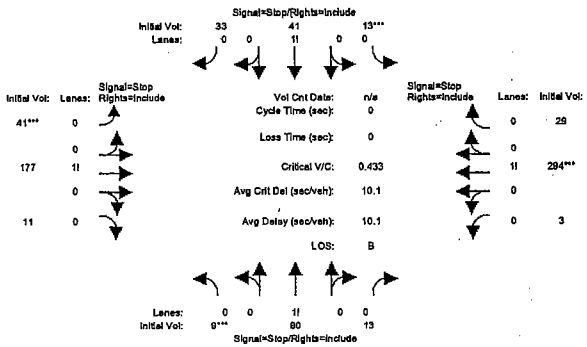
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 No Project AM

Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 161 | 10 | 3 | 267 | 26 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 9 | 90 | 13 | 13 | 41 | 33 | 41 | 177 | 11 | 3 | 294 | 29 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 9 | 90 | 13 | 13 | 41 | 33 | 41 | 177 | 11 | 3 | 294 | 29 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 9 | 90 | 13 | 13 | 41 | 33 | 41 | 177 | 11 | 3 | 294 | 29 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 9 | 90 | 13 | 13 | 41 | 33 | 41 | 177 | 11 | 3 | 294 | 29 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 9 | 90 | 13 | 13 | 41 | 33 | 41 | 177 | 11 | 3 | 294 | 29 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.08 | 0.80 | 0.12 | 0.15 | 0.47 | 0.38 | 0.18 | 0.77 | 0.05 | 0.01 | 0.90 | 0.09 |
| Final Sat.: | 49 | 505 | 74 | 96 | 297 | 241 | 128 | 557 | 35 | 8 | 678 | 66 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.18 | 0.18 | 0.18 | 0.14 | 0.14 | 0.14 | 0.32 | 0.32 | 0.32 | 0.43 | 0.43 | 0.43 |
| Crit Moves: | **** | | | **** | | | **** | | | | **** | |
| Delay/Veh: | 9.2 | 9.2 | 9.2 | 8.9 | 8.9 | 8.9 | 9.9 | 9.9 | 9.9 | 10.9 | 10.9 | 10.9 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.2 | 9.2 | 9.2 | 8.9 | 8.9 | 8.9 | 9.9 | 9.9 | 9.9 | 10.9 | 10.9 | 10.9 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | B | B | B |
| ApproachDel: | | 9.2 | | | 8.9 | | | 9.9 | | | 10.9 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 9.2 | | | 8.9 | | | 9.9 | | | 10.9 | |
| LOS by Appr: | | A | | | A | | | A | | | B | |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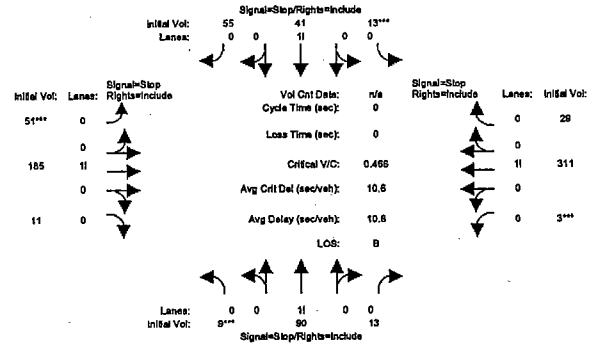
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 161 | 10 | 3 | 267 | 26 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 9 | 90 | 13 | 13 | 41 | 33 | 41 | 177 | 11 | 3 | 294 | 29 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 22 | 10 | 8 | 0 | 0 | 17 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 9 | 90 | 13 | 13 | 41 | 55 | 51 | 185 | 11 | 3 | 311 | 29 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 9 | 90 | 13 | 13 | 41 | 55 | 51 | 185 | 11 | 3 | 311 | 29 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 9 | 90 | 13 | 13 | 41 | 55 | 51 | 185 | 11 | 3 | 311 | 29 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 9 | 90 | 13 | 13 | 41 | 55 | 51 | 185 | 11 | 3 | 311 | 29 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.08 | 0.80 | 0.12 | 0.12 | 0.37 | 0.51 | 0.21 | 0.75 | 0.04 | 0.01 | 0.91 | 0.08 |
| Final Sat.: | 48 | 488 | 71 | 76 | 235 | 317 | 145 | 528 | 31 | 7 | 667 | 61 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.18 | 0.18 | 0.18 | 0.17 | 0.17 | 0.17 | 0.35 | 0.35 | 0.35 | 0.47 | 0.47 | 0.47 |
| Crit Moves: | **** | | | **** | | | **** | | | | **** | |
| Delay/Veh: | 9.4 | 9.4 | 9.4 | 9.1 | 9.1 | 9.1 | 10.4 | 10.4 | 10.4 | 11.6 | 11.6 | 11.6 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.4 | 9.4 | 9.4 | 9.1 | 9.1 | 9.1 | 10.4 | 10.4 | 10.4 | 11.6 | 11.6 | 11.6 |
| LOS by Move: | A | A | A | A | A | A | B | B | B | B | B | B |
| ApproachDel: | | 9.4 | | | 9.1 | | | 10.4 | | | 11.6 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 9.4 | | | 9.1 | | | 10.4 | | | 11.6 | |
| LOS by Appr: | | A | | | A | | | B | | | B | |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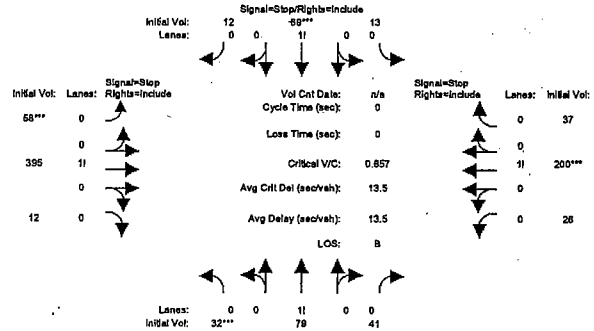
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 No Project PM

Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 359 | 11 | 24 | 182 | 34 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 32 | 79 | 41 | 13 | 69 | 12 | 58 | 395 | 12 | 26 | 200 | 37 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 32 | 79 | 41 | 13 | 69 | 12 | 58 | 395 | 12 | 26 | 200 | 37 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 32 | 79 | 41 | 13 | 69 | 12 | 58 | 395 | 12 | 26 | 200 | 37 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 32 | 79 | 41 | 13 | 69 | 12 | 58 | 395 | 12 | 26 | 200 | 37 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 32 | 79 | 41 | 13 | 69 | 12 | 58 | 395 | 12 | 26 | 200 | 37 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.21 | 0.52 | 0.27 | 0.14 | 0.73 | 0.13 | 0.12 | 0.85 | 0.03 | 0.10 | 0.76 | 0.14 |
| Final Sat.: | 120 | 297 | 153 | 75 | 395 | 69 | 89 | 601 | 18 | 67 | 506 | 94 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.27 | 0.27 | 0.27 | 0.18 | 0.18 | 0.18 | 0.66 | 0.66 | 0.66 | 0.40 | 0.40 | 0.40 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |
| Delay/Veh: | 10.5 | 10.5 | 10.5 | 9.9 | 9.9 | 9.9 | 16.4 | 16.4 | 16.4 | 11.2 | 11.2 | 11.2 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.5 | 10.5 | 10.5 | 9.9 | 9.9 | 9.9 | 16.4 | 16.4 | 16.4 | 11.2 | 11.2 | 11.2 |
| LOS by Move: | B | B | B | A | A | A | C | C | C | B | B | B |
| ApproachDel: | | 10.5 | | | 9.9 | | | 16.4 | | | 11.2 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.5 | | | 9.9 | | | 16.4 | | | 11.2 | |
| LOS by Appr: | | B | | | A | | | C | | | B | |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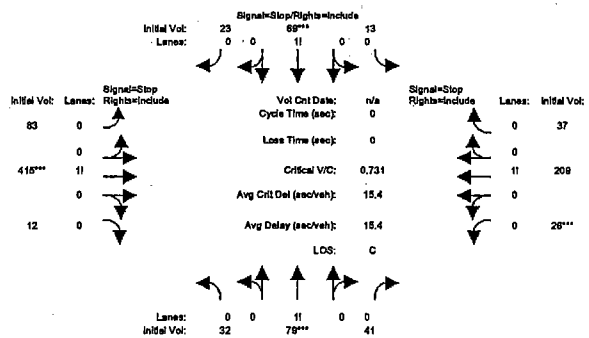
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 359 | 11 | 24 | 182 | 34 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 32 | 79 | 41 | 13 | 69 | 12 | 58 | 395 | 12 | 26 | 200 | 37 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 11 | 25 | 20 | 0 | 0 | 9 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 32 | 79 | 41 | 13 | 69 | 23 | 83 | 415 | 12 | 26 | 209 | 37 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 32 | 79 | 41 | 13 | 69 | 23 | 83 | 415 | 12 | 26 | 209 | 37 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 32 | 79 | 41 | 13 | 69 | 23 | 83 | 415 | 12 | 26 | 209 | 37 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 32 | 79 | 41 | 13 | 69 | 23 | 83 | 415 | 12 | 26 | 209 | 37 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.21 | 0.52 | 0.27 | 0.12 | 0.66 | 0.22 | 0.16 | 0.82 | 0.02 | 0.10 | 0.76 | 0.14 |
| Final Sat.: | 115 | 286 | 147 | 66 | 345 | 115 | 114 | 568 | 17 | 63 | 497 | 89 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.28 | 0.28 | 0.28 | 0.20 | 0.20 | 0.20 | 0.73 | 0.73 | 0.73 | 0.42 | 0.42 | 0.42 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Delay/Veh: | 10.8 | 10.8 | 10.8 | 10.3 | 10.3 | 10.3 | 19.7 | 19.7 | 19.7 | 11.7 | 11.7 | 11.7 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.8 | 10.8 | 10.8 | 10.3 | 10.3 | 10.3 | 19.7 | 19.7 | 19.7 | 11.7 | 11.7 | 11.7 |
| LOS by Move: | B | B | B | B | B | B | C | C | C | B | B | B |
| ApproachDel: | | 10.8 | | | 10.3 | | | 19.7 | | | 11.7 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.8 | | | 10.3 | | | 19.7 | | | 11.7 | |
| LOS by Appr: | | B | | | B | | | C | | | B | |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Marine Science Center

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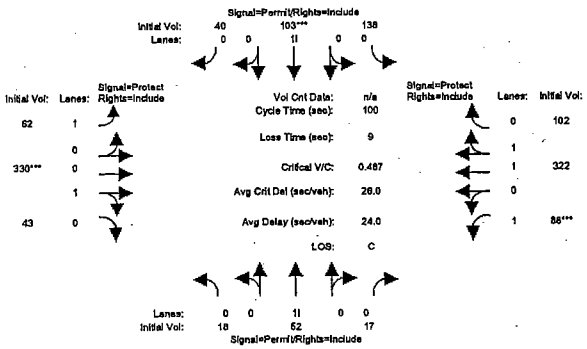
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project AM

Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 16 | 47 | 15 | 125 | 94 | 36 | 56 | 300 | 39 | 80 | 293 | 93 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 18 | 52 | 17 | 138 | 103 | 40 | 62 | 330 | 43 | 88 | 322 | 102 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 18 | 52 | 17 | 138 | 103 | 40 | 62 | 330 | 43 | 88 | 322 | 102 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 18 | 52 | 17 | 138 | 103 | 40 | 62 | 330 | 43 | 88 | 322 | 102 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 18 | 52 | 17 | 138 | 103 | 40 | 62 | 330 | 43 | 88 | 322 | 102 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 18 | 52 | 17 | 138 | 103 | 40 | 62 | 330 | 43 | 88 | 322 | 102 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.88 | 0.88 | 0.88 | 0.78 | 0.78 | 0.78 | 0.93 | 0.96 | 0.96 | 0.93 | 0.90 | 0.90 |
| Lanes: | 0.21 | 0.60 | 0.19 | 0.49 | 0.37 | 0.14 | 1.00 | 0.88 | 0.12 | 1.00 | 1.52 | 0.48 |
| Final Sat.: | 343 | 1009 | 322 | 723 | 544 | 208 | 1769 | 1620 | 211 | 1769 | 2589 | 822 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.05 | 0.05 | 0.19 | 0.19 | 0.19 | 0.03 | 0.20 | 0.20 | 0.05 | 0.12 | 0.12 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.11 | 0.42 | 0.42 | 0.10 | 0.41 | 0.41 |
| Volume/Cap: | 0.13 | 0.13 | 0.13 | 0.49 | 0.49 | 0.49 | 0.31 | 0.49 | 0.49 | 0.49 | 0.31 | 0.31 |
| Delay/Veh: | 19.7 | 19.7 | 19.7 | 23.6 | 23.6 | 23.6 | 41.6 | 21.8 | 21.8 | 44.5 | 20.2 | 20.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 19.7 | 19.7 | 19.7 | 23.6 | 23.6 | 23.6 | 41.6 | 21.8 | 21.8 | 44.5 | 20.2 | 20.2 |
| DesignQueue: | 1 | 2 | 1 | 5 | 4 | 1 | 3 | 11 | 1 | 4 | 11 | 3 |





Marine Science Center

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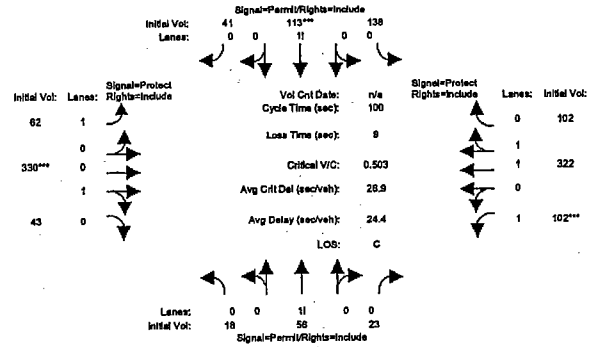
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 16 | 47 | 15 | 125 | 94 | 36 | 56 | 300 | 39 | 80 | 293 | 93 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 18 | 52 | 17 | 138 | 103 | 40 | 62 | 330 | 43 | 88 | 322 | 102 |
| Added Vol: | 0 | 4 | 6 | 0 | 10 | 1 | 0 | 0 | 0 | 14 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 18 | 56 | 23 | 138 | 113 | 41 | 62 | 330 | 43 | 102 | 322 | 102 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 18 | 56 | 23 | 138 | 113 | 41 | 62 | 330 | 43 | 102 | 322 | 102 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 18 | 56 | 23 | 138 | 113 | 41 | 62 | 330 | 43 | 102 | 322 | 102 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 18 | 56 | 23 | 138 | 113 | 41 | 62 | 330 | 43 | 102 | 322 | 102 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.88 | 0.88 | 0.88 | 0.78 | 0.78 | 0.78 | 0.93 | 0.96 | 0.96 | 0.93 | 0.90 | 0.90 |
| Lanes: | 0.18 | 0.59 | 0.23 | 0.47 | 0.39 | 0.14 | 1.00 | 0.88 | 0.12 | 1.00 | 1.52 | 0.48 |
| Final Sat.: | 307 | 973 | 393 | 700 | 577 | 207 | 1769 | 1620 | 211 | 1769 | 2589 | 822 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.06 | 0.06 | 0.20 | 0.20 | 0.20 | 0.03 | 0.20 | 0.20 | 0.06 | 0.12 | 0.12 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.11 | 0.40 | 0.40 | 0.11 | 0.41 | 0.41 |
| Volume/Cap: | 0.15 | 0.15 | 0.15 | 0.50 | 0.50 | 0.50 | 0.31 | 0.50 | 0.50 | 0.50 | 0.31 | 0.31 |
| Delay/Veh: | 19.8 | 19.8 | 19.8 | 23.8 | 23.8 | 23.8 | 41.6 | 22.8 | 22.8 | 43.6 | 20.3 | 20.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 19.8 | 19.8 | 19.8 | 23.8 | 23.8 | 23.8 | 41.6 | 22.8 | 22.8 | 43.6 | 20.3 | 20.3 |
| DesignQueue: | 1 | 2 | 1 | 5 | 4 | 1 | 3 | 12 | 1 | 5 | 11 | 3 |

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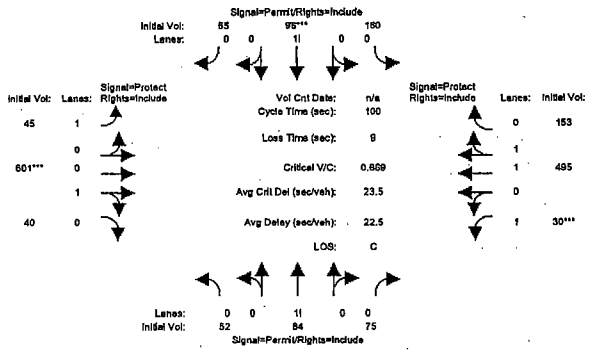
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project PM

Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 47 | 76 | 68 | 145 | 87 | 50 | 41 | 546 | 36 | 27 | 450 | 139 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 52 | 84 | 75 | 160 | 96 | 55 | 45 | 601 | 40 | 30 | 495 | 153 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 52 | 84 | 75 | 160 | 96 | 55 | 45 | 601 | 40 | 30 | 495 | 153 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 52 | 84 | 75 | 160 | 96 | 55 | 45 | 601 | 40 | 30 | 495 | 153 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 52 | 84 | 75 | 160 | 96 | 55 | 45 | 601 | 40 | 30 | 495 | 153 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 52 | 84 | 75 | 160 | 96 | 55 | 45 | 601 | 40 | 30 | 495 | 153 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.81 | 0.81 | 0.81 | 0.67 | 0.67 | 0.67 | 0.93 | 0.97 | 0.97 | 0.93 | 0.90 | 0.90 |
| Lanes: | 0.25 | 0.40 | 0.35 | 0.51 | 0.31 | 0.18 | 1.00 | 0.94 | 0.06 | 1.00 | 1.53 | 0.47 |
| Final Sat.: | 379 | 614 | 549 | 650 | 390 | 224 | 1769 | 1731 | 114 | 1769 | 2608 | 806 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.14 | 0.14 | 0.14 | 0.25 | 0.25 | 0.25 | 0.03 | 0.35 | 0.35 | 0.02 | 0.19 | 0.19 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.06 | 0.52 | 0.52 | 0.03 | 0.48 | 0.48 |
| Volume/Cap: | 0.37 | 0.37 | 0.37 | 0.67 | 0.67 | 0.67 | 0.40 | 0.67 | 0.67 | 0.67 | 0.40 | 0.40 |
| Delay/Veh: | 23.6 | 23.6 | 23.6 | 30.3 | 30.3 | 30.3 | 47.2 | 19.6 | 19.6 | 81.3 | 16.9 | 16.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 23.6 | 23.6 | 23.6 | 30.3 | 30.3 | 30.3 | 47.2 | 19.6 | 19.6 | 81.3 | 16.9 | 16.9 |
| DesignQueue: | 2 | 3 | 3 | 6 | 4 | 2 | 2 | 18 | 1 | 2 | 15 | 5 |





Marine Science Center

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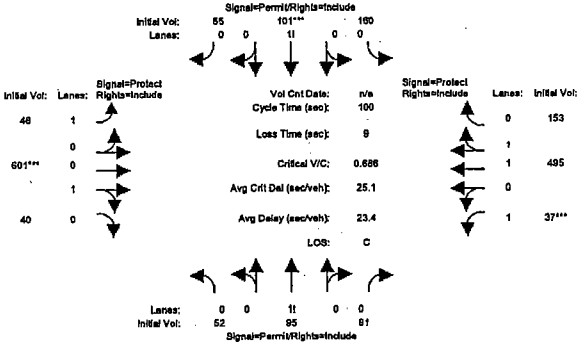
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]



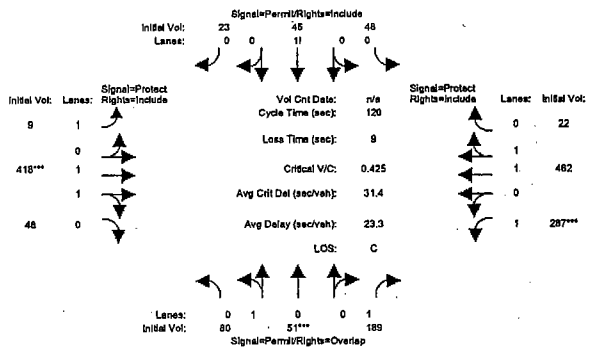

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 47 | 76 | 68 | 145 | 87 | 50 | 41 | 546 | 36 | 27 | 450 | 139 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 52 | 84 | 75 | 160 | 96 | 55 | 45 | 601 | 40 | 30 | 495 | 153 |
| Added Vol: | 0 | 11 | 16 | 0 | 5 | 0 | 1 | 0 | 0 | 7 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 52 | 95 | 91 | 160 | 101 | 55 | 46 | 601 | 40 | 37 | 495 | 153 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 52 | 95 | 91 | 160 | 101 | 55 | 46 | 601 | 40 | 37 | 495 | 153 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 52 | 95 | 91 | 160 | 101 | 55 | 46 | 601 | 40 | 37 | 495 | 153 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 52 | 95 | 91 | 160 | 101 | 55 | 46 | 601 | 40 | 37 | 495 | 153 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.82 | 0.82 | 0.82 | 0.65 | 0.65 | 0.65 | 0.93 | 0.97 | 0.97 | 0.93 | 0.90 | 0.90 |
| Lanes: | 0.22 | 0.40 | 0.38 | 0.51 | 0.32 | 0.17 | 1.00 | 0.94 | 0.06 | 1.00 | 1.53 | 0.47 |
| Final Sat.: | 339 | 621 | 596 | 622 | 393 | 215 | 1769 | 1731 | 114 | 1769 | 2608 | 806 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.15 | 0.15 | 0.15 | 0.26 | 0.26 | 0.26 | 0.03 | 0.35 | 0.35 | 0.02 | 0.19 | 0.19 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.06 | 0.51 | 0.51 | 0.03 | 0.47 | 0.47 |
| Volume/Cap: | 0.41 | 0.41 | 0.41 | 0.69 | 0.69 | 0.69 | 0.40 | 0.69 | 0.69 | 0.69 | 0.40 | 0.40 |
| Delay/Veh: | 23.6 | 23.6 | 23.6 | 30.7 | 30.7 | 30.7 | 47.2 | 20.8 | 20.8 | 79.1 | 17.4 | 17.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 23.6 | 23.6 | 23.6 | 30.7 | 30.7 | 30.7 | 47.2 | 20.8 | 20.8 | 79.1 | 17.4 | 17.4 |
| DesignQueue: | 2 | 3 | 3 | 6 | 4 | 2 | 2 | 18 | 1 | 2 | 15 | 5 |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project AM

Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 73 | 46 | 172 | 44 | 41 | 21 | 8 | 380 | 44 | 261 | 420 | 20 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 80 | 51 | 189 | 48 | 45 | 23 | 9 | 418 | 48 | 287 | 462 | 22 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 80 | 51 | 189 | 48 | 45 | 23 | 9 | 418 | 48 | 287 | 462 | 22 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 80 | 51 | 189 | 48 | 45 | 23 | 9 | 418 | 48 | 287 | 462 | 22 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 80 | 51 | 189 | 48 | 45 | 23 | 9 | 418 | 48 | 287 | 462 | 22 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 80 | 51 | 189 | 48 | 45 | 23 | 9 | 418 | 48 | 287 | 462 | 22 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.71 | 0.71 | 0.83 | 0.80 | 0.80 | 0.80 | 0.93 | 0.92 | 0.92 | 0.93 | 0.92 | 0.92 |
| Lanes: | 0.61 | 0.39 | 1.00 | 0.41 | 0.39 | 0.20 | 1.00 | 1.79 | 0.21 | 1.00 | 1.91 | 0.09 |
| Final Sat.: | 833 | 525 | 1583 | 630 | 587 | 301 | 1769 | 3120 | 361 | 1769 | 3353 | 160 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.10 | 0.12 | 0.08 | 0.08 | 0.08 | 0.00 | 0.13 | 0.13 | 0.16 | 0.14 | 0.14 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.23 | 0.23 | 0.61 | 0.23 | 0.23 | 0.23 | 0.02 | 0.32 | 0.32 | 0.38 | 0.67 | 0.67 |
| Volume/Cap: | 0.42 | 0.42 | 0.20 | 0.34 | 0.34 | 0.34 | 0.20 | 0.42 | 0.42 | 0.42 | 0.20 | 0.20 |
| Delay/Veh: | 40.6 | 40.6 | 10.5 | 39.4 | 39.4 | 39.4 | 59.8 | 32.7 | 32.7 | 27.8 | 7.5 | 7.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 40.6 | 40.6 | 10.5 | 39.4 | 39.4 | 39.4 | 59.8 | 32.7 | 32.7 | 27.8 | 7.5 | 7.5 |
| DesignQueue: | 4 | 3 | 5 | 3 | 2 | 1 | 1 | 20 | 2 | 12 | 10 | 0 |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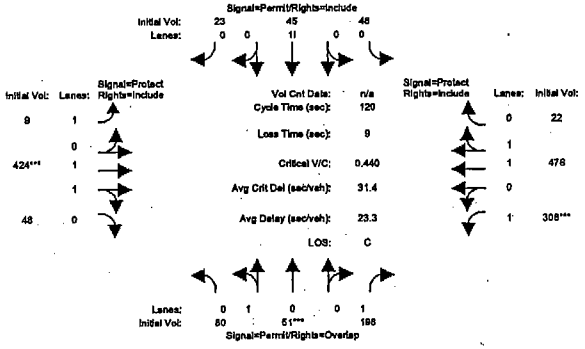
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 73 | 46 | 172 | 44 | 41 | 21 | 8 | 380 | 44 | 261 | 420 | 20 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 80 | 51 | 189 | 48 | 45 | 23 | 9 | 418 | 48 | 287 | 462 | 22 |
| Added Vol: | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 6 | 0 | 21 | 14 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 80 | 51 | 198 | 48 | 45 | 23 | 9 | 424 | 48 | 308 | 476 | 22 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 80 | 51 | 198 | 48 | 45 | 23 | 9 | 424 | 48 | 308 | 476 | 22 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 80 | 51 | 198 | 48 | 45 | 23 | 9 | 424 | 48 | 308 | 476 | 22 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 80 | 51 | 198 | 48 | 45 | 23 | 9 | 424 | 48 | 308 | 476 | 22 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.71 | 0.71 | 0.83 | 0.80 | 0.80 | 0.80 | 0.93 | 0.92 | 0.92 | 0.93 | 0.92 | 0.92 |
| Lanes: | 0.61 | 0.39 | 1.00 | 0.41 | 0.39 | 0.20 | 1.00 | 1.80 | 0.20 | 1.00 | 1.91 | 0.09 |
| Final Sat.: | 828 | 522 | 1583 | 629 | 587 | 300 | 1769 | 3128 | 357 | 1769 | 3358 | 155 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.10 | 0.13 | 0.08 | 0.08 | 0.08 | 0.00 | 0.14 | 0.14 | 0.17 | 0.14 | 0.14 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.22 | 0.22 | 0.62 | 0.22 | 0.22 | 0.22 | 0.02 | 0.31 | 0.31 | 0.40 | 0.68 | 0.68 |
| Volume/Cap: | 0.44 | 0.44 | 0.20 | 0.35 | 0.35 | 0.35 | 0.21 | 0.44 | 0.44 | 0.44 | 0.21 | 0.21 |
| Delay/Veh: | 41.4 | 41.4 | 10.2 | 40.1 | 40.1 | 40.1 | 59.9 | 33.5 | 33.5 | 26.9 | 7.2 | 7.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 41.4 | 41.4 | 10.2 | 40.1 | 40.1 | 40.1 | 59.9 | 33.5 | 33.5 | 26.9 | 7.2 | 7.2 |
| DesignQueue: | 4 | 3 | 5 | 3 | 2 | 1 | 1 | 20 | 2 | 13 | 10 | 0 |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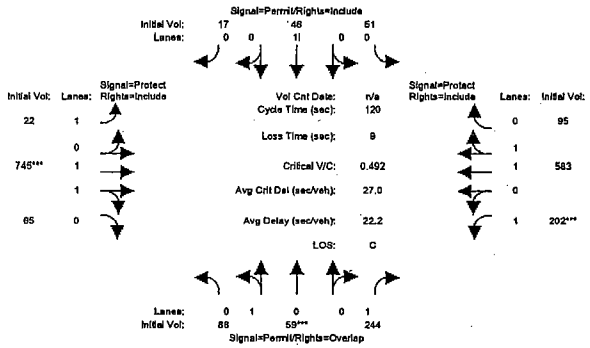
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project PM

Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 80 | 54 | 222 | 46 | 42 | 15 | 20 | 677 | 59 | 184 | 530 | 86 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 88 | 59 | 244 | 51 | 46 | 17 | 22 | 745 | 65 | 202 | 583 | 95 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 88 | 59 | 244 | 51 | 46 | 17 | 22 | 745 | 65 | 202 | 583 | 95 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 88 | 59 | 244 | 51 | 46 | 17 | 22 | 745 | 65 | 202 | 583 | 95 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 88 | 59 | 244 | 51 | 46 | 17 | 22 | 745 | 65 | 202 | 583 | 95 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 88 | 59 | 244 | 51 | 46 | 17 | 22 | 745 | 65 | 202 | 583 | 95 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.71 | 0.71 | 0.83 | 0.77 | 0.77 | 0.77 | 0.93 | 0.92 | 0.92 | 0.93 | 0.91 | 0.91 |
| Lanes: | 0.60 | 0.40 | 1.00 | 0.45 | 0.41 | 0.14 | 1.00 | 1.84 | 0.16 | 1.00 | 1.72 | 0.28 |
| Final Sat.: | 809 | 546 | 1583 | 655 | 598 | 214 | 1769 | 3215 | 280 | 1769 | 2980 | 484 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.11 | 0.11 | 0.15 | 0.08 | 0.08 | 0.08 | 0.01 | 0.23 | 0.23 | 0.11 | 0.20 | 0.20 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.22 | 0.22 | 0.45 | 0.22 | 0.22 | 0.22 | 0.04 | 0.47 | 0.47 | 0.23 | 0.66 | 0.66 |
| Volume/Cap: | 0.49 | 0.49 | 0.34 | 0.35 | 0.35 | 0.35 | 0.30 | 0.49 | 0.49 | 0.49 | 0.30 | 0.30 |
| Delay/Veh: | 42.1 | 42.1 | 21.4 | 40.1 | 40.1 | 40.1 | 58.0 | 22.1 | 22.1 | 40.8 | 8.6 | 8.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 42.1 | 42.1 | 21.4 | 40.1 | 40.1 | 40.1 | 58.0 | 22.1 | 22.1 | 40.8 | 8.6 | 8.6 |
| DesignQueue: | 5 | 3 | 9 | 3 | 2 | 1 | 1 | 28 | 2 | 11 | 14 | 2 |





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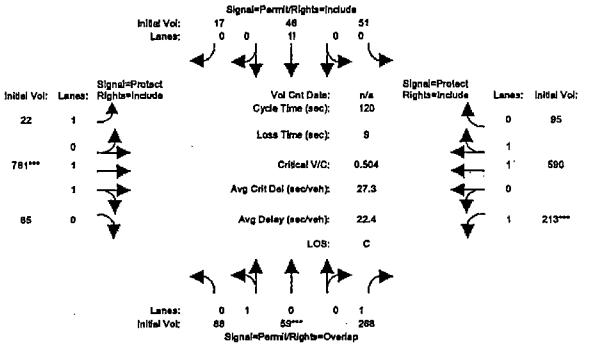
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 80 | 54 | 222 | 46 | 42 | 15 | 20 | 677 | 59 | 184 | 530 | 86 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 88 | 59 | 244 | 51 | 46 | 17 | 22 | 745 | 65 | 202 | 583 | 95 |
| Added Vol: | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 16 | 0 | 11 | 7 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 88 | 59 | 268 | 51 | 46 | 17 | 22 | 761 | 65 | 213 | 590 | 95 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 88 | 59 | 268 | 51 | 46 | 17 | 22 | 761 | 65 | 213 | 590 | 95 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 88 | 59 | 268 | 51 | 46 | 17 | 22 | 761 | 65 | 213 | 590 | 95 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 88 | 59 | 268 | 51 | 46 | 17 | 22 | 761 | 65 | 213 | 590 | 95 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.71 | 0.71 | 0.83 | 0.76 | 0.76 | 0.76 | 0.93 | 0.92 | 0.92 | 0.93 | 0.91 | 0.91 |
| Lanes: | 0.60 | 0.40 | 1.00 | 0.45 | 0.41 | 0.14 | 1.00 | 1.84 | 0.16 | 1.00 | 1.72 | 0.28 |
| Final Sat.: | 806 | 544 | 1583 | 649 | 592 | 212 | 1769 | 3221 | 275 | 1769 | 2985 | 479 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.11 | 0.11 | 0.17 | 0.08 | 0.08 | 0.08 | 0.01 | 0.24 | 0.24 | 0.12 | 0.20 | 0.20 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.22 | 0.22 | 0.46 | 0.22 | 0.22 | 0.22 | 0.04 | 0.47 | 0.47 | 0.24 | 0.67 | 0.67 |
| Volume/Cap: | 0.50 | 0.50 | 0.37 | 0.36 | 0.36 | 0.36 | 0.30 | 0.50 | 0.50 | 0.50 | 0.30 | 0.30 |
| Delay/Veh: | 42.7 | 42.7 | 21.7 | 40.6 | 40.6 | 40.6 | 58.0 | 22.4 | 22.4 | 40.4 | 8.4 | 8.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 42.7 | 42.7 | 21.7 | 40.6 | 40.6 | 40.6 | 58.0 | 22.4 | 22.4 | 40.4 | 8.4 | 8.4 |
| DesignQueue: | 5 | 3 | 10 | 3 | 2 | 1 | 1 | 29 | 2 | 11 | 14 | 2 |

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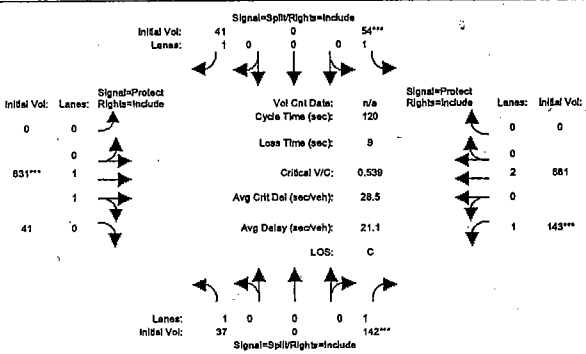
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project AM

Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 755 | 37 | 130 | 801 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 37 | 0 | 142 | 54 | 0 | 41 | 0 | 831 | 41 | 143 | 881 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 37 | 0 | 142 | 54 | 0 | 41 | 0 | 831 | 41 | 143 | 881 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 42 | 0 | 158 | 60 | 0 | 45 | 0 | 923 | 45 | 159 | 979 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 42 | 0 | 158 | 60 | 0 | 45 | 0 | 923 | 45 | 159 | 979 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 42 | 0 | 158 | 60 | 0 | 45 | 0 | 923 | 45 | 159 | 979 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.92 | 0.92 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.91 | 0.09 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3349 | 164 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.00 | 0.10 | 0.03 | 0.00 | 0.03 | 0.00 | 0.28 | 0.28 | 0.09 | 0.28 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.18 | 0.00 | 0.18 | 0.06 | 0.00 | 0.06 | 0.00 | 0.51 | 0.51 | 0.17 | 0.68 | 0.00 |
| Volume/Cap: | 0.13 | 0.00 | 0.54 | 0.54 | 0.00 | 0.46 | 0.00 | 0.54 | 0.54 | 0.54 | 0.41 | 0.00 |
| Delay/Veh: | 41.0 | 0.0 | 46.3 | 59.8 | 0.0 | 57.5 | 0.0 | 20.1 | 20.1 | 47.8 | 8.7 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 41.0 | 0.0 | 46.3 | 59.8 | 0.0 | 57.5 | 0.0 | 20.1 | 20.1 | 47.8 | 8.7 | 0.0 |
| DesignQueue: | 2 | 0 | 9 | 4 | 0 | 3 | 0 | 32 | 2 | 9 | 23 | 0 |





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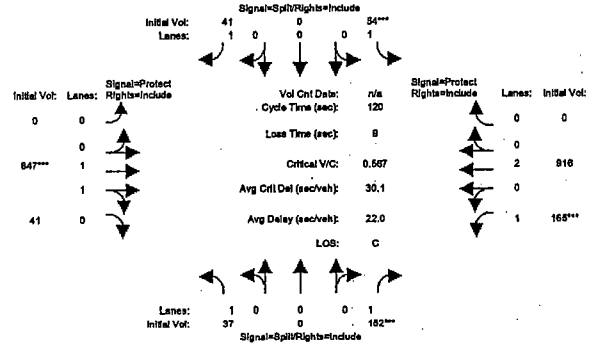
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 755 | 37 | 130 | 801 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 37 | 0 | 142 | 54 | 0 | 41 | 0 | 831 | 41 | 143 | 881 | 0 |
| Added Vol: | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 16 | 0 | 22 | 35 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 37 | 0 | 152 | 54 | 0 | 41 | 0 | 847 | 41 | 165 | 916 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 42 | 0 | 169 | 60 | 0 | 45 | 0 | 941 | 45 | 183 | 1018 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 42 | 0 | 169 | 60 | 0 | 45 | 0 | 941 | 45 | 183 | 1018 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 42 | 0 | 169 | 60 | 0 | 45 | 0 | 941 | 45 | 183 | 1018 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.92 | 0.92 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.91 | 0.09 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3352 | 161 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.00 | 0.11 | 0.03 | 0.00 | 0.03 | 0.00 | 0.28 | 0.28 | 0.10 | 0.29 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.19 | 0.00 | 0.19 | 0.06 | 0.00 | 0.06 | 0.00 | 0.49 | 0.49 | 0.18 | 0.68 | 0.00 |
| Volume/Cap: | 0.12 | 0.00 | 0.57 | 0.57 | 0.00 | 0.48 | 0.00 | 0.57 | 0.57 | 0.57 | 0.42 | 0.00 |
| Delay/Veh: | 40.7 | 0.0 | 46.9 | 62.0 | 0.0 | 58.4 | 0.0 | 21.7 | 21.7 | 47.1 | 8.9 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 40.7 | 0.0 | 46.9 | 62.0 | 0.0 | 58.4 | 0.0 | 21.7 | 21.7 | 47.1 | 8.9 | 0.0 |
| DesignQueue: | 2 | 0 | 9 | 4 | 0 | 3 | 0 | 34 | 2 | 10 | 24 | 0 |

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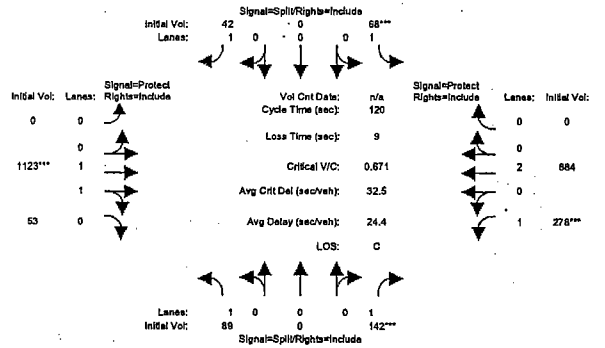
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project PM

Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 1021 | 48 | 253 | 804 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 89 | 0 | 142 | 68 | 0 | 42 | 0 | 1123 | 53 | 278 | 884 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 89 | 0 | 142 | 68 | 0 | 42 | 0 | 1123 | 53 | 278 | 884 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 89 | 0 | 142 | 68 | 0 | 42 | 0 | 1123 | 53 | 278 | 884 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 89 | 0 | 142 | 68 | 0 | 42 | 0 | 1123 | 53 | 278 | 884 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 89 | 0 | 142 | 68 | 0 | 42 | 0 | 1123 | 53 | 278 | 884 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.92 | 0.92 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.91 | 0.09 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3355 | 158 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.00 | 0.09 | 0.04 | 0.00 | 0.03 | 0.00 | 0.33 | 0.33 | 0.16 | 0.25 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.13 | 0.00 | 0.13 | 0.06 | 0.00 | 0.06 | 0.00 | 0.50 | 0.50 | 0.23 | 0.73 | 0.00 |
| Volume/Cap: | 0.38 | 0.00 | 0.67 | 0.67 | 0.00 | 0.46 | 0.00 | 0.67 | 0.67 | 0.67 | 0.34 | 0.00 |
| Delay/Veh: | 48.4 | 0.0 | 57.6 | 71.5 | 0.0 | 58.4 | 0.0 | 23.6 | 23.6 | 45.9 | 5.7 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 48.4 | 0.0 | 57.6 | 71.5 | 0.0 | 58.4 | 0.0 | 23.6 | 23.6 | 45.9 | 5.7 | 0.0 |
| DesignQueue: | 5 | 0 | 8 | 4 | 0 | 3 | 0 | 41 | 2 | 15 | 17 | 0 |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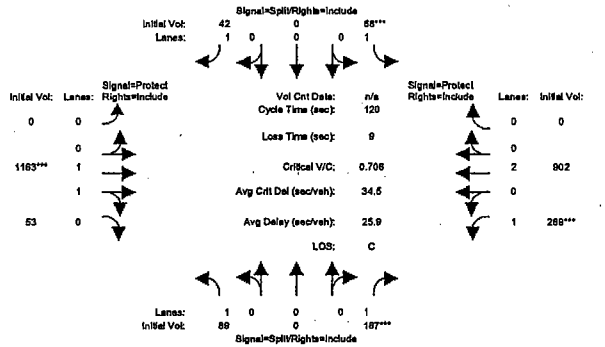
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 1021 | 48 | 253 | 804 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 89 | 0 | 142 | 68 | 0 | 42 | 0 | 1123 | 53 | 278 | 884 | 0 |
| Added Vol: | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 40 | 0 | 11 | 18 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 89 | 0 | 167 | 68 | 0 | 42 | 0 | 1163 | 53 | 289 | 902 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 89 | 0 | 167 | 68 | 0 | 42 | 0 | 1163 | 53 | 289 | 902 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 89 | 0 | 167 | 68 | 0 | 42 | 0 | 1163 | 53 | 289 | 902 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 89 | 0 | 167 | 68 | 0 | 42 | 0 | 1163 | 53 | 289 | 902 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.93 | 0.93 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.91 | 0.09 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3364 | 153 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.00 | 0.11 | 0.04 | 0.00 | 0.03 | 0.00 | 0.35 | 0.35 | 0.16 | 0.26 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.15 | 0.00 | 0.15 | 0.05 | 0.00 | 0.05 | 0.00 | 0.49 | 0.49 | 0.23 | 0.72 | 0.00 |
| Volume/Cap: | 0.34 | 0.00 | 0.71 | 0.71 | 0.00 | 0.48 | 0.00 | 0.71 | 0.71 | 0.71 | 0.35 | 0.00 |
| Delay/Veh: | 46.5 | 0.0 | 57.9 | 77.0 | 0.0 | 59.3 | 0.0 | 25.3 | 25.3 | 47.9 | 6.3 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 46.5 | 0.0 | 57.9 | 77.0 | 0.0 | 59.3 | 0.0 | 25.3 | 25.3 | 47.9 | 6.3 | 0.0 |
| DesignQueue: | 5 | 0 | 10 | 4 | 0 | 3 | 0 | 43 | 2 | 15 | 18 | 0 |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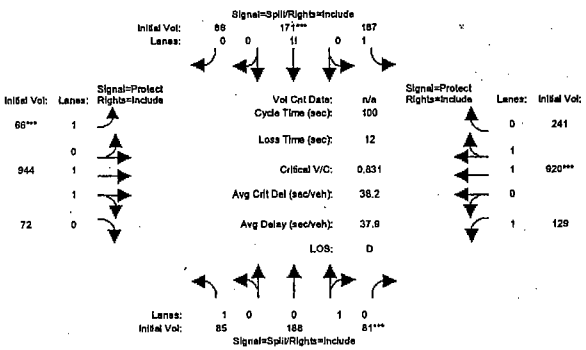
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project AM

## Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 77 | 171 | 74 | 170 | 155 | 78 | 60 | 858 | 65 | 117 | 836 | 219 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 85 | 188 | 81 | 187 | 171 | 86 | 66 | 944 | 72 | 129 | 920 | 241 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 85 | 188 | 81 | 187 | 171 | 86 | 66 | 944 | 72 | 129 | 920 | 241 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 85 | 188 | 81 | 187 | 171 | 86 | 66 | 944 | 72 | 129 | 920 | 241 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 85 | 188 | 81 | 187 | 171 | 86 | 66 | 944 | 72 | 129 | 920 | 241 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 85 | 188 | 81 | 187 | 171 | 86 | 66 | 944 | 72 | 129 | 920 | 241 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.90 | 0.90 |
| Lanes: | 1.00 | 0.70 | 0.30 | 1.27 | 0.49 | 0.24 | 1.00 | 1.86 | 0.14 | 1.00 | 1.58 | 0.42 |
| Final Sat.: | 1736 | 1218 | 527 | 2202 | 847 | 426 | 1769 | 3256 | 247 | 1769 | 2717 | 712 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.15 | 0.15 | 0.08 | 0.20 | 0.20 | 0.04 | 0.29 | 0.29 | 0.07 | 0.34 | 0.34 |
| Crit Moves: | | | **** | | **** | | **** | | | | **** | |
| Green/Cycle: | 0.19 | 0.19 | 0.19 | 0.24 | 0.24 | 0.24 | 0.04 | 0.36 | 0.36 | 0.09 | 0.41 | 0.41 |
| Volume/Cap: | 0.26 | 0.83 | 0.83 | 0.35 | 0.83 | 0.83 | 0.83 | 0.80 | 0.80 | 0.80 | 0.83 | 0.83 |
| Delay/Veh: | 35.3 | 55.6 | 55.6 | 31.5 | 46.6 | 46.6 | 96.8 | 32.5 | 32.5 | 69.0 | 30.9 | 30.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 35.3 | 55.6 | 55.6 | 31.5 | 46.6 | 46.6 | 96.8 | 32.5 | 32.5 | 69.0 | 30.9 | 30.9 |
| DesignQueue: | 4 | 9 | 4 | 8 | 8 | 4 | 4 | 36 | 3 | 7 | 33 | 9 |





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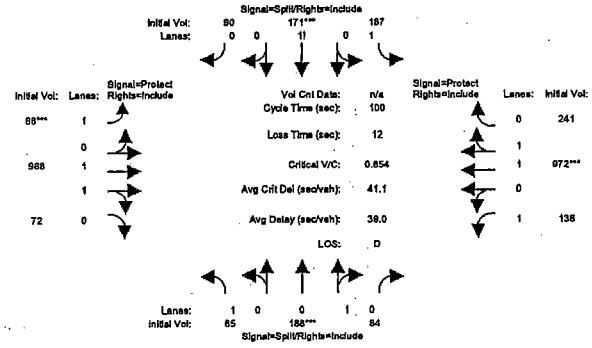
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 AM

## Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 77 | 171 | 74 | 170 | 155 | 78 | 60 | 858 | 65 | 117 | 836 | 219 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 85 | 188 | 81 | 187 | 171 | 86 | 66 | 944 | 72 | 129 | 920 | 241 |
| Added Vol: | 0 | 0 | 3 | 0 | 0 | 4 | 2 | 24 | 0 | 7 | 52 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 85 | 188 | 84 | 187 | 171 | 90 | 68 | 968 | 72 | 136 | 972 | 241 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 85 | 188 | 84 | 187 | 171 | 90 | 68 | 968 | 72 | 136 | 972 | 241 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 85 | 188 | 84 | 187 | 171 | 90 | 68 | 968 | 72 | 136 | 972 | 241 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 85 | 188 | 84 | 187 | 171 | 90 | 68 | 968 | 72 | 136 | 972 | 241 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.90 | 0.90 |
| Lanes: | 1.00 | 0.69 | 0.31 | 1.27 | 0.48 | 0.25 | 1.00 | 1.86 | 0.14 | 1.00 | 1.60 | 0.40 |
| Final Sat.: | 1736 | 1204 | 540 | 2197 | 837 | 441 | 1769 | 3261 | 241 | 1769 | 2750 | 682 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.16 | 0.16 | 0.09 | 0.20 | 0.20 | 0.04 | 0.30 | 0.30 | 0.08 | 0.35 | 0.35 |
| Crit Moves: | | **** | | | **** | | **** | | | | **** | |
| Green/Cycle: | 0.18 | 0.18 | 0.18 | 0.24 | 0.24 | 0.24 | 0.05 | 0.36 | 0.36 | 0.09 | 0.41 | 0.41 |
| Volume/Cap: | 0.27 | 0.85 | 0.85 | 0.36 | 0.85 | 0.85 | 0.85 | 0.81 | 0.81 | 0.81 | 0.85 | 0.85 |
| Delay/Veh: | 35.5 | 59.1 | 59.1 | 31.9 | 49.3 | 49.3 | 102.6 | 32.9 | 32.9 | 69.9 | 31.9 | 31.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 35.5 | 59.1 | 59.1 | 31.9 | 49.3 | 49.3 | 102.6 | 32.9 | 32.9 | 69.9 | 31.9 | 31.9 |
| DesignQueue: | 4 | 9 | 4 | 8 | 8 | 4 | 4 | 37 | 3 | 7 | 35 | 9 |

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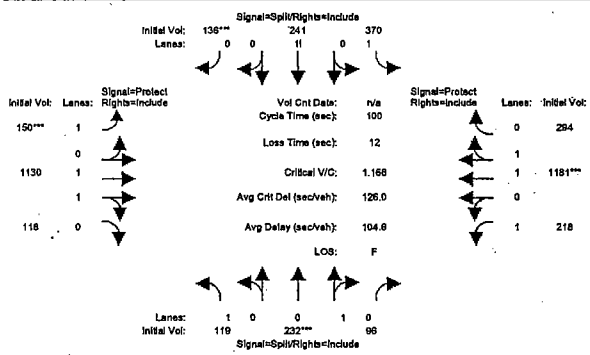
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project PM

Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 108 | 211 | 87 | 336 | 219 | 124 | 136 | 1027 | 107 | 198 | 1074 | 267 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 119 | 232 | 96 | 370 | 241 | 136 | 150 | 1130 | 118 | 218 | 1181 | 294 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 119 | 232 | 96 | 370 | 241 | 136 | 150 | 1130 | 118 | 218 | 1181 | 294 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 119 | 232 | 96 | 370 | 241 | 136 | 150 | 1130 | 118 | 218 | 1181 | 294 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 119 | 232 | 96 | 370 | 241 | 136 | 150 | 1130 | 118 | 218 | 1181 | 294 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 119 | 232 | 96 | 370 | 241 | 136 | 150 | 1130 | 118 | 218 | 1181 | 294 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.90 | 0.90 |
| Lanes: | 1.00 | 0.71 | 0.29 | 1.33 | 0.43 | 0.24 | 1.00 | 1.81 | 0.19 | 1.00 | 1.60 | 0.40 |
| Final Sat.: | 1736 | 1237 | 510 | 2306 | 744 | 421 | 1769 | 3159 | 329 | 1769 | 2748 | 683 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.19 | 0.19 | 0.16 | 0.32 | 0.32 | 0.08 | 0.36 | 0.36 | 0.12 | 0.43 | 0.43 |
| Crit Moves: | | **** | | | | **** | **** | | | | **** | |
| Green/Cycle: | 0.16 | 0.16 | 0.16 | 0.28 | 0.28 | 0.28 | 0.07 | 0.33 | 0.33 | 0.11 | 0.37 | 0.37 |
| Volume/Cap: | 0.43 | 1.17 | 1.17 | 0.58 | 1.17 | 1.17 | 1.17 | 1.09 | 1.09 | 1.09 | 1.17 | 1.17 |
| Delay/Veh: | 38.8 | 148 | 148.2 | 31.7 | 127 | 126.9 | 177.2 | 88.0 | 88.0 | 133.9 | 115 | 115.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 38.8 | 148 | 148.2 | 31.7 | 127 | 126.9 | 177.2 | 88.0 | 88.0 | 133.9 | 115 | 115.1 |
| DesignQueue: | 6 | 11 | 5 | 15 | 10 | 6 | 8 | 46 | 5 | 11 | 46 | 11 |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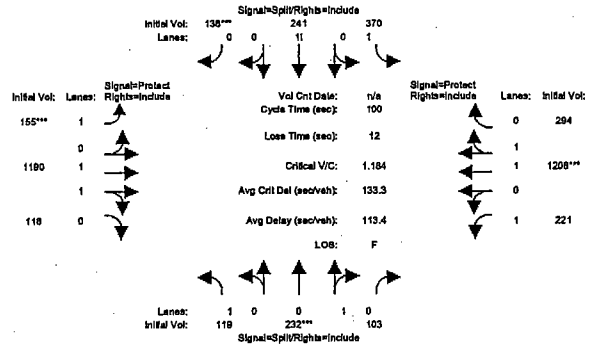
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 108 | 211 | 87 | 336 | 219 | 124 | 136 | 1027 | 107 | 198 | 1074 | 267 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 119 | 232 | 96 | 370 | 241 | 136 | 150 | 1130 | 118 | 218 | 1181 | 294 |
| Added Vol: | 0 | 0 | 7 | 0 | 0 | 2 | 5 | 60 | 0 | 3 | 27 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 119 | 232 | 103 | 370 | 241 | 138 | 155 | 1190 | 118 | 221 | 1208 | 294 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 119 | 232 | 103 | 370 | 241 | 138 | 155 | 1190 | 118 | 221 | 1208 | 294 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 119 | 232 | 103 | 370 | 241 | 138 | 155 | 1190 | 118 | 221 | 1208 | 294 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 119 | 232 | 103 | 370 | 241 | 138 | 155 | 1190 | 118 | 221 | 1208 | 294 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.90 | 0.90 |
| Lanes: | 1.00 | 0.69 | 0.31 | 1.33 | 0.43 | 0.24 | 1.00 | 1.82 | 0.18 | 1.00 | 1.61 | 0.39 |
| Final Sat.: | 1736 | 1209 | 535 | 2302 | 741 | 425 | 1769 | 3177 | 314 | 1769 | 2764 | 672 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.19 | 0.19 | 0.16 | 0.33 | 0.33 | 0.09 | 0.37 | 0.37 | 0.12 | 0.44 | 0.44 |
| Crit Moves: | | **** | | | | **** | **** | | | | **** | |
| Green/Cycle: | 0.16 | 0.16 | 0.16 | 0.27 | 0.27 | 0.27 | 0.07 | 0.33 | 0.33 | 0.11 | 0.37 | 0.37 |
| Volume/Cap: | 0.42 | 1.18 | 1.18 | 0.58 | 1.18 | 1.18 | 1.18 | 1.13 | 1.13 | 1.13 | 1.18 | 1.18 |
| Delay/Veh: | 38.7 | 155 | 154.8 | 32.0 | 135 | 134.5 | 182.9 | 102 | 101.9 | 146.9 | 123 | 122.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 38.7 | 155 | 154.8 | 32.0 | 135 | 134.5 | 182.9 | 102 | 101.9 | 146.9 | 123 | 122.7 |
| DesignQueue: | 6 | 11 | 5 | 15 | 11 | 6 | 8 | 49 | 5 | 11 | 47 | 11 |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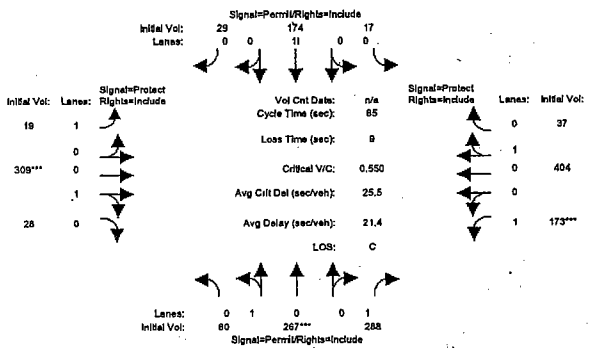
## Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 73 | 243 | 262 | 15 | 158 | 26 | 17 | 281 | 25 | 157 | 367 | 34 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 80 | 267 | 288 | 17 | 174 | 29 | 19 | 309 | 28 | 173 | 404 | 37 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 80 | 267 | 288 | 17 | 174 | 29 | 19 | 309 | 28 | 173 | 404 | 37 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 80 | 267 | 288 | 17 | 174 | 29 | 19 | 309 | 28 | 173 | 404 | 37 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 80 | 267 | 288 | 17 | 174 | 29 | 19 | 309 | 28 | 173 | 404 | 37 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 80 | 267 | 288 | 17 | 174 | 29 | 19 | 309 | 28 | 173 | 404 | 37 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.87 | 0.87 | 0.83 | 0.93 | 0.93 | 0.93 | 0.93 | 0.97 | 0.97 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.23 | 0.77 | 1.00 | 0.08 | 0.79 | 0.13 | 1.00 | 0.92 | 0.08 | 1.00 | 0.92 | 0.08 |
| Final Sat.: | 380 | 1266 | 1583 | 133 | 1399 | 230 | 1769 | 1689 | 150 | 1769 | 1682 | 156 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.21 | 0.21 | 0.18 | 0.12 | 0.12 | 0.12 | 0.01 | 0.18 | 0.18 | 0.10 | 0.24 | 0.24 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.02 | 0.33 | 0.33 | 0.18 | 0.49 | 0.49 |
| Volume/Cap: | 0.55 | 0.55 | 0.47 | 0.32 | 0.32 | 0.32 | 0.49 | 0.55 | 0.55 | 0.55 | 0.49 | 0.49 |
| Delay/Veh: | 21.5 | 21.5 | 20.3 | 18.7 | 18.7 | 18.7 | 50.8 | 24.2 | 24.2 | 33.9 | 15.0 | 15.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 21.5 | 21.5 | 20.3 | 18.7 | 18.7 | 18.7 | 50.8 | 24.2 | 24.2 | 33.9 | 15.0 | 15.0 |
| DesignQueue: | 2 | 8 | 9 | 0 | 5 | 1 | 1 | 10 | 1 | 7 | 10 | 1 |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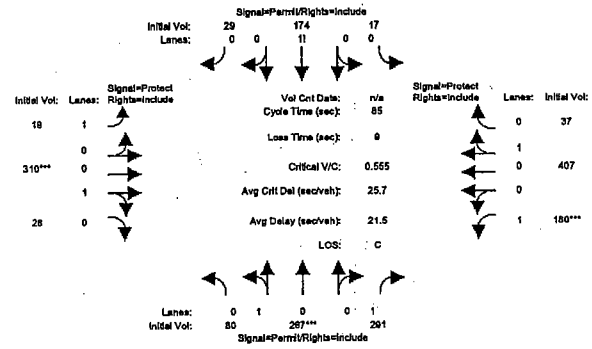
## Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 73 | 243 | 262 | 15 | 158 | 26 | 17 | 281 | 25 | 157 | 367 | 34 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 80 | 267 | 288 | 17 | 174 | 29 | 19 | 309 | 28 | 173 | 404 | 37 |
| Added Vol: | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 3 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 80 | 267 | 291 | 17 | 174 | 29 | 19 | 310 | 28 | 180 | 407 | 37 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 80 | 267 | 291 | 17 | 174 | 29 | 19 | 310 | 28 | 180 | 407 | 37 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 80 | 267 | 291 | 17 | 174 | 29 | 19 | 310 | 28 | 180 | 407 | 37 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 80 | 267 | 291 | 17 | 174 | 29 | 19 | 310 | 28 | 180 | 407 | 37 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.87 | 0.87 | 0.83 | 0.93 | 0.93 | 0.93 | 0.93 | 0.97 | 0.97 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.23 | 0.77 | 1.00 | 0.08 | 0.79 | 0.13 | 1.00 | 0.92 | 0.08 | 1.00 | 0.92 | 0.08 |
| Final Sat.: | 380 | 1264 | 1583 | 133 | 1399 | 230 | 1769 | 1690 | 150 | 1769 | 1683 | 155 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.21 | 0.21 | 0.18 | 0.12 | 0.12 | 0.12 | 0.01 | 0.18 | 0.18 | 0.10 | 0.24 | 0.24 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.02 | 0.33 | 0.33 | 0.18 | 0.49 | 0.49 |
| Volume/Cap: | 0.56 | 0.56 | 0.48 | 0.33 | 0.33 | 0.33 | 0.49 | 0.56 | 0.56 | 0.56 | 0.49 | 0.49 |
| Delay/Veh: | 21.8 | 21.8 | 20.6 | 18.9 | 18.9 | 18.9 | 50.8 | 24.5 | 24.5 | 33.7 | 14.9 | 14.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 21.8 | 21.8 | 20.6 | 18.9 | 18.9 | 18.9 | 50.8 | 24.5 | 24.5 | 33.7 | 14.9 | 14.9 |
| DesignQueue: | 2 | 8 | 9 | 0 | 5 | 1 | 1 | 10 | 1 | 7 | 10 | 1 |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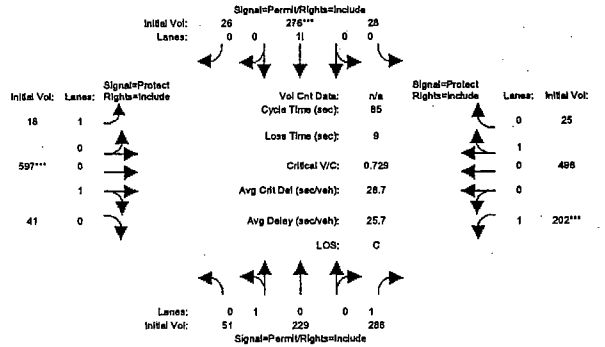
## Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 46 | 208 | 262 | 25 | 251 | 24 | 16 | 543 | 37 | 184 | 453 | 23 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 51 | 229 | 288 | 28 | 276 | 26 | 18 | 597 | 41 | 202 | 498 | 25 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 51 | 229 | 288 | 28 | 276 | 26 | 18 | 597 | 41 | 202 | 498 | 25 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 51 | 229 | 288 | 28 | 276 | 26 | 18 | 597 | 41 | 202 | 498 | 25 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 51 | 229 | 288 | 28 | 276 | 26 | 18 | 597 | 41 | 202 | 498 | 25 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 51 | 229 | 288 | 28 | 276 | 26 | 18 | 597 | 41 | 202 | 498 | 25 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.78 | 0.78 | 0.83 | 0.91 | 0.91 | 0.91 | 0.93 | 0.97 | 0.97 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.18 | 0.82 | 1.00 | 0.08 | 0.84 | 0.08 | 1.00 | 0.94 | 0.06 | 1.00 | 0.95 | 0.05 |
| Final Sat.: | 270 | 1220 | 1583 | 144 | 1447 | 138 | 1769 | 1726 | 118 | 1769 | 1760 | 89 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.19 | 0.19 | 0.18 | 0.19 | 0.19 | 0.19 | 0.01 | 0.35 | 0.35 | 0.11 | 0.28 | 0.28 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.02 | 0.48 | 0.48 | 0.16 | 0.61 | 0.61 |
| Volume/Cap: | 0.72 | 0.72 | 0.70 | 0.73 | 0.73 | 0.73 | 0.46 | 0.73 | 0.73 | 0.73 | 0.46 | 0.46 |
| Delay/Veh: | 34.7 | 34.7 | 33.4 | 34.5 | 34.5 | 34.5 | 49.8 | 21.0 | 21.0 | 43.5 | 9.3 | 9.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 34.7 | 34.7 | 33.4 | 34.5 | 34.5 | 34.5 | 49.8 | 21.0 | 21.0 | 43.5 | 9.3 | 9.3 |
| DesignQueue: | 2 | 8 | 10 | 1 | 10 | 1 | 1 | 16 | 1 | 8 | 10 | 1 |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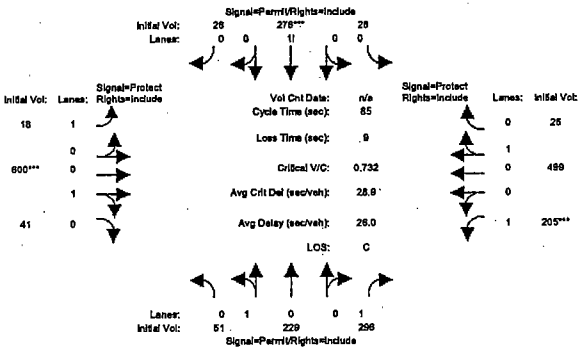
## Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 46 | 208 | 262 | 25 | 251 | 24 | 16 | 543 | 37 | 184 | 453 | 23 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 51 | 229 | 288 | 28 | 276 | 26 | 18 | 597 | 41 | 202 | 498 | 25 |
| Added Vol: | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 1 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 51 | 229 | 296 | 28 | 276 | 26 | 18 | 600 | 41 | 205 | 499 | 25 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 51 | 229 | 296 | 28 | 276 | 26 | 18 | 600 | 41 | 205 | 499 | 25 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 51 | 229 | 296 | 28 | 276 | 26 | 18 | 600 | 41 | 205 | 499 | 25 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 51 | 229 | 296 | 28 | 276 | 26 | 18 | 600 | 41 | 205 | 499 | 25 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.78 | 0.78 | 0.83 | 0.91 | 0.91 | 0.91 | 0.93 | 0.97 | 0.97 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.18 | 0.82 | 1.00 | 0.08 | 0.84 | 0.08 | 1.00 | 0.94 | 0.06 | 1.00 | 0.95 | 0.05 |
| Final Sat.: | 269 | 1217 | 1583 | 144 | 1444 | 138 | 1769 | 1728 | 117 | 1769 | 1760 | 89 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.01 | 0.35 | 0.35 | 0.12 | 0.28 | 0.28 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.02 | 0.47 | 0.47 | 0.16 | 0.61 | 0.61 |
| Volume/Cap: | 0.72 | 0.72 | 0.72 | 0.73 | 0.73 | 0.73 | 0.46 | 0.73 | 0.73 | 0.73 | 0.46 | 0.46 |
| Delay/Veh: | 35.0 | 35.0 | 34.5 | 34.8 | 34.8 | 34.8 | 49.8 | 21.2 | 21.2 | 43.6 | 9.3 | 9.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 35.0 | 35.0 | 34.5 | 34.8 | 34.8 | 34.8 | 49.8 | 21.2 | 21.2 | 43.6 | 9.3 | 9.3 |
| DesignQueue: | 2 | 8 | 11 | 1 | 10 | 1 | 1 | 16 | 1 | 8 | 10 | 0 |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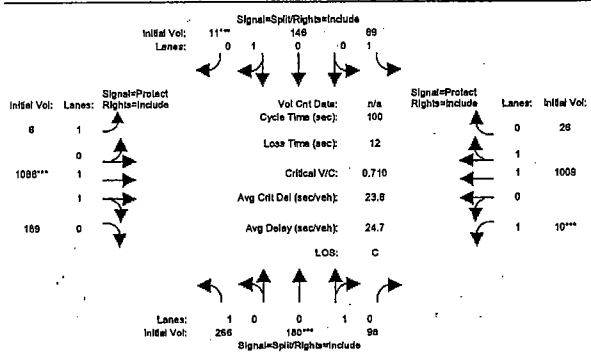
2010 No Project AM

Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 242 | 164 | 89 | 63 | 133 | 10 | 5 | 989 | 172 | 9 | 917 | 24 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 266 | 180 | 98 | 69 | 146 | 11 | 6 | 1088 | 189 | 10 | 1009 | 26 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 266 | 180 | 98 | 69 | 146 | 11 | 6 | 1088 | 189 | 10 | 1009 | 26 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 266 | 180 | 98 | 69 | 146 | 11 | 6 | 1088 | 189 | 10 | 1009 | 26 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 266 | 180 | 98 | 69 | 146 | 11 | 6 | 1088 | 189 | 10 | 1009 | 26 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 266 | 180 | 98 | 69 | 146 | 11 | 6 | 1088 | 189 | 10 | 1009 | 26 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.93 | 0.93 | 0.97 | 0.97 | 0.91 | 0.89 | 0.89 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.65 | 0.35 | 1.00 | 0.93 | 0.07 | 1.00 | 1.70 | 0.30 | 1.00 | 1.95 | 0.05 |
| Final Sat.: | 1769 | 1143 | 620 | 1769 | 1714 | 129 | 1736 | 2893 | 503 | 1736 | 3371 | 88 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.15 | 0.16 | 0.16 | 0.04 | 0.09 | 0.09 | 0.00 | 0.38 | 0.38 | 0.01 | 0.30 | 0.30 |
| Crit Moves: | | **** | | | | **** | | **** | | | **** | |
| Green/Cycle: | 0.22 | 0.22 | 0.22 | 0.12 | 0.12 | 0.12 | 0.01 | 0.53 | 0.53 | 0.01 | 0.53 | 0.53 |
| Volume/Cap: | 0.68 | 0.71 | 0.71 | 0.33 | 0.71 | 0.71 | 0.56 | 0.71 | 0.71 | 0.71 | 0.56 | 0.56 |
| Delay/Veh: | 40.3 | 41.9 | 41.9 | 41.2 | 52.5 | 52.5 | 108.0 | 19.1 | 19.1 | 148.9 | 16.0 | 16.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 40.3 | 41.9 | 41.9 | 41.2 | 52.5 | 52.5 | 108.0 | 19.1 | 19.1 | 148.9 | 16.0 | 16.0 |
| DesignQueue: | 12 | 8 | 4 | 3 | 7 | 1 | 0 | 31 | 5 | 1 | 28 | 1 |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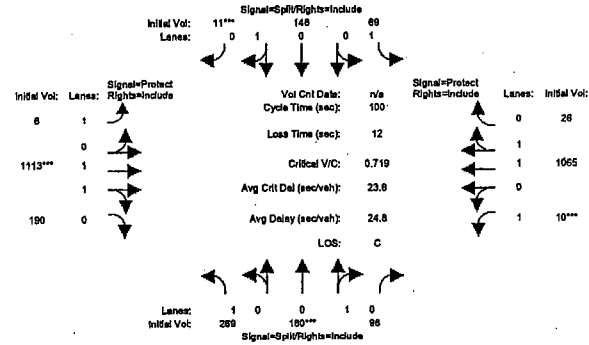
2010 Plus Phase 1 AM

Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 242 | 164 | 89 | 63 | 133 | 10 | 5 | 989 | 172 | 9 | 917 | 24 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 266 | 180 | 98 | 69 | 146 | 11 | 6 | 1088 | 189 | 10 | 1009 | 26 |
| Added Vol: | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 1 | 0 | 56 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 269 | 180 | 98 | 69 | 146 | 11 | 6 | 1113 | 190 | 10 | 1065 | 26 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 269 | 180 | 98 | 69 | 146 | 11 | 6 | 1113 | 190 | 10 | 1065 | 26 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 269 | 180 | 98 | 69 | 146 | 11 | 6 | 1113 | 190 | 10 | 1065 | 26 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 269 | 180 | 98 | 69 | 146 | 11 | 6 | 1113 | 190 | 10 | 1065 | 26 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.93 | 0.93 | 0.97 | 0.97 | 0.91 | 0.89 | 0.89 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.65 | 0.35 | 1.00 | 0.93 | 0.07 | 1.00 | 1.71 | 0.29 | 1.00 | 1.95 | 0.05 |
| Final Sat.: | 1769 | 1143 | 620 | 1769 | 1714 | 129 | 1736 | 2901 | 496 | 1736 | 3375 | 84 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.15 | 0.16 | 0.16 | 0.04 | 0.09 | 0.09 | 0.00 | 0.38 | 0.38 | 0.01 | 0.32 | 0.32 |
| Crit Moves: | | **** | | | | **** | | **** | | | **** | |
| Green/Cycle: | 0.22 | 0.22 | 0.22 | 0.12 | 0.12 | 0.12 | 0.01 | 0.53 | 0.53 | 0.01 | 0.54 | 0.54 |
| Volume/Cap: | 0.69 | 0.72 | 0.72 | 0.33 | 0.72 | 0.72 | 0.59 | 0.72 | 0.72 | 0.72 | 0.59 | 0.59 |
| Delay/Veh: | 41.2 | 42.6 | 42.6 | 41.3 | 53.4 | 53.4 | 121.2 | 19.1 | 19.1 | 153.4 | 16.2 | 16.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 41.2 | 42.6 | 42.6 | 41.3 | 53.4 | 53.4 | 121.2 | 19.1 | 19.1 | 153.4 | 16.2 | 16.2 |
| DesignQueue: | 12 | 8 | 4 | 3 | 7 | 1 | 0 | 32 | 5 | 1 | 30 | 1 |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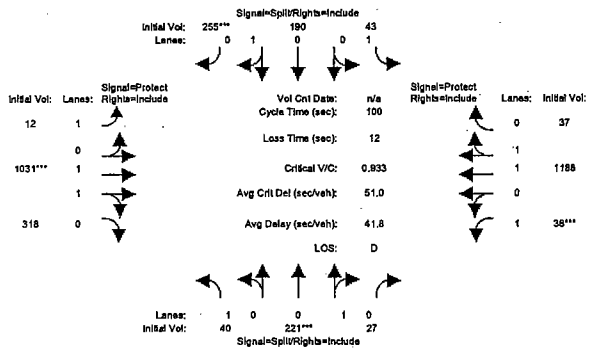
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project PM

## Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 40 | 221 | 27 | 43 | 190 | 255 | 12 | 1031 | 318 | 38 | 1188 | 37 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 40 | 221 | 27 | 43 | 190 | 255 | 12 | 1031 | 318 | 38 | 1188 | 37 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 40 | 221 | 27 | 43 | 190 | 255 | 12 | 1031 | 318 | 38 | 1188 | 37 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 40 | 221 | 27 | 43 | 190 | 255 | 12 | 1031 | 318 | 38 | 1188 | 37 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 40 | 221 | 27 | 43 | 190 | 255 | 12 | 1031 | 318 | 38 | 1188 | 37 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 40 | 221 | 27 | 43 | 190 | 255 | 12 | 1031 | 318 | 38 | 1188 | 37 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.96 | 0.96 | 0.93 | 0.90 | 0.90 | 0.91 | 0.88 | 0.88 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.89 | 0.11 | 1.00 | 0.43 | 0.57 | 1.00 | 1.53 | 0.47 | 1.00 | 1.94 | 0.06 |
| Final Sat.: | 1769 | 1633 | 199 | 1769 | 727 | 975 | 1736 | 2561 | 790 | 1736 | 3354 | 104 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.14 | 0.14 | 0.02 | 0.26 | 0.26 | 0.01 | 0.40 | 0.40 | 0.02 | 0.35 | 0.35 |
| Crit Moves: | | **** | | | | **** | | **** | | | **** | |
| Green/Cycle: | 0.15 | 0.15 | 0.15 | 0.28 | 0.28 | 0.28 | 0.01 | 0.43 | 0.43 | 0.02 | 0.45 | 0.45 |
| Volume/Cap: | 0.16 | 0.93 | 0.93 | 0.09 | 0.93 | 0.93 | 0.79 | 0.93 | 0.93 | 0.93 | 0.79 | 0.79 |
| Delay/Veh: | 37.7 | 79.8 | 79.8 | 26.6 | 60.6 | 60.6 | 178.4 | 38.4 | 38.4 | 163.4 | 26.7 | 26.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.7 | 79.8 | 79.8 | 26.6 | 60.6 | 60.6 | 178.4 | 38.4 | 38.4 | 163.4 | 26.7 | 26.7 |
| DesignQueue: | 2 | 11 | 1 | 2 | 8 | 11 | 1 | 36 | 11 | 2 | 40 | 1 |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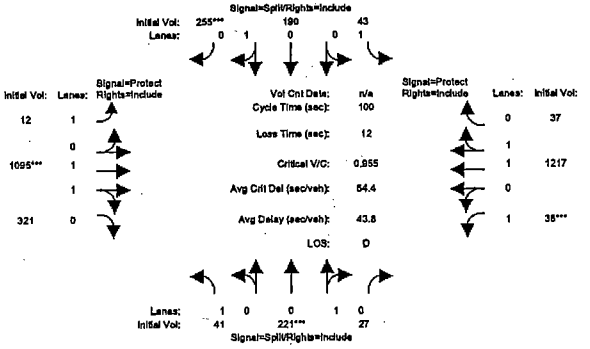
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 PM

## Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 40 | 221 | 27 | 43 | 190 | 255 | 12 | 1031 | 318 | 38 | 1188 | 37 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 40 | 221 | 27 | 43 | 190 | 255 | 12 | 1031 | 318 | 38 | 1188 | 37 |
| Added Vol: | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 3 | 0 | 29 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 41 | 221 | 27 | 43 | 190 | 255 | 12 | 1095 | 321 | 38 | 1217 | 37 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 41 | 221 | 27 | 43 | 190 | 255 | 12 | 1095 | 321 | 38 | 1217 | 37 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 41 | 221 | 27 | 43 | 190 | 255 | 12 | 1095 | 321 | 38 | 1217 | 37 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 41 | 221 | 27 | 43 | 190 | 255 | 12 | 1095 | 321 | 38 | 1217 | 37 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.96 | 0.96 | 0.93 | 0.90 | 0.90 | 0.91 | 0.88 | 0.88 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.89 | 0.11 | 1.00 | 0.43 | 0.57 | 1.00 | 1.55 | 0.45 | 1.00 | 1.94 | 0.06 |
| Final Sat.: | 1769 | 1633 | 199 | 1769 | 727 | 975 | 1736 | 2594 | 761 | 1736 | 3357 | 102 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.14 | 0.14 | 0.02 | 0.26 | 0.26 | 0.01 | 0.42 | 0.42 | 0.02 | 0.36 | 0.36 |
| Crit Moves: | | **** | | | | **** | | **** | | | **** | |
| Green/Cycle: | 0.14 | 0.14 | 0.14 | 0.27 | 0.27 | 0.27 | 0.01 | 0.44 | 0.44 | 0.02 | 0.46 | 0.46 |
| Volume/Cap: | 0.16 | 0.96 | 0.96 | 0.09 | 0.96 | 0.96 | 0.80 | 0.96 | 0.96 | 0.96 | 0.80 | 0.80 |
| Delay/Veh: | 38.0 | 86.2 | 86.2 | 27.1 | 66.2 | 66.2 | 179.0 | 41.1 | 41.1 | 173.6 | 26.1 | 26.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 38.0 | 86.2 | 86.2 | 27.1 | 66.2 | 66.2 | 179.0 | 41.1 | 41.1 | 173.6 | 26.1 | 26.1 |
| DesignQueue: | 2 | 11 | 1 | 2 | 8 | 11 | 1 | 38 | 11 | 2 | 40 | 1 |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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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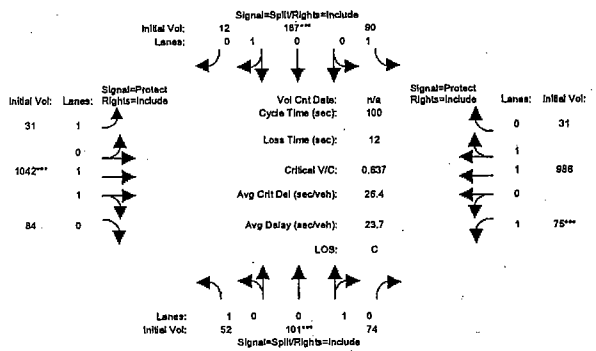
Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 47 | 92 | 67 | 82 | 170 | 11 | 28 | 947 | 76 | 68 | 896 | 28 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 52 | 101 | 74 | 90 | 187 | 12 | 31 | 1042 | 84 | 75 | 986 | 31 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 52 | 101 | 74 | 90 | 187 | 12 | 31 | 1042 | 84 | 75 | 986 | 31 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 52 | 101 | 74 | 90 | 187 | 12 | 31 | 1042 | 84 | 75 | 986 | 31 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 52 | 101 | 74 | 90 | 187 | 12 | 31 | 1042 | 84 | 75 | 986 | 31 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 52 | 101 | 74 | 90 | 187 | 12 | 31 | 1042 | 84 | 75 | 986 | 31 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.94 | 0.94 | 0.95 | 0.99 | 0.99 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.58 | 0.42 | 1.00 | 0.94 | 0.06 | 1.00 | 1.85 | 0.15 | 1.00 | 1.94 | 0.06 |
| Final Sat.: | 1805 | 1030 | 750 | 1805 | 1768 | 114 | 1805 | 3305 | 265 | 1805 | 3487 | 109 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.10 | 0.10 | 0.05 | 0.11 | 0.11 | 0.02 | 0.32 | 0.32 | 0.04 | 0.28 | 0.28 |
| Crit Moves: | | **** | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.15 | 0.15 | 0.15 | 0.17 | 0.17 | 0.17 | 0.03 | 0.49 | 0.49 | 0.07 | 0.53 | 0.53 |
| Volume/Cap: | 0.19 | 0.64 | 0.64 | 0.30 | 0.64 | 0.64 | 0.54 | 0.64 | 0.64 | 0.64 | 0.54 | 0.54 |
| Delay/Veh: | 37.1 | 44.6 | 44.6 | 37.2 | 43.2 | 43.2 | 57.2 | 19.4 | 19.4 | 56.7 | 15.8 | 15.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.1 | 44.6 | 44.6 | 37.2 | 43.2 | 43.2 | 57.2 | 19.4 | 19.4 | 56.7 | 15.8 | 15.8 |
| DesignQueue: | 2 | 5 | 4 | 4 | 9 | 1 | 2 | 32 | 3 | 4 | 28 | 1 |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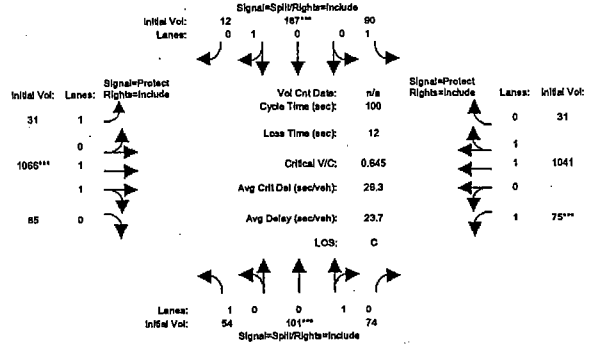
November 2003

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 47 | 92 | 67 | 82 | 170 | 11 | 28 | 947 | 76 | 68 | 896 | 28 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 52 | 101 | 74 | 90 | 187 | 12 | 31 | 1042 | 84 | 75 | 986 | 31 |
| Added Vol: | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 1 | 0 | 55 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 54 | 101 | 74 | 90 | 187 | 12 | 31 | 1066 | 85 | 75 | 1041 | 31 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 54 | 101 | 74 | 90 | 187 | 12 | 31 | 1066 | 85 | 75 | 1041 | 31 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 54 | 101 | 74 | 90 | 187 | 12 | 31 | 1066 | 85 | 75 | 1041 | 31 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 54 | 101 | 74 | 90 | 187 | 12 | 31 | 1066 | 85 | 75 | 1041 | 31 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.94 | 0.94 | 0.95 | 0.99 | 0.99 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.58 | 0.42 | 1.00 | 0.94 | 0.06 | 1.00 | 1.85 | 0.15 | 1.00 | 1.94 | 0.06 |
| Final Sat.: | 1805 | 1030 | 750 | 1805 | 1768 | 114 | 1805 | 3308 | 263 | 1805 | 3492 | 103 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.10 | 0.10 | 0.05 | 0.11 | 0.11 | 0.02 | 0.32 | 0.32 | 0.04 | 0.30 | 0.30 |
| Crit Moves: | | **** | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.03 | 0.50 | 0.50 | 0.06 | 0.53 | 0.53 |
| Volume/Cap: | 0.20 | 0.65 | 0.65 | 0.30 | 0.65 | 0.65 | 0.56 | 0.65 | 0.65 | 0.65 | 0.56 | 0.56 |
| Delay/Veh: | 37.4 | 45.1 | 45.1 | 37.4 | 43.7 | 43.7 | 60.0 | 19.3 | 19.3 | 57.5 | 15.9 | 15.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.4 | 45.1 | 45.1 | 37.4 | 43.7 | 43.7 | 60.0 | 19.3 | 19.3 | 57.5 | 15.9 | 15.9 |
| DesignQueue: | 3 | 5 | 4 | 4 | 9 | 1 | 2 | 32 | 3 | 4 | 29 | 1 |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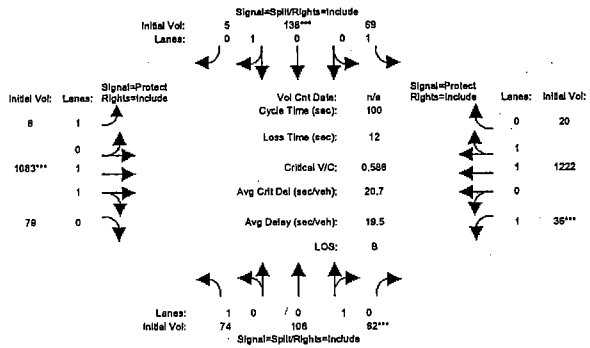
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project PM

Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 74 | 108 | 62 | 69 | 138 | 5 | 6 | 1083 | 79 | 36 | 1222 | 20 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 74 | 108 | 62 | 69 | 138 | 5 | 6 | 1083 | 79 | 36 | 1222 | 20 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 74 | 108 | 62 | 69 | 138 | 5 | 6 | 1083 | 79 | 36 | 1222 | 20 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 74 | 108 | 62 | 69 | 138 | 5 | 6 | 1083 | 79 | 36 | 1222 | 20 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 74 | 108 | 62 | 69 | 138 | 5 | 6 | 1083 | 79 | 36 | 1222 | 20 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 74 | 108 | 62 | 69 | 138 | 5 | 6 | 1083 | 79 | 36 | 1222 | 20 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.64 | 0.36 | 1.00 | 0.97 | 0.03 | 1.00 | 1.86 | 0.14 | 1.00 | 1.97 | 0.03 |
| Final Sat.: | 1805 | 1141 | 655 | 1805 | 1824 | 66 | 1805 | 3331 | 243 | 1805 | 3545 | 58 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.09 | 0.09 | 0.04 | 0.08 | 0.08 | 0.00 | 0.33 | 0.33 | 0.02 | 0.34 | 0.34 |
| Crit Moves: | | | **** | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.16 | 0.16 | 0.16 | 0.13 | 0.13 | 0.13 | 0.01 | 0.56 | 0.56 | 0.03 | 0.58 | 0.58 |
| Volume/Cap: | 0.25 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 |
| Delay/Veh: | 37.1 | 41.9 | 41.9 | 40.1 | 44.7 | 44.7 | 117.8 | 15.1 | 15.1 | 61.4 | 13.7 | 13.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.1 | 41.9 | 41.9 | 40.1 | 44.7 | 44.7 | 117.8 | 15.1 | 15.1 | 61.4 | 13.7 | 13.7 |
| DesignQueue: | 3 | 5 | 3 | 3 | 7 | 0 | 0 | 29 | 2 | 2 | 31 | 1 |





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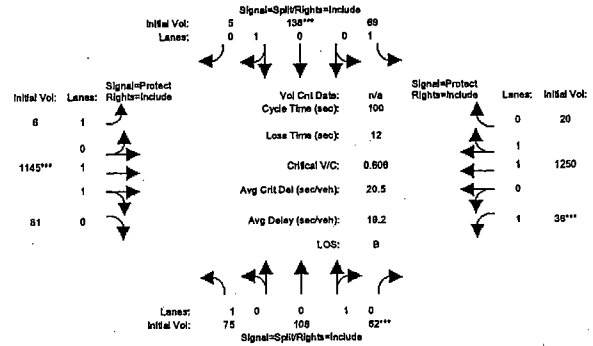
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 74 | 108 | 62 | 69 | 138 | 5 | 6 | 1083 | 79 | 36 | 1222 | 20 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 74 | 108 | 62 | 69 | 138 | 5 | 6 | 1083 | 79 | 36 | 1222 | 20 |
| Added Vol: | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 2 | 0 | 28 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 75 | 108 | 62 | 69 | 138 | 5 | 6 | 1145 | 81 | 36 | 1250 | 20 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 75 | 108 | 62 | 69 | 138 | 5 | 6 | 1145 | 81 | 36 | 1250 | 20 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 75 | 108 | 62 | 69 | 138 | 5 | 6 | 1145 | 81 | 36 | 1250 | 20 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 75 | 108 | 62 | 69 | 138 | 5 | 6 | 1145 | 81 | 36 | 1250 | 20 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.64 | 0.36 | 1.00 | 0.97 | 0.03 | 1.00 | 1.87 | 0.13 | 1.00 | 1.97 | 0.03 |
| Final Sat.: | 1805 | 1141 | 655 | 1805 | 1824 | 66 | 1805 | 3338 | 236 | 1805 | 3546 | 57 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.09 | 0.09 | 0.04 | 0.08 | 0.08 | 0.00 | 0.34 | 0.34 | 0.02 | 0.35 | 0.35 |
| Crit Moves: | | | **** | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.16 | 0.16 | 0.16 | 0.12 | 0.12 | 0.12 | 0.01 | 0.57 | 0.57 | 0.03 | 0.59 | 0.59 |
| Volume/Cap: | 0.27 | 0.61 | 0.61 | 0.31 | 0.61 | 0.61 | 0.59 | 0.61 | 0.61 | 0.61 | 0.59 | 0.59 |
| Delay/Veh: | 37.6 | 43.1 | 43.1 | 40.6 | 45.9 | 45.9 | 119.5 | 14.9 | 14.9 | 64.3 | 13.2 | 13.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.6 | 43.1 | 43.1 | 40.6 | 45.9 | 45.9 | 119.5 | 14.9 | 14.9 | 64.3 | 13.2 | 13.2 |
| DesignQueue: | 4 | 5 | 3 | 3 | 7 | 0 | 0 | 30 | 2 | 2 | 31 | 0 |

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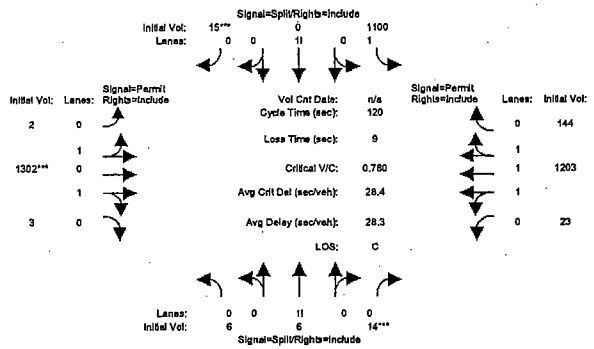
2010 No Project AM

## Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 5 | 13 | 1000 | 0 | 14 | 2 | 1184 | 3 | 21 | 1094 | 131 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 6 | 6 | 14 | 1100 | 0 | 15 | 2 | 1302 | 3 | 23 | 1203 | 144 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 6 | 6 | 14 | 1100 | 0 | 15 | 2 | 1302 | 3 | 23 | 1203 | 144 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 6 | 6 | 14 | 1100 | 0 | 15 | 2 | 1302 | 3 | 23 | 1203 | 144 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 6 | 6 | 14 | 1100 | 0 | 15 | 2 | 1302 | 3 | 23 | 1203 | 144 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 6 | 6 | 14 | 1100 | 0 | 15 | 2 | 1302 | 3 | 23 | 1203 | 144 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.90 | 0.90 | 0.90 | 0.93 | 1.00 | 0.93 | 0.89 | 0.89 | 0.89 | 0.74 | 0.74 | 0.74 |
| Lanes: | 0.22 | 0.22 | 0.56 | 1.97 | 0.00 | 0.03 | 0.00 | 1.99 | 0.01 | 0.05 | 2.63 | 0.32 |
| Final Sat.: | 370 | 370 | 962 | 3494 | 0 | 48 | 6 | 3364 | 9 | 71 | 3685 | 441 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.01 | 0.01 | 0.31 | 0.00 | 0.32 | 0.39 | 0.39 | 0.39 | 0.33 | 0.33 | 0.33 |
| Crit Moves: | | | **** | | | **** | | **** | | | | |
| Green/Cycle: | 0.02 | 0.02 | 0.02 | 0.41 | 0.00 | 0.41 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Volume/Cap: | 0.78 | 0.78 | 0.78 | 0.77 | 0.00 | 0.78 | 0.78 | 0.78 | 0.78 | 0.66 | 0.66 | 0.66 |
| Delay/Veh: | 132.1 | 132 | 132.1 | 33.1 | 0.0 | 33.6 | 27.2 | 27.2 | 27.2 | 23.4 | 23.4 | 23.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 132.1 | 132 | 132.1 | 33.1 | 0.0 | 33.6 | 27.2 | 27.2 | 27.2 | 23.4 | 23.4 | 23.4 |
| DesignQueue: | 0 | 0 | 1 | 47 | 0 | 1 | 0 | 48 | 0 | 1 | 43 | 5 |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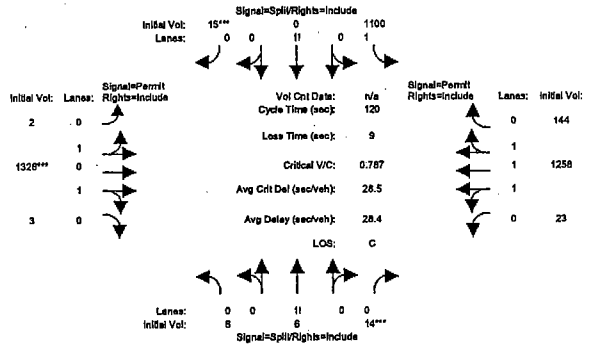
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 AM

## Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 5 | 13 | 1000 | 0 | 14 | 2 | 1184 | 3 | 21 | 1094 | 131 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 6 | 6 | 14 | 1100 | 0 | 15 | 2 | 1302 | 3 | 23 | 1203 | 144 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 55 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 6 | 6 | 14 | 1100 | 0 | 15 | 2 | 1326 | 3 | 23 | 1258 | 144 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 6 | 6 | 14 | 1100 | 0 | 15 | 2 | 1326 | 3 | 23 | 1258 | 144 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 6 | 6 | 14 | 1100 | 0 | 15 | 2 | 1326 | 3 | 23 | 1258 | 144 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 6 | 6 | 14 | 1100 | 0 | 15 | 2 | 1326 | 3 | 23 | 1258 | 144 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.90 | 0.90 | 0.90 | 0.93 | 1.00 | 0.93 | 0.89 | 0.89 | 0.89 | 0.74 | 0.74 | 0.74 |
| Lanes: | 0.22 | 0.22 | 0.56 | 1.97 | 0.00 | 0.03 | 0.00 | 1.99 | 0.01 | 0.05 | 2.65 | 0.30 |
| Final Sat.: | 370 | 370 | 962 | 3494 | 0 | 48 | 6 | 3365 | 8 | 68 | 3708 | 425 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.01 | 0.01 | 0.31 | 0.00 | 0.32 | 0.39 | 0.39 | 0.39 | 0.34 | 0.34 | 0.34 |
| Crit Moves: | | | **** | | | **** | | **** | | | | |
| Green/Cycle: | 0.02 | 0.02 | 0.02 | 0.41 | 0.00 | 0.41 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Volume/Cap: | 0.79 | 0.79 | 0.79 | 0.78 | 0.00 | 0.79 | 0.79 | 0.79 | 0.79 | 0.68 | 0.68 | 0.68 |
| Delay/Veh: | 135.0 | 135 | 135.0 | 33.7 | 0.0 | 34.2 | 27.2 | 27.2 | 27.2 | 23.5 | 23.5 | 23.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 135.0 | 135 | 135.0 | 33.7 | 0.0 | 34.2 | 27.2 | 27.2 | 27.2 | 23.5 | 23.5 | 23.5 |
| DesignQueue: | 0 | 0 | 1 | 47 | 0 | 1 | 0 | 49 | 0 | 1 | 45 | 5 |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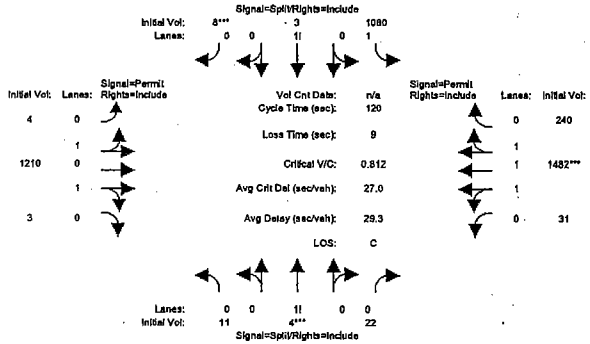
2000 HCM Operations (Future Volume Alternative)
2010 No Project PM

Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 10 | 4 | 20 | 982 | 3 | 7 | 4 | 1100 | 3 | 28 | 1347 | 218 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 11 | 4 | 22 | 1080 | 3 | 8 | 4 | 1210 | 3 | 31 | 1482 | 240 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 11 | 4 | 22 | 1080 | 3 | 8 | 4 | 1210 | 3 | 31 | 1482 | 240 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 11 | 4 | 22 | 1080 | 3 | 8 | 4 | 1210 | 3 | 31 | 1482 | 240 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 11 | 4 | 22 | 1080 | 3 | 8 | 4 | 1210 | 3 | 31 | 1482 | 240 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 11 | 4 | 22 | 1080 | 3 | 8 | 4 | 1210 | 3 | 31 | 1482 | 240 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.89 | 0.89 | 0.89 | 0.93 | 0.93 | 0.93 | 0.88 | 0.88 | 0.88 | 0.74 | 0.74 | 0.74 |
| Lanes: | 0.29 | 0.12 | 0.59 | 1.98 | 0.01 | 0.01 | 0.01 | 1.98 | 0.01 | 0.05 | 2.54 | 0.41 |
| Final Sat.: | 497 | 199 | 995 | 3510 | 11 | 25 | 12 | 3326 | 9 | 74 | 3547 | 574 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.02 | 0.02 | 0.31 | 0.31 | 0.31 | 0.36 | 0.36 | 0.36 | 0.42 | 0.42 | 0.42 |
| Crit Moves: | | **** | | | | **** | | | | | **** | |
| Green/Cycle: | 0.03 | 0.03 | 0.03 | 0.38 | 0.38 | 0.38 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 |
| Volume/Cap: | 0.81 | 0.81 | 0.81 | 0.80 | 0.81 | 0.81 | 0.71 | 0.71 | 0.71 | 0.81 | 0.81 | 0.81 |
| Delay/Veh: | 124.1 | 124 | 124.1 | 36.6 | 37.0 | 37.0 | 23.6 | 23.6 | 23.6 | 26.7 | 26.7 | 26.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 124.1 | 124 | 124.1 | 36.6 | 37.0 | 37.0 | 23.6 | 23.6 | 23.6 | 26.7 | 26.7 | 26.7 |
| DesignQueue: | 1 | 0 | 1 | 48 | 0 | 0 | 0 | 43 | 0 | 1 | 52 | 8 |





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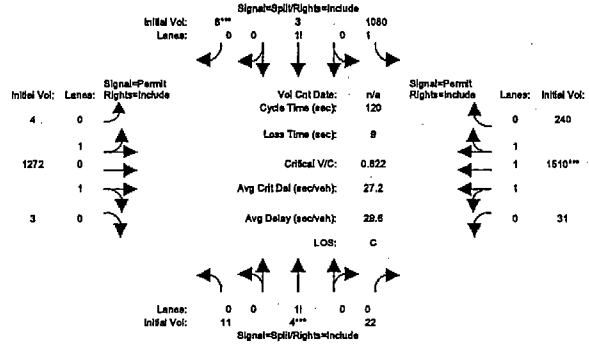
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 10 | 4 | 20 | 982 | 3 | 7 | 4 | 1100 | 3 | 28 | 1347 | 218 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 11 | 4 | 22 | 1080 | 3 | 8 | 4 | 1210 | 3 | 31 | 1482 | 240 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 0 | 0 | 28 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 11 | 4 | 22 | 1080 | 3 | 8 | 4 | 1272 | 3 | 31 | 1510 | 240 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 11 | 4 | 22 | 1080 | 3 | 8 | 4 | 1272 | 3 | 31 | 1510 | 240 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 11 | 4 | 22 | 1080 | 3 | 8 | 4 | 1272 | 3 | 31 | 1510 | 240 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 11 | 4 | 22 | 1080 | 3 | 8 | 4 | 1272 | 3 | 31 | 1510 | 240 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.89 | 0.89 | 0.89 | 0.93 | 0.93 | 0.93 | 0.88 | 0.88 | 0.88 | 0.73 | 0.73 | 0.73 |
| Lanes: | 0.29 | 0.12 | 0.59 | 1.98 | 0.01 | 0.01 | 0.01 | 1.98 | 0.01 | 0.05 | 2.55 | 0.40 |
| Final Sat.: | 497 | 199 | 995 | 3510 | 11 | 25 | 12 | 3327 | 9 | 72 | 3532 | 561 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.02 | 0.02 | 0.31 | 0.31 | 0.31 | 0.38 | 0.38 | 0.38 | 0.43 | 0.43 | 0.43 |
| Crit Moves: | | **** | | | | **** | | | | | **** | |
| Green/Cycle: | 0.03 | 0.03 | 0.03 | 0.38 | 0.38 | 0.38 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Volume/Cap: | 0.82 | 0.82 | 0.82 | 0.81 | 0.82 | 0.82 | 0.74 | 0.74 | 0.74 | 0.82 | 0.82 | 0.82 |
| Delay/Veh: | 128.0 | 128 | 128.0 | 37.5 | 37.9 | 37.9 | 24.1 | 24.1 | 24.1 | 26.8 | 26.8 | 26.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 128.0 | 128 | 128.0 | 37.5 | 37.9 | 37.9 | 24.1 | 24.1 | 24.1 | 26.8 | 26.8 | 26.8 |
| DesignQueue: | 1 | 0 | 1 | 48 | 0 | 0 | 0 | 45 | 0 | 1 | 53 | 8 |

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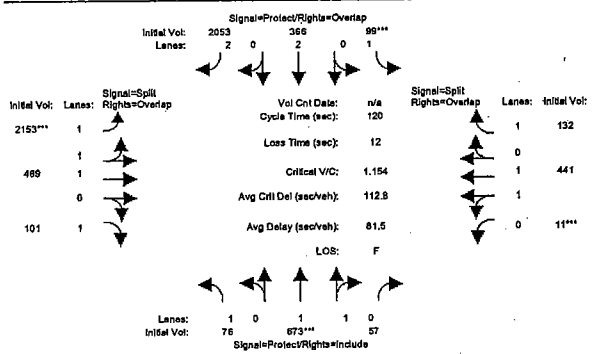
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project AM

## Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 69 | 612 | 52 | 90 | 333 | 1866 | 1957 | 426 | 92 | 10 | 401 | 120 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 76 | 673 | 57 | 99 | 366 | 2053 | 2153 | 469 | 101 | 11 | 441 | 132 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 76 | 673 | 57 | 99 | 366 | 2053 | 2153 | 469 | 101 | 11 | 441 | 132 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 76 | 673 | 57 | 99 | 366 | 2053 | 2153 | 469 | 101 | 11 | 441 | 132 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 76 | 673 | 57 | 99 | 366 | 2053 | 2153 | 469 | 101 | 11 | 441 | 132 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 76 | 673 | 57 | 99 | 366 | 2053 | 2153 | 469 | 101 | 11 | 441 | 132 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.84 | 0.16 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.05 | 1.95 | 1.00 |
| Final Sat.: | 1769 | 3222 | 274 | 1736 | 3473 | 2734 | 3337 | 1669 | 1554 | 86 | 3448 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.21 | 0.21 | 0.06 | 0.11 | 0.75 | 0.65 | 0.28 | 0.07 | 0.13 | 0.13 | 0.08 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Green/Cycle: | 0.07 | 0.18 | 0.18 | 0.05 | 0.16 | 0.72 | 0.56 | 0.56 | 0.63 | 0.11 | 0.11 | 0.16 |
| Volume/Cap: | 0.64 | 1.15 | 1.15 | 1.15 | 0.64 | 1.04 | 1.15 | 0.50 | 0.10 | 1.15 | 1.15 | 0.52 |
| Delay/Veh: | 66.3 | 136 | 135.7 | 201.8 | 49.4 | 47.8 | 101.4 | 16.3 | 9.1 | 148.0 | 148 | 48.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 66.3 | 136 | 135.7 | 201.8 | 49.4 | 47.8 | 101.4 | 16.3 | 9.1 | 148.0 | 148 | 48.1 |
| DesignQueue: | 5 | 39 | 3 | 6 | 21 | 44 | 74 | 15 | 3 | 1 | 27 | 8 |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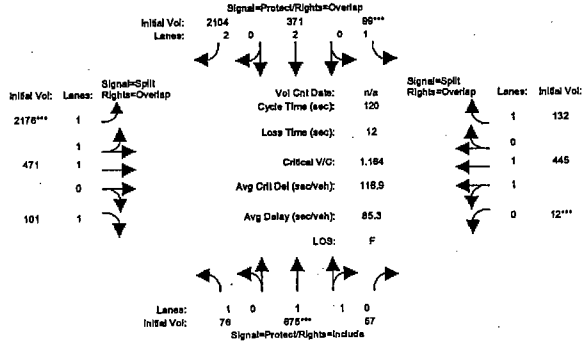
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 AM

## Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 69 | 612 | 52 | 90 | 333 | 1866 | 1957 | 426 | 92 | 10 | 401 | 120 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 76 | 673 | 57 | 99 | 366 | 2053 | 2153 | 469 | 101 | 11 | 441 | 132 |
| Added Vol: | 0 | 2 | 0 | 0 | 5 | 51 | 23 | 2 | 0 | 1 | 4 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 76 | 675 | 57 | 99 | 371 | 2104 | 2176 | 471 | 101 | 12 | 445 | 132 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 76 | 675 | 57 | 99 | 371 | 2104 | 2176 | 471 | 101 | 12 | 445 | 132 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 76 | 675 | 57 | 99 | 371 | 2104 | 2176 | 471 | 101 | 12 | 445 | 132 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 76 | 675 | 57 | 99 | 371 | 2104 | 2176 | 471 | 101 | 12 | 445 | 132 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.84 | 0.16 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.05 | 1.95 | 1.00 |
| Final Sat.: | 1769 | 3222 | 273 | 1736 | 3473 | 2734 | 3337 | 1669 | 1554 | 93 | 3441 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.21 | 0.21 | 0.06 | 0.11 | 0.77 | 0.65 | 0.28 | 0.07 | 0.13 | 0.13 | 0.08 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Green/Cycle: | 0.06 | 0.18 | 0.18 | 0.05 | 0.17 | 0.73 | 0.56 | 0.56 | 0.62 | 0.11 | 0.11 | 0.16 |
| Volume/Cap: | 0.70 | 1.16 | 1.16 | 1.16 | 0.64 | 1.06 | 1.16 | 0.50 | 0.10 | 1.16 | 1.16 | 0.52 |
| Delay/Veh: | 73.7 | 140 | 139.7 | 205.6 | 48.9 | 53.7 | 105.5 | 16.3 | 9.3 | 151.7 | 152 | 48.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 73.7 | 140 | 139.7 | 205.6 | 48.9 | 53.7 | 105.5 | 16.3 | 9.3 | 151.7 | 152 | 48.1 |
| DesignQueue: | 5 | 39 | 3 | 6 | 21 | 45 | 75 | 15 | 3 | 1 | 27 | 8 |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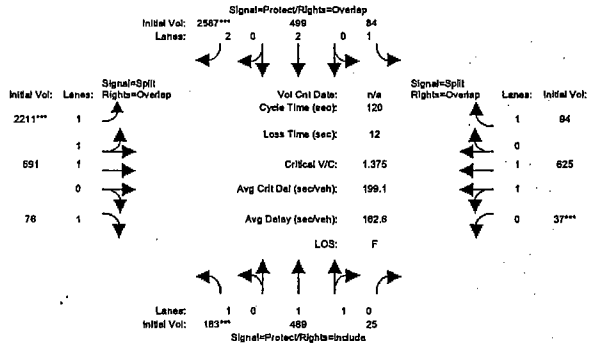
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project PM

Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 166 | 426 | 23 | 76 | 454 | 2352 | 2010 | 537 | 69 | 34 | 568 | 85 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 183 | 469 | 25 | 84 | 499 | 2587 | 2211 | 591 | 76 | 37 | 625 | 94 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 183 | 469 | 25 | 84 | 499 | 2587 | 2211 | 591 | 76 | 37 | 625 | 94 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 183 | 469 | 25 | 84 | 499 | 2587 | 2211 | 591 | 76 | 37 | 625 | 94 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 183 | 469 | 25 | 84 | 499 | 2587 | 2211 | 591 | 76 | 37 | 625 | 94 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 183 | 469 | 25 | 84 | 499 | 2587 | 2211 | 591 | 76 | 37 | 625 | 94 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.90 | 0.10 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.11 | 1.89 | 1.00 |
| Final Sat.: | 1769 | 3330 | 180 | 1736 | 3473 | 2734 | 3341 | 1670 | 1554 | 199 | 3328 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.14 | 0.14 | 0.05 | 0.14 | 0.95 | 0.66 | 0.35 | 0.05 | 0.19 | 0.19 | 0.06 |
| Crit Moves: | **** | | | | | **** | **** | | | **** | | |
| Green/Cycle: | 0.08 | 0.21 | 0.21 | 0.07 | 0.21 | 0.69 | 0.48 | 0.48 | 0.56 | 0.14 | 0.14 | 0.21 |
| Volume/Cap: | 1.37 | 0.67 | 0.67 | 0.67 | 0.70 | 1.37 | 1.37 | 0.73 | 0.09 | 1.37 | 1.37 | 0.28 |
| Delay/Veh: | 264.2 | 46.0 | 46.0 | 67.5 | 47.1 | 190.7 | 202.9 | 25.7 | 12.4 | 233.1 | 233 | 40.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 264.2 | 46.0 | 46.0 | 67.5 | 47.1 | 190.7 | 202.9 | 25.7 | 12.4 | 233.1 | 233 | 40.4 |
| DesignQueue: | 12 | 26 | 1 | 5 | 27 | 66 | 90 | 22 | 2 | 2 | 38 | 5 |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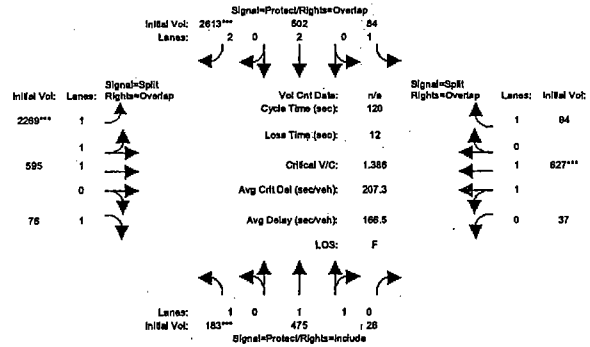
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 166 | 426 | 23 | 76 | 454 | 2352 | 2010 | 537 | 69 | 34 | 568 | 85 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 183 | 469 | 25 | 84 | 499 | 2587 | 2211 | 591 | 76 | 37 | 625 | 94 |
| Added Vol: | 0 | 6 | 1 | 0 | 3 | 26 | 58 | 4 | 0 | 0 | 2 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 183 | 475 | 26 | 84 | 502 | 2613 | 2269 | 595 | 76 | 37 | 627 | 94 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 183 | 475 | 26 | 84 | 502 | 2613 | 2269 | 595 | 76 | 37 | 627 | 94 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 183 | 475 | 26 | 84 | 502 | 2613 | 2269 | 595 | 76 | 37 | 627 | 94 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 183 | 475 | 26 | 84 | 502 | 2613 | 2269 | 595 | 76 | 37 | 627 | 94 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.89 | 0.11 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.11 | 1.89 | 1.00 |
| Final Sat.: | 1769 | 3325 | 184 | 1736 | 3473 | 2734 | 3341 | 1670 | 1554 | 199 | 3329 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.14 | 0.14 | 0.05 | 0.14 | 0.96 | 0.68 | 0.36 | 0.05 | 0.19 | 0.19 | 0.06 |
| Crit Moves: | **** | | | | | **** | **** | | | | **** | |
| Green/Cycle: | 0.07 | 0.20 | 0.20 | 0.07 | 0.20 | 0.69 | 0.49 | 0.49 | 0.56 | 0.14 | 0.14 | 0.21 |
| Volume/Cap: | 1.39 | 0.70 | 0.70 | 0.70 | 0.73 | 1.39 | 1.39 | 0.73 | 0.09 | 1.39 | 1.39 | 0.29 |
| Delay/Veh: | 269.0 | 47.3 | 47.3 | 71.0 | 48.8 | 195.6 | 207.3 | 24.9 | 12.0 | 238.0 | 238 | 40.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 269.0 | 47.3 | 47.3 | 71.0 | 48.8 | 195.6 | 207.3 | 24.9 | 12.0 | 238.0 | 238 | 40.8 |
| DesignQueue: | 12 | 26 | 1 | 5 | 28 | 66 | 92 | 22 | 2 | 2 | 38 | 5 |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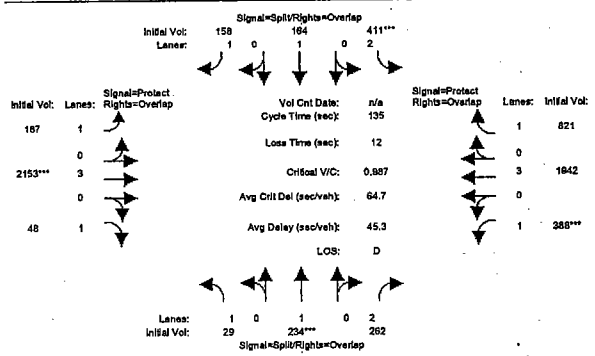
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project AM

## Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 26 | 213 | 238 | 374 | 149 | 144 | 170 | 1957 | 44 | 353 | 1765 | 746 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 29 | 234 | 262 | 411 | 164 | 158 | 187 | 2153 | 48 | 388 | 1942 | 821 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 29 | 234 | 262 | 411 | 164 | 158 | 187 | 2153 | 48 | 388 | 1942 | 821 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 29 | 234 | 262 | 411 | 164 | 158 | 187 | 2153 | 48 | 388 | 1942 | 821 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 29 | 234 | 262 | 411 | 164 | 158 | 187 | 2153 | 48 | 388 | 1942 | 821 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 29 | 234 | 262 | 411 | 164 | 158 | 187 | 2153 | 48 | 388 | 1942 | 821 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.13 | 0.09 | 0.12 | 0.09 | 0.10 | 0.11 | 0.42 | 0.03 | 0.22 | 0.38 | 0.52 |
| Crit Moves: | | **** | | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.13 | 0.13 | 0.35 | 0.12 | 0.12 | 0.23 | 0.11 | 0.43 | 0.56 | 0.22 | 0.54 | 0.66 |
| Volume/Cap: | 0.13 | 0.99 | 0.27 | 0.99 | 0.73 | 0.43 | 0.96 | 0.99 | 0.05 | 0.99 | 0.71 | 0.78 |
| Delay/Veh: | 46.7 | 107 | 28.2 | 93.3 | 61.9 | 40.2 | 105.5 | 50.3 | 12.2 | 88.4 | 21.3 | 18.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 46.7 | 107 | 28.2 | 93.3 | 61.9 | 40.2 | 105.5 | 50.3 | 12.2 | 88.4 | 21.3 | 18.1 |
| DesignQueue: | 2 | 14 | 12 | 25 | 10 | 8 | 11 | 91 | 1 | 21 | 65 | 21 |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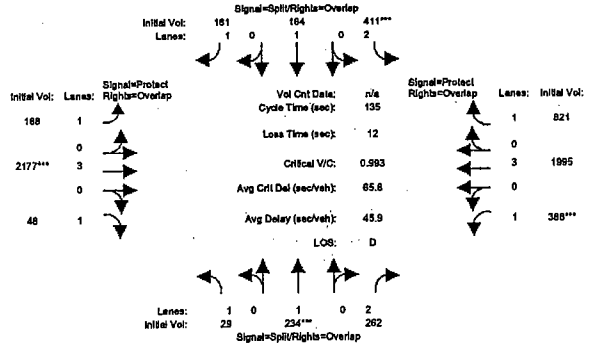
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 AM

## Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 26 | 213 | 238 | 374 | 149 | 144 | 170 | 1957 | 44 | 353 | 1765 | 746 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 29 | 234 | 262 | 411 | 164 | 158 | 187 | 2153 | 48 | 388 | 1942 | 821 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 24 | 0 | 0 | 53 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 29 | 234 | 262 | 411 | 164 | 161 | 188 | 2177 | 48 | 388 | 1995 | 821 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 29 | 234 | 262 | 411 | 164 | 161 | 188 | 2177 | 48 | 388 | 1995 | 821 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 29 | 234 | 262 | 411 | 164 | 161 | 188 | 2177 | 48 | 388 | 1995 | 821 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 29 | 234 | 262 | 411 | 164 | 161 | 188 | 2177 | 48 | 388 | 1995 | 821 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.13 | 0.09 | 0.12 | 0.09 | 0.10 | 0.11 | 0.43 | 0.03 | 0.22 | 0.39 | 0.52 |
| Crit Moves: | | **** | | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.13 | 0.13 | 0.35 | 0.12 | 0.12 | 0.23 | 0.11 | 0.43 | 0.56 | 0.22 | 0.54 | 0.66 |
| Volume/Cap: | 0.13 | 0.99 | 0.27 | 0.99 | 0.73 | 0.44 | 0.96 | 0.99 | 0.05 | 0.99 | 0.72 | 0.78 |
| Delay/Veh: | 46.8 | 109 | 28.3 | 94.9 | 62.3 | 40.3 | 104.9 | 51.4 | 12.1 | 90.1 | 21.7 | 18.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 46.8 | 109 | 28.3 | 94.9 | 62.3 | 40.3 | 104.9 | 51.4 | 12.1 | 90.1 | 21.7 | 18.1 |
| DesignQueue: | 2 | 14 | 12 | 25 | 10 | 8 | 11 | 92 | 1 | 21 | 67 | 21 |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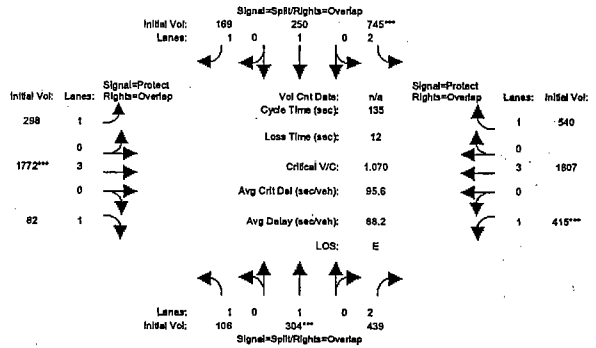
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project PM

## Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 96 | 276 | 399 | 677 | 227 | 154 | 271 | 1611 | 56 | 377 | 1643 | 491 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 106 | 304 | 439 | 745 | 250 | 169 | 298 | 1772 | 62 | 415 | 1807 | 540 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 106 | 304 | 439 | 745 | 250 | 169 | 298 | 1772 | 62 | 415 | 1807 | 540 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 106 | 304 | 439 | 745 | 250 | 169 | 298 | 1772 | 62 | 415 | 1807 | 540 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 106 | 304 | 439 | 745 | 250 | 169 | 298 | 1772 | 62 | 415 | 1807 | 540 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 106 | 304 | 439 | 745 | 250 | 169 | 298 | 1772 | 62 | 415 | 1807 | 540 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.16 | 0.16 | 0.22 | 0.13 | 0.11 | 0.17 | 0.35 | 0.04 | 0.23 | 0.36 | 0.34 |
| Crit Moves: | | **** | | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.15 | 0.15 | 0.37 | 0.20 | 0.20 | 0.38 | 0.18 | 0.33 | 0.48 | 0.22 | 0.37 | 0.57 |
| Volume/Cap: | 0.39 | 1.07 | 0.42 | 1.07 | 0.66 | 0.28 | 0.96 | 1.07 | 0.08 | 1.07 | 0.96 | 0.60 |
| Delay/Veh: | 46.8 | 124 | 28.4 | 102.3 | 48.4 | 26.3 | 89.8 | 84.0 | 17.0 | 112.5 | 49.9 | 17.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 46.8 | 124 | 28.4 | 102.3 | 48.4 | 26.3 | 89.8 | 84.0 | 17.0 | 112.5 | 49.9 | 17.7 |
| DesignQueue: | 6 | 18 | 19 | 42 | 14 | 7 | 17 | 87 | 2 | 23 | 83 | 17 |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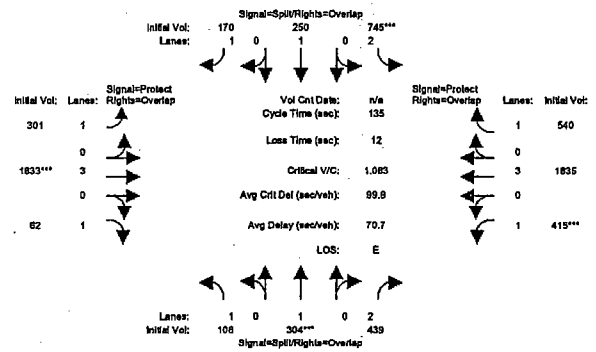
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 PM

## Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 96 | 276 | 399 | 677 | 227 | 154 | 271 | 1611 | 56 | 377 | 1643 | 491 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 106 | 304 | 439 | 745 | 250 | 169 | 298 | 1772 | 62 | 415 | 1807 | 540 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 61 | 0 | 0 | 28 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 106 | 304 | 439 | 745 | 250 | 170 | 301 | 1833 | 62 | 415 | 1835 | 540 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 106 | 304 | 439 | 745 | 250 | 170 | 301 | 1833 | 62 | 415 | 1835 | 540 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 106 | 304 | 439 | 745 | 250 | 170 | 301 | 1833 | 62 | 415 | 1835 | 540 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 106 | 304 | 439 | 745 | 250 | 170 | 301 | 1833 | 62 | 415 | 1835 | 540 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.16 | 0.16 | 0.22 | 0.13 | 0.11 | 0.17 | 0.36 | 0.04 | 0.23 | 0.36 | 0.34 |
| Crit Moves: | | **** | | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.15 | 0.15 | 0.37 | 0.20 | 0.20 | 0.38 | 0.18 | 0.33 | 0.48 | 0.22 | 0.37 | 0.57 |
| Volume/Cap: | 0.40 | 1.08 | 0.43 | 1.08 | 0.67 | 0.29 | 0.97 | 1.08 | 0.08 | 1.08 | 0.97 | 0.59 |
| Delay/Veh: | 47.0 | 129 | 28.8 | 107.1 | 49.0 | 26.4 | 91.1 | 88.3 | 16.7 | 117.2 | 50.6 | 17.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 47.0 | 129 | 28.8 | 107.1 | 49.0 | 26.4 | 91.1 | 88.3 | 16.7 | 117.2 | 50.6 | 17.6 |
| DesignQueue: | 6 | 18 | 19 | 42 | 14 | 7 | 17 | 89 | 2 | 23 | 84 | 17 |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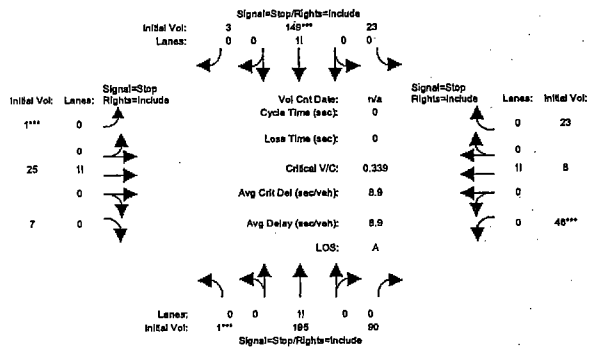
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 No Project AM

Intersection #18: Western/Meder [N/S: Western E/w: Meder]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 1 | 177 | 82 | 21 | 135 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 1 | 195 | 90 | 23 | 149 | 3 | 1 | 25 | 7 | 48 | 8 | 23 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 195 | 90 | 23 | 149 | 3 | 1 | 25 | 7 | 48 | 8 | 23 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1 | 195 | 90 | 23 | 149 | 3 | 1 | 25 | 7 | 48 | 8 | 23 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1 | 195 | 90 | 23 | 149 | 3 | 1 | 25 | 7 | 48 | 8 | 23 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1 | 195 | 90 | 23 | 149 | 3 | 1 | 25 | 7 | 48 | 8 | 23 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.01 | 0.68 | 0.31 | 0.13 | 0.85 | 0.02 | 0.03 | 0.77 | 0.20 | 0.61 | 0.10 | 0.29 |
| Final Sat.: | 3 | 574 | 266 | 103 | 664 | 15 | 23 | 518 | 135 | 419 | 67 | 200 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.34 | 0.34 | 0.34 | 0.22 | 0.22 | 0.22 | 0.05 | 0.05 | 0.05 | 0.12 | 0.12 | 0.12 |
| Crit Moves: | **** | | | | **** | | **** | | | **** | | |
| Delay/Veh: | 9.2 | 9.2 | 9.2 | 8.7 | 8.7 | 8.7 | 8.1 | 8.1 | 8.1 | 8.4 | 8.4 | 8.4 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.2 | 9.2 | 9.2 | 8.7 | 8.7 | 8.7 | 8.1 | 8.1 | 8.1 | 8.4 | 8.4 | 8.4 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | | 9.2 | | | 8.7 | | | 8.1 | | | 8.4 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 9.2 | | | 8.7 | | | 8.1 | | | 8.4 | |
| LOS by Appr: | | A | | | A | | | A | | | A | |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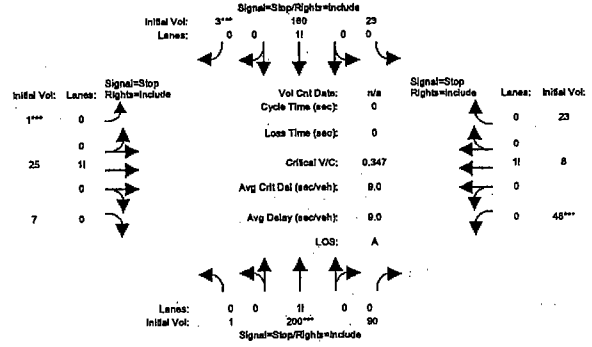
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #18: Western/Meder [N/S: Western E/w: Meder]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 1 | 177 | 82 | 21 | 135 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 1 | 195 | 90 | 23 | 149 | 3 | 1 | 25 | 7 | 48 | 8 | 23 |
| Added Vol: | 0 | 5 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 200 | 90 | 23 | 160 | 3 | 1 | 25 | 7 | 48 | 8 | 23 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1 | 200 | 90 | 23 | 160 | 3 | 1 | 25 | 7 | 48 | 8 | 23 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1 | 200 | 90 | 23 | 160 | 3 | 1 | 25 | 7 | 48 | 8 | 23 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1 | 200 | 90 | 23 | 160 | 3 | 1 | 25 | 7 | 48 | 8 | 23 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.01 | 0.68 | 0.31 | 0.12 | 0.86 | 0.02 | 0.03 | 0.77 | 0.20 | 0.61 | 0.10 | 0.29 |
| Final Sat.: | 3 | 576 | 260 | 97 | 670 | 14 | 22 | 514 | 134 | 415 | 66 | 198 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.35 | 0.35 | 0.35 | 0.24 | 0.24 | 0.24 | 0.05 | 0.05 | 0.05 | 0.12 | 0.12 | 0.12 |
| Crit Moves: | | **** | | | | **** | **** | | | **** | | |
| Delay/Veh: | 9.3 | 9.3 | 9.3 | 8.8 | 8.8 | 8.8 | 8.1 | 8.1 | 8.1 | 8.5 | 8.5 | 8.5 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.3 | 9.3 | 9.3 | 8.8 | 8.8 | 8.8 | 8.1 | 8.1 | 8.1 | 8.5 | 8.5 | 8.5 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | | 9.3 | | | 8.8 | | | 8.1 | | | 8.5 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 9.3 | | | 8.8 | | | 8.1 | | | 8.5 | |
| LOS by Appr: | | A | | | A | | | A | | | A | |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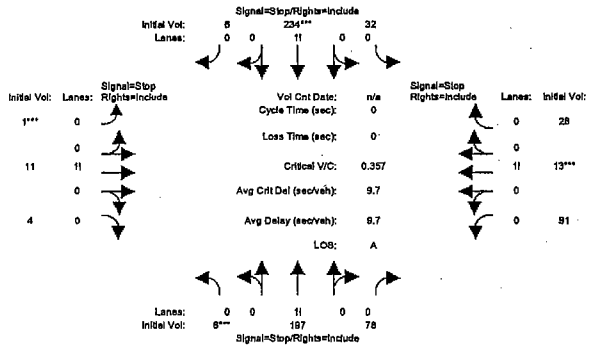
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 No Project PM

Intersection #18: Western/Meder [N/S: Western E/w: Meder]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L - | T - | R | L - | T - | R | L - | T - | R | L - | T - | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 179 | 71 | 29 | 213 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 6 | 197 | 78 | 32 | 234 | 6 | 1 | 11 | 4 | 91 | 13 | 28 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 6 | 197 | 78 | 32 | 234 | 6 | 1 | 11 | 4 | 91 | 13 | 28 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 6 | 197 | 78 | 32 | 234 | 6 | 1 | 11 | 4 | 91 | 13 | 28 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 6 | 197 | 78 | 32 | 234 | 6 | 1 | 11 | 4 | 91 | 13 | 28 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 6 | 197 | 78 | 32 | 234 | 6 | 1 | 11 | 4 | 91 | 13 | 28 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.02 | 0.70 | 0.28 | 0.12 | 0.86 | 0.02 | 0.06 | 0.67 | 0.27 | 0.69 | 0.10 | 0.21 |
| Final Sat.: | 15 | 554 | 220 | 89 | 656 | 15 | 41 | 415 | 166 | 448 | 65 | 135 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.03 | 0.03 | 0.03 | 0.20 | 0.20 | 0.20 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |
| Delay/Veh: | 9.7 | 9.7 | 9.7 | 10.0 | 10.0 | 10.0 | 8.3 | 8.3 | 8.3 | 9.3 | 9.3 | 9.3 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.7 | 9.7 | 9.7 | 10.0 | 10.0 | 10.0 | 8.3 | 8.3 | 8.3 | 9.3 | 9.3 | 9.3 |
| LOS by Move: | A | A | A | B | B | B | A | A | A | A | A | A |
| ApproachDel: | | 9.7 | | | 10.0 | | | 8.3 | | | 9.3 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 9.7 | | | 10.0 | | | 8.3 | | | 9.3 | |
| LOS by Appr: | | A | | | B | | | A | | | A | |





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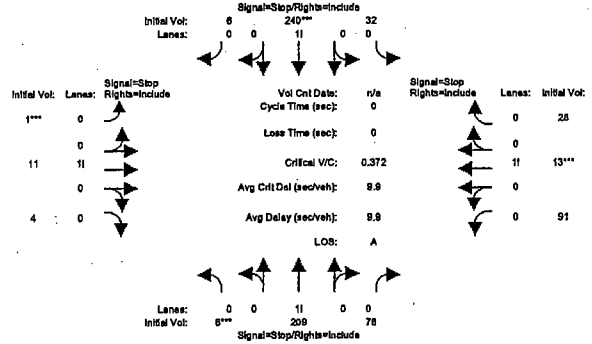
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #18: Western/Meder [N/S: Western E/w: Meder]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L - | T - | R | L - | T - | R | L - | T - | R | L - | T - | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 179 | 71 | 29 | 213 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 6 | 197 | 78 | 32 | 234 | 6 | 1 | 11 | 4 | 91 | 13 | 28 |
| Added Vol: | 0 | 12 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 6 | 209 | 78 | 32 | 240 | 6 | 1 | 11 | 4 | 91 | 13 | 28 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 6 | 209 | 78 | 32 | 240 | 6 | 1 | 11 | 4 | 91 | 13 | 28 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 6 | 209 | 78 | 32 | 240 | 6 | 1 | 11 | 4 | 91 | 13 | 28 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 6 | 209 | 78 | 32 | 240 | 6 | 1 | 11 | 4 | 91 | 13 | 28 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.02 | 0.71 | 0.27 | 0.11 | 0.87 | 0.02 | 0.06 | 0.67 | 0.27 | 0.69 | 0.10 | 0.21 |
| Final Sat.: | 15 | 562 | 210 | 87 | 657 | 15 | 41 | 410 | 164 | 444 | 64 | 134 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.03 | 0.03 | 0.03 | 0.21 | 0.21 | 0.21 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |
| Delay/Veh: | 9.9 | 9.9 | 9.9 | 10.1 | 10.1 | 10.1 | 8.3 | 8.3 | 8.3 | 9.4 | 9.4 | 9.4 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.9 | 9.9 | 9.9 | 10.1 | 10.1 | 10.1 | 8.3 | 8.3 | 8.3 | 9.4 | 9.4 | 9.4 |
| LOS by Move: | A | A | A | B | B | B | A | A | A | A | A | A |
| ApproachDel: | | 9.9 | | | 10.1 | | | 8.3 | | | 9.4 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 9.9 | | | 10.1 | | | 8.3 | | | 9.4 | |
| LOS by Appr: | | A | | | B | | | A | | | A | |

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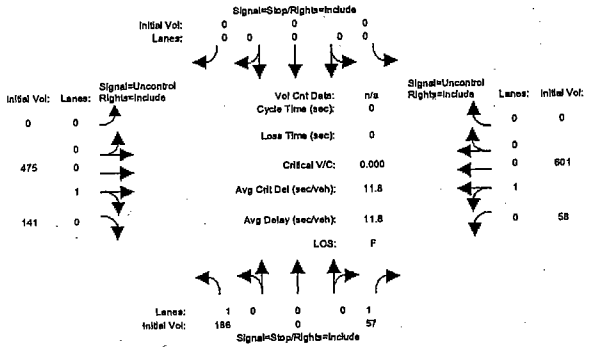
2000 HCM Unsignalized (Future Volume Alternative)
2010 No Project AM

## Intersection #19: High/Western (N/S: Western E/w: High)




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 169 | 0 | 52 | 0 | 0 | 0 | 0 | 432 | 128 | 53 | 546 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 186 | 0 | 57 | 0 | 0 | 0 | 0 | 475 | 141 | 58 | 601 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 186 | 0 | 57 | 0 | 0 | 0 | 0 | 475 | 141 | 58 | 601 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 186 | 0 | 57 | 0 | 0 | 0 | 0 | 475 | 141 | 58 | 601 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 186 | 0 | 57 | 0 | 0 | 0 | 0 | 475 | 141 | 58 | 601 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1263 | xxxx | 546 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 616 | xxxx | xxxxx |
| Potent Cap.: | 189 | xxxx | 542 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 974 | xxxx | xxxxx |
| Move Cap.: | 180 | xxxx | 542 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 974 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 128.6 | xxxx | 12.4 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.9 | xxxx | xxxxx |
| LOS by Move: | F | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.9 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 101.2 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | F | | | * | | | * | | | * | | |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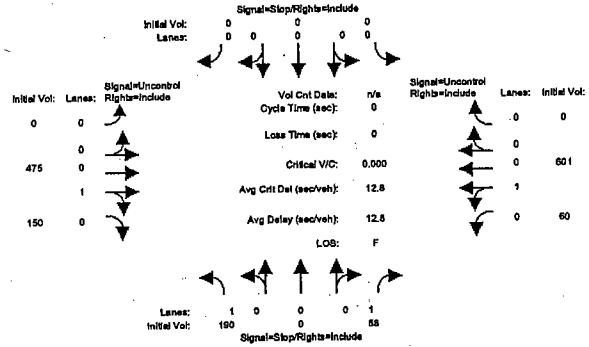
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 Plus Phase 1 AM

## Intersection #19: High/Western (N/S: Western E/w: High)




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 169 | 0 | 52 | 0 | 0 | 0 | 0 | 432 | 128 | 53 | 546 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 186 | 0 | 57 | 0 | 0 | 0 | 0 | 475 | 141 | 58 | 601 | 0 |
| Added Vol: | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 2 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 190 | 0 | 58 | 0 | 0 | 0 | 0 | 475 | 150 | 60 | 601 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 190 | 0 | 58 | 0 | 0 | 0 | 0 | 475 | 150 | 60 | 601 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 190 | 0 | 58 | 0 | 0 | 0 | 0 | 475 | 150 | 60 | 601 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1271 | xxxx | 550 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 625 | xxxx | xxxxx |
| Potent Cap.: | 187 | xxxx | 539 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 966 | xxxx | xxxxx |
| Move Cap.: | 178 | xxxx | 539 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 966 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 140.5 | xxxx | 12.5 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 9.0 | xxxx | xxxxx |
| LOS by Move: | F | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 9.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 110.5 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | F | | | * | | | * | | | * | | |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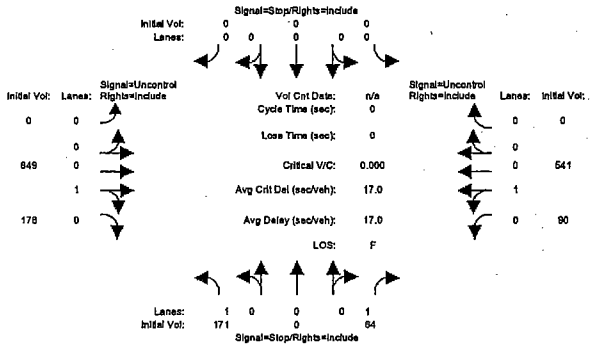
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 No Project PM

Intersection #19: High/Western [N/S: Western E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 155 | 0 | 58 | 0 | 0 | 0 | 0 | 590 | 162 | 82 | 492 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 171 | 0 | 64 | 0 | 0 | 0 | 0 | 649 | 178 | 90 | 541 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 171 | 0 | 64 | 0 | 0 | 0 | 0 | 649 | 178 | 90 | 541 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 171 | 0 | 64 | 0 | 0 | 0 | 0 | 649 | 178 | 90 | 541 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 171 | 0 | 64 | 0 | 0 | 0 | 0 | 649 | 178 | 90 | 541 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1460 | xxxx | 738 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 827 | xxxx | xxxxx |
| Potent Cap.: | 144 | xxxx | 421 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 813 | xxxx | xxxxx |
| Move Cap.: | 131 | xxxx | 421 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 813 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 244.8 | xxxx | 15.1 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 10.0 | xxxx | xxxxx |
| LOS by Move: | F | * | C | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 10.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 182.2 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | F | | | * | | | * | | | * | | |





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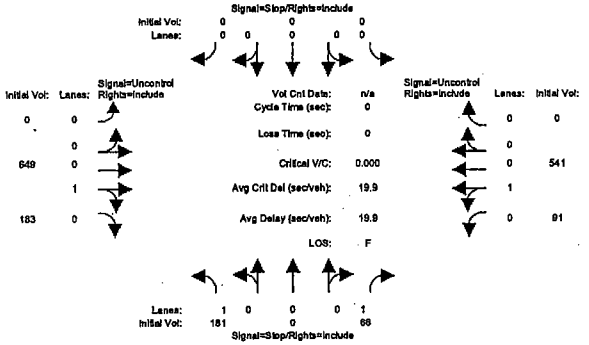
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #19: High/Western [N/S: Western E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 155 | 0 | 58 | 0 | 0 | 0 | 0 | 590 | 162 | 82 | 492 | 0 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 171 | 0 | 64 | 0 | 0 | 0 | 0 | 649 | 178 | 90 | 541 | 0 |
| Added Vol: | 10 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 181 | 0 | 66 | 0 | 0 | 0 | 0 | 649 | 183 | 91 | 541 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 181 | 0 | 66 | 0 | 0 | 0 | 0 | 649 | 183 | 91 | 541 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 181 | 0 | 66 | 0 | 0 | 0 | 0 | 649 | 183 | 91 | 541 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1464 | xxxx | 741 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 832 | xxxx | xxxxx |
| Potent Cap.: | 143 | xxxx | 420 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 809 | xxxx | xxxxx |
| Move Cap.: | 130 | xxxx | 420 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 809 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 278.8 | xxxx | 15.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 10.0 | xxxx | xxxxx |
| LOS by Move: | F | * | C | * | * | * | * | * | * | B | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 10.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | B | * | * |
| ApproachDel: | 208.4 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | F | | | * | | | * | | | * | | |

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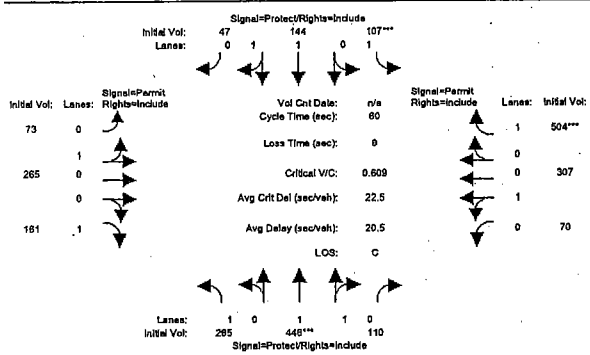
2000 HCM Operations (Future Volume Alternative)
2010 No Project AM

## Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 241 | 405 | 100 | 97 | 131 | 43 | 66 | 241 | 146 | 64 | 279 | 458 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 265 | 446 | 110 | 107 | 144 | 47 | 73 | 265 | 161 | 70 | 307 | 504 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 265 | 446 | 110 | 107 | 144 | 47 | 73 | 265 | 161 | 70 | 307 | 504 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 265 | 446 | 110 | 107 | 144 | 47 | 73 | 265 | 161 | 70 | 307 | 504 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 265 | 446 | 110 | 107 | 144 | 47 | 73 | 265 | 161 | 70 | 307 | 504 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 265 | 446 | 110 | 107 | 144 | 47 | 73 | 265 | 161 | 70 | 307 | 504 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.90 | 0.90 | 0.93 | 0.90 | 0.90 | 0.83 | 0.83 | 0.83 | 0.86 | 0.86 | 0.83 |
| Lanes: | 1.00 | 1.60 | 0.40 | 1.00 | 1.51 | 0.49 | 0.21 | 0.79 | 1.00 | 0.19 | 0.81 | 1.00 |
| Final Sat.: | 1769 | 2752 | 680 | 1769 | 2565 | 842 | 341 | 1244 | 1583 | 305 | 1330 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.15 | 0.16 | 0.16 | 0.06 | 0.06 | 0.06 | 0.21 | 0.21 | 0.10 | 0.23 | 0.23 | 0.32 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.27 | 0.27 | 0.27 | 0.10 | 0.10 | 0.10 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Volume/Cap: | 0.56 | 0.61 | 0.61 | 0.61 | 0.56 | 0.56 | 0.41 | 0.41 | 0.19 | 0.44 | 0.44 | 0.61 |
| Delay/Veh: | 27.0 | 26.9 | 26.9 | 40.7 | 36.6 | 36.6 | 11.9 | 11.9 | 10.3 | 12.2 | 12.2 | 14.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 27.0 | 26.9 | 26.9 | 40.7 | 36.6 | 36.6 | 11.9 | 11.9 | 10.3 | 12.2 | 12.2 | 14.7 |
| DesignQueue: | 9 | 15 | 4 | 4 | 6 | 2 | 2 | 6 | 3 | 2 | 7 | 11 |





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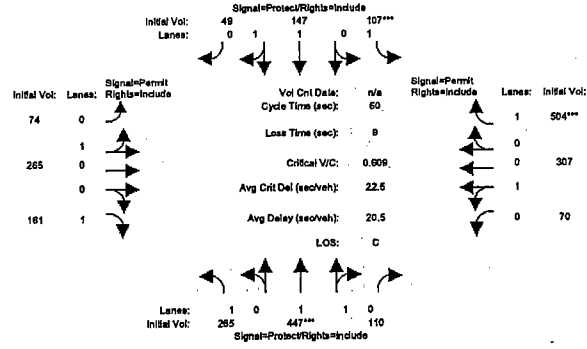
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 AM

## Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 241 | 405 | 100 | 97 | 131 | 43 | 66 | 241 | 146 | 64 | 279 | 458 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 265 | 446 | 110 | 107 | 144 | 47 | 73 | 265 | 161 | 70 | 307 | 504 |
| Added Vol: | 0 | 1 | 0 | 0 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 265 | 447 | 110 | 107 | 147 | 49 | 74 | 265 | 161 | 70 | 307 | 504 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 265 | 447 | 110 | 107 | 147 | 49 | 74 | 265 | 161 | 70 | 307 | 504 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 265 | 447 | 110 | 107 | 147 | 49 | 74 | 265 | 161 | 70 | 307 | 504 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 265 | 447 | 110 | 107 | 147 | 49 | 74 | 265 | 161 | 70 | 307 | 504 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.90 | 0.90 | 0.93 | 0.90 | 0.90 | 0.83 | 0.83 | 0.83 | 0.86 | 0.86 | 0.83 |
| Lanes: | 1.00 | 1.60 | 0.40 | 1.00 | 1.50 | 0.50 | 0.22 | 0.78 | 1.00 | 0.19 | 0.81 | 1.00 |
| Final Sat.: | 1769 | 2753 | 678 | 1769 | 2549 | 854 | 344 | 1240 | 1583 | 305 | 1328 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.15 | 0.16 | 0.16 | 0.06 | 0.06 | 0.06 | 0.21 | 0.21 | 0.10 | 0.23 | 0.23 | 0.32 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.26 | 0.27 | 0.27 | 0.10 | 0.10 | 0.10 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Volume/Cap: | 0.57 | 0.61 | 0.61 | 0.61 | 0.57 | 0.57 | 0.41 | 0.41 | 0.19 | 0.44 | 0.44 | 0.61 |
| Delay/Veh: | 27.2 | 26.9 | 26.9 | 40.7 | 36.5 | 36.5 | 11.9 | 11.9 | 10.3 | 12.2 | 12.2 | 14.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 27.2 | 26.9 | 26.9 | 40.7 | 36.5 | 36.5 | 11.9 | 11.9 | 10.3 | 12.2 | 12.2 | 14.7 |
| DesignQueue: | 9 | 15 | 4 | 4 | 6 | 2 | 2 | 6 | 3 | 2 | 7 | 11 |

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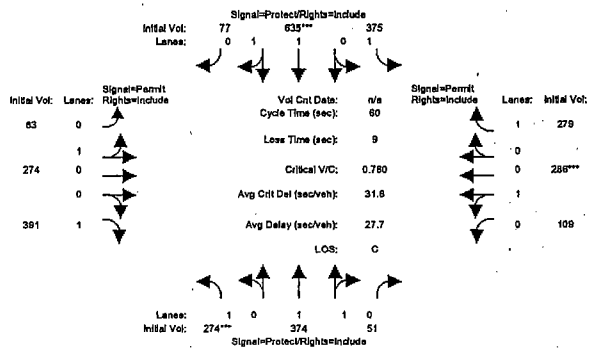
2000 HCM Operations (Future Volume Alternative)
2010 No Project PM

## Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 249 | 340 | 46 | 341 | 577 | 70 | 75 | 249 | 355 | 99 | 260 | 254 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 274 | 374 | 51 | 375 | 635 | 77 | 83 | 274 | 391 | 109 | 286 | 279 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 274 | 374 | 51 | 375 | 635 | 77 | 83 | 274 | 391 | 109 | 286 | 279 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 274 | 374 | 51 | 375 | 635 | 77 | 83 | 274 | 391 | 109 | 286 | 279 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 274 | 374 | 51 | 375 | 635 | 77 | 83 | 274 | 391 | 109 | 286 | 279 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 274 | 374 | 51 | 375 | 635 | 77 | 83 | 274 | 391 | 109 | 286 | 279 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.70 | 0.70 | 0.83 | 0.66 | 0.66 | 0.83 |
| Lanes: | 1.00 | 1.76 | 0.24 | 1.00 | 1.78 | 0.22 | 0.23 | 0.77 | 1.00 | 0.28 | 0.72 | 1.00 |
| Final Sat.: | 1769 | 3060 | 414 | 1769 | 3105 | 377 | 307 | 1020 | 1583 | 345 | 906 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.15 | 0.12 | 0.12 | 0.21 | 0.20 | 0.20 | 0.27 | 0.27 | 0.25 | 0.32 | 0.32 | 0.18 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.20 | 0.17 | 0.17 | 0.30 | 0.27 | 0.27 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 |
| Volume/Cap: | 0.76 | 0.71 | 0.71 | 0.71 | 0.76 | 0.76 | 0.65 | 0.65 | 0.59 | 0.76 | 0.76 | 0.43 |
| Delay/Veh: | 39.2 | 35.1 | 35.1 | 29.3 | 30.6 | 30.6 | 21.4 | 21.4 | 19.7 | 26.5 | 26.5 | 17.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 39.2 | 35.1 | 35.1 | 29.3 | 30.6 | 30.6 | 21.4 | 21.4 | 19.7 | 26.5 | 26.5 | 17.1 |
| DesignQueue: | 10 | 14 | 2 | 12 | 22 | 3 | 2 | 7 | 11 | 3 | 8 | 8 |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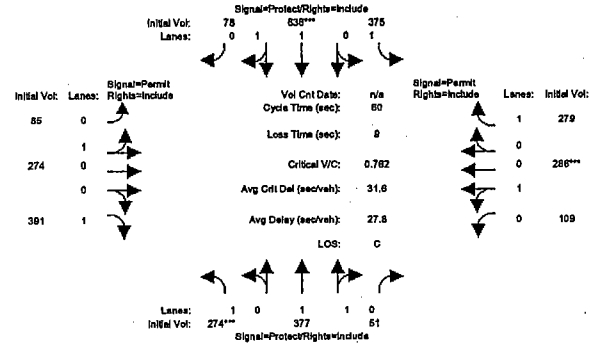
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 PM

## Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 249 | 340 | 46 | 341 | 577 | 70 | 75 | 249 | 355 | 99 | 260 | 254 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 274 | 374 | 51 | 375 | 635 | 77 | 83 | 274 | 391 | 109 | 286 | 279 |
| Added Vol: | 0 | 3 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 274 | 377 | 51 | 375 | 636 | 78 | 84 | 274 | 391 | 109 | 286 | 279 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 274 | 377 | 51 | 375 | 636 | 78 | 84 | 274 | 391 | 109 | 286 | 279 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 274 | 377 | 51 | 375 | 636 | 78 | 84 | 274 | 391 | 109 | 286 | 279 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 274 | 377 | 51 | 375 | 636 | 78 | 84 | 274 | 391 | 109 | 286 | 279 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.69 | 0.69 | 0.83 | 0.66 | 0.66 | 0.83 |
| Lanes: | 1.00 | 1.76 | 0.24 | 1.00 | 1.78 | 0.22 | 0.24 | 0.76 | 1.00 | 0.28 | 0.72 | 1.00 |
| Final Sat.: | 1769 | 3063 | 411 | 1769 | 3101 | 380 | 309 | 1000 | 1583 | 344 | 904 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.15 | 0.12 | 0.12 | 0.21 | 0.21 | 0.21 | 0.27 | 0.27 | 0.25 | 0.32 | 0.32 | 0.18 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.20 | 0.17 | 0.17 | 0.30 | 0.27 | 0.27 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 |
| Volume/Cap: | 0.76 | 0.71 | 0.71 | 0.71 | 0.76 | 0.76 | 0.66 | 0.66 | 0.59 | 0.76 | 0.76 | 0.43 |
| Delay/Veh: | 39.3 | 35.1 | 35.1 | 29.4 | 30.6 | 30.6 | 21.8 | 21.8 | 19.6 | 26.6 | 26.6 | 17.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 39.3 | 35.1 | 35.1 | 29.4 | 30.6 | 30.6 | 21.8 | 21.8 | 19.6 | 26.6 | 26.6 | 17.0 |
| DesignQueue: | 10 | 14 | 2 | 12 | 22 | 3 | 2 | 7 | 11 | 3 | 8 | 8 |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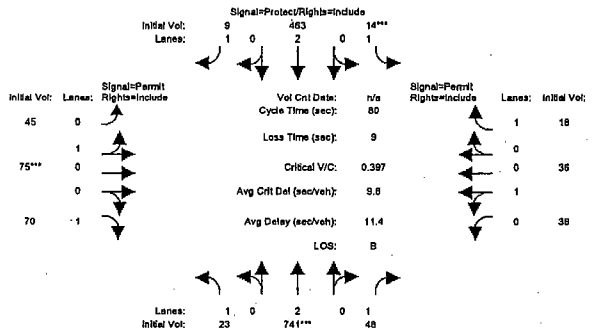
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project AM

Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 21 | 674 | 44 | 13 | 421 | 8 | 41 | 68 | 64 | 33 | 33 | 16 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 23 | 741 | 48 | 14 | 463 | 9 | 45 | 75 | 70 | 36 | 36 | 18 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 23 | 741 | 48 | 14 | 463 | 9 | 45 | 75 | 70 | 36 | 36 | 18 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| PHF Volume: | 28 | 893 | 58 | 17 | 558 | 11 | 54 | 90 | 85 | 44 | 44 | 21 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 28 | 893 | 58 | 17 | 558 | 11 | 54 | 90 | 85 | 44 | 44 | 21 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 28 | 893 | 58 | 17 | 558 | 11 | 54 | 90 | 85 | 44 | 44 | 21 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.84 | 0.84 | 0.83 | 0.80 | 0.80 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.38 | 0.62 | 1.00 | 0.50 | 0.50 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 604 | 1001 | 1583 | 762 | 762 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.25 | 0.04 | 0.01 | 0.16 | 0.01 | 0.09 | 0.09 | 0.05 | 0.06 | 0.06 | 0.01 |
| Crit Moves: | | **** | | **** | | | | **** | | | | |
| Green/Cycle: | 0.06 | 0.64 | 0.64 | 0.02 | 0.60 | 0.60 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 |
| Volume/Cap: | 0.26 | 0.40 | 0.06 | 0.40 | 0.26 | 0.01 | 0.40 | 0.40 | 0.24 | 0.25 | 0.25 | 0.06 |
| Delay/Veh: | 37.2 | 7.2 | 5.5 | 44.3 | 7.6 | 6.4 | 27.0 | 27.0 | 25.6 | 25.8 | 25.8 | 24.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.2 | 7.2 | 5.5 | 44.3 | 7.6 | 6.4 | 27.0 | 27.0 | 25.6 | 25.8 | 25.8 | 24.3 |
| DesignQueue: | 1 | 15 | 1 | 1 | 10 | 0 | 2 | 3 | 3 | 2 | 2 | 1 |





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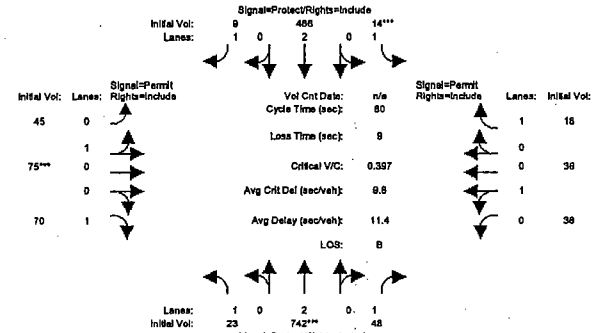
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 21 | 674 | 44 | 13 | 421 | 8 | 41 | 68 | 64 | 33 | 33 | 16 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 23 | 741 | 48 | 14 | 463 | 9 | 45 | 75 | 70 | 36 | 36 | 18 |
| Added Vol: | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 23 | 742 | 48 | 14 | 466 | 9 | 45 | 75 | 70 | 36 | 36 | 18 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| PHF Volume: | 28 | 894 | 58 | 17 | 562 | 11 | 54 | 90 | 85 | 44 | 44 | 21 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 28 | 894 | 58 | 17 | 562 | 11 | 54 | 90 | 85 | 44 | 44 | 21 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 28 | 894 | 58 | 17 | 562 | 11 | 54 | 90 | 85 | 44 | 44 | 21 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.84 | 0.84 | 0.83 | 0.80 | 0.80 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.38 | 0.62 | 1.00 | 0.50 | 0.50 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 604 | 1001 | 1583 | 762 | 762 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.25 | 0.04 | 0.01 | 0.16 | 0.01 | 0.09 | 0.09 | 0.05 | 0.06 | 0.06 | 0.01 |
| Crit Moves: | | **** | | **** | | | | **** | | | | |
| Green/Cycle: | 0.06 | 0.64 | 0.64 | 0.02 | 0.60 | 0.60 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 |
| Volume/Cap: | 0.26 | 0.40 | 0.06 | 0.40 | 0.26 | 0.01 | 0.40 | 0.40 | 0.24 | 0.25 | 0.25 | 0.06 |
| Delay/Veh: | 37.3 | 7.2 | 5.5 | 44.3 | 7.6 | 6.4 | 27.0 | 27.0 | 25.6 | 25.8 | 25.8 | 24.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.3 | 7.2 | 5.5 | 44.3 | 7.6 | 6.4 | 27.0 | 27.0 | 25.6 | 25.8 | 25.8 | 24.3 |
| DesignQueue: | 1 | 15 | 1 | 1 | 10 | 0 | 2 | 3 | 3 | 2 | 2 | 1 |

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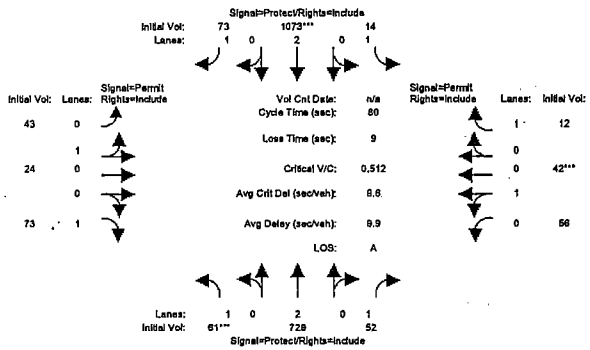
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project PM

Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 663 | 47 | 13 | 975 | 66 | 39 | 22 | 66 | 51 | 38 | 11 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 61 | 729 | 52 | 14 | 1073 | 73 | 43 | 24 | 73 | 56 | 42 | 12 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 61 | 729 | 52 | 14 | 1073 | 73 | 43 | 24 | 73 | 56 | 42 | 12 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| PHF Volume: | 68 | 819 | 58 | 16 | 1205 | 82 | 48 | 27 | 82 | 63 | 47 | 14 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 68 | 819 | 58 | 16 | 1205 | 82 | 48 | 27 | 82 | 63 | 47 | 14 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 68 | 819 | 58 | 16 | 1205 | 82 | 48 | 27 | 82 | 63 | 47 | 14 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.74 | 0.74 | 0.83 | 0.77 | 0.77 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.64 | 0.36 | 1.00 | 0.57 | 0.43 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 895 | 505 | 1583 | 837 | 623 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.23 | 0.04 | 0.01 | 0.34 | 0.05 | 0.05 | 0.05 | 0.05 | 0.08 | 0.08 | 0.01 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.08 | 0.71 | 0.71 | 0.03 | 0.67 | 0.67 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Volume/Cap: | 0.51 | 0.33 | 0.05 | 0.33 | 0.51 | 0.08 | 0.37 | 0.37 | 0.35 | 0.51 | 0.51 | 0.06 |
| Delay/Veh: | 38.9 | 4.4 | 3.5 | 42.0 | 7.0 | 4.8 | 31.9 | 31.9 | 31.6 | 33.5 | 33.5 | 29.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 38.9 | 4.4 | 3.5 | 42.0 | 7.0 | 4.8 | 31.9 | 31.9 | 31.6 | 33.5 | 33.5 | 29.5 |
| DesignQueue: | 3 | 11 | 1 | 1 | 20 | 1 | 2 | 1 | 3 | 2 | 2 | 1 |





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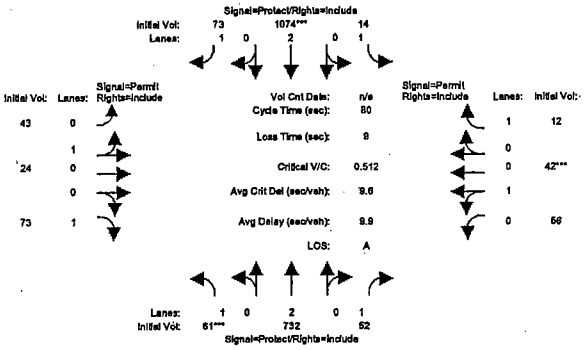
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 663 | 47 | 13 | 975 | 66 | 39 | 22 | 66 | 51 | 38 | 11 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 61 | 729 | 52 | 14 | 1073 | 73 | 43 | 24 | 73 | 56 | 42 | 12 |
| Added Vol: | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 61 | 732 | 52 | 14 | 1073 | 73 | 43 | 24 | 73 | 56 | 42 | 12 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| PHF Volume: | 68 | 823 | 58 | 16 | 1206 | 82 | 48 | 27 | 82 | 63 | 47 | 14 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 68 | 823 | 58 | 16 | 1206 | 82 | 48 | 27 | 82 | 63 | 47 | 14 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 68 | 823 | 58 | 16 | 1206 | 82 | 48 | 27 | 82 | 63 | 47 | 14 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.74 | 0.74 | 0.83 | 0.77 | 0.77 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.64 | 0.36 | 1.00 | 0.57 | 0.43 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 895 | 505 | 1583 | 837 | 623 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.23 | 0.04 | 0.01 | 0.34 | 0.05 | 0.05 | 0.05 | 0.05 | 0.08 | 0.08 | 0.01 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.08 | 0.71 | 0.71 | 0.03 | 0.67 | 0.67 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Volume/Cap: | 0.51 | 0.33 | 0.05 | 0.33 | 0.51 | 0.08 | 0.37 | 0.37 | 0.35 | 0.51 | 0.51 | 0.06 |
| Delay/Veh: | 39.0 | 4.4 | 3.4 | 42.0 | 7.0 | 4.8 | 31.9 | 31.9 | 31.6 | 33.6 | 33.6 | 29.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 39.0 | 4.4 | 3.4 | 42.0 | 7.0 | 4.8 | 31.9 | 31.9 | 31.6 | 33.6 | 33.6 | 29.5 |
| DesignQueue: | 3 | 11 | 1 | 1 | 20 | 1 | 2 | 1 | 3 | 2 | 2 | 1 |

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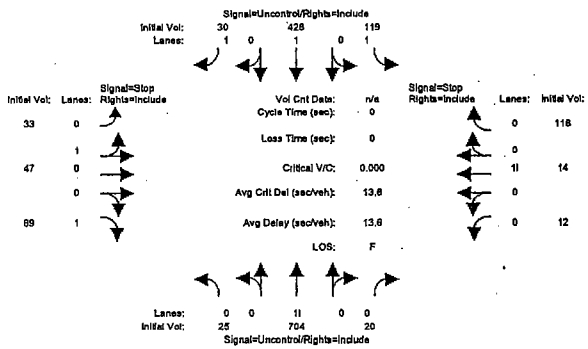
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 No Project AM

Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 23 | 640 | 18 | 108 | 389 | 27 | 30 | 43 | 63 | 11 | 13 | 107 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 25 | 704 | 20 | 119 | 428 | 30 | 33 | 47 | 69 | 12 | 14 | 118 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 25 | 704 | 20 | 119 | 428 | 30 | 33 | 47 | 69 | 12 | 14 | 118 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 25 | 704 | 20 | 119 | 428 | 30 | 33 | 47 | 69 | 12 | 14 | 118 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 25 | 704 | 20 | 119 | 428 | 30 | 33 | 47 | 69 | 12 | 14 | 118 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 458 | xxxx | xxxxx | 724 | xxxx | xxxxx | 1496 | 1440 | 428 | 1503 | 1460 | 714 |
| Potent Cap.: | 1114 | xxxx | xxxxx | 888 | xxxx | xxxxx | 102 | 134 | 631 | 101 | 130 | 435 |
| Move Cap.: | 1114 | xxxx | xxxxx | 888 | xxxx | xxxxx | 59 | 113 | 631 | 54 | 110 | 435 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 8.3 | xxxx | xxxxx | 9.7 | xxxx | xxxxx | xxxxx | xxxx | 11.4 | xxxxx | xxxx | xxxxx |
| LOS by Move: | A | * | * | A | * | * | * | * | B | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 82 | xxxx | xxxxx | xxxx | 231 | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 181.0 | xxxx | xxxxx | xxxxx | 43.4 | xxxxx |
| Shared LOS: | * | * | * | * | * | * | F | * | * | * | E | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 102.4 | | | 43.4 | | |
| ApproachLOS: | * | | | * | | | F | | | E | | |





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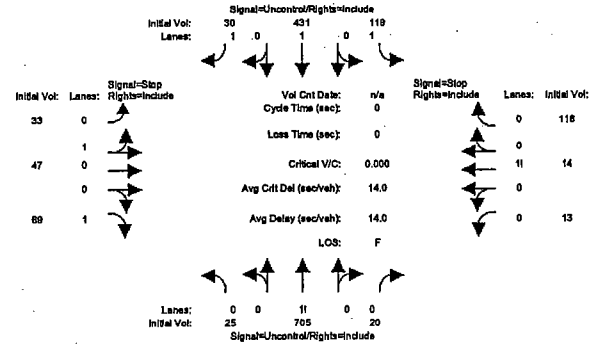
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 Plus Phase 1 AM

Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 23 | 640 | 18 | 108 | 389 | 27 | 30 | 43 | 63 | 11 | 13 | 107 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 25 | 704 | 20 | 119 | 428 | 30 | 33 | 47 | 69 | 12 | 14 | 118 |
| Added Vol: | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 25 | 705 | 20 | 119 | 431 | 30 | 33 | 47 | 69 | 13 | 14 | 118 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 25 | 705 | 20 | 119 | 431 | 30 | 33 | 47 | 69 | 13 | 14 | 118 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 25 | 705 | 20 | 119 | 431 | 30 | 33 | 47 | 69 | 13 | 14 | 118 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 461 | xxxx | xxxxx | 725 | xxxx | xxxxx | 1500 | 1444 | 431 | 1507 | 1464 | 715 |
| Potent Cap.: | 1111 | xxxx | xxxxx | 887 | xxxx | xxxxx | 101 | 133 | 629 | 100 | 130 | 434 |
| Move Cap.: | 1111 | xxxx | xxxxx | 887 | xxxx | xxxxx | 59 | 113 | 629 | 53 | 110 | 434 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 8.3 | xxxx | xxxxx | 9.7 | xxxx | xxxxx | xxxxx | xxxx | 11.4 | xxxxx | xxxx | xxxxx |
| LOS by Move: | A | * | * | A | * | * | * | * | B | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 82 | xxxx | xxxxx | xxxx | 224 | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 183.7 | xxxx | xxxxx | xxxxx | 46.3 | xxxxx |
| Shared LOS: | * | * | * | * | * | * | F | * | * | * | E | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 103.9 | | | 46.3 | | |
| ApproachLOS: | * | | | * | | | F | | | E | | |

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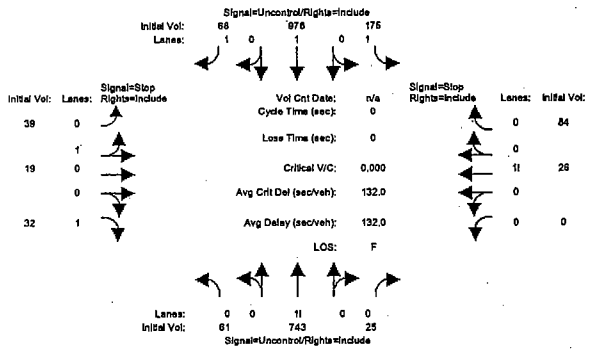
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 No Project PM

Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 675 | 23 | 159 | 889 | 62 | 35 | 17 | 29 | 0 | 24 | 76 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 61 | 743 | 25 | 175 | 978 | 68 | 39 | 19 | 32 | 0 | 26 | 84 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 61 | 743 | 25 | 175 | 978 | 68 | 39 | 19 | 32 | 0 | 26 | 84 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 61 | 743 | 25 | 175 | 978 | 68 | 39 | 19 | 32 | 0 | 26 | 84 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 61 | 743 | 25 | 175 | 978 | 68 | 39 | 19 | 32 | 0 | 26 | 84 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | xxxxx | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | xxxxx | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1046 | xxxx | xxxxx | 768 | xxxx | xxxxx | 2259 | 2217 | 978 | xxxx | 2272 | 755 |
| Potent Cap.: | 673 | xxxx | xxxxx | 855 | xxxx | xxxxx | 30 | 44 | 307 | xxxx | 41 | 412 |
| Move Cap.: | 673 | xxxx | xxxxx | 855 | xxxx | xxxxx | 4 | 32 | 307 | xxxx | 29 | 412 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 10.9 | xxxx | xxxxx | 10.3 | xxxx | xxxxx | xxxxx | xxxx | 18.1 | xxxxx | xxxx | xxxxx |
| LOS by Move: | B | * | * | B | * | * | * | * | C | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 6 | xxxx | xxxxx | xxxx | xxxx | 100 |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4868 | xxxx | xxxxx | xxxxx | xxxx | 198.5 |
| Shared LOS: | * | * | * | * | * | * | F | * | * | * | * | F |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 3131.9 | | | 198.5 | | |
| ApproachLOS: | * | | | * | | | F | | | F | | |





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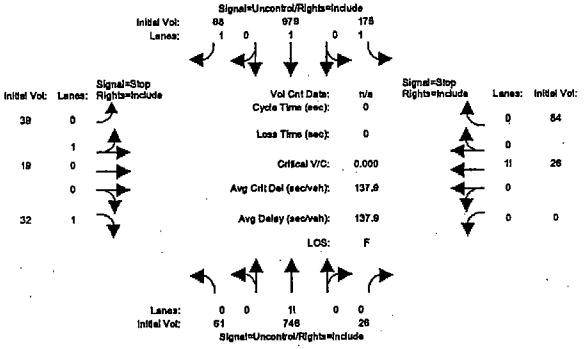
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 675 | 23 | 159 | 889 | 62 | 35 | 17 | 29 | 0 | 24 | 76 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 61 | 743 | 25 | 175 | 978 | 68 | 39 | 19 | 32 | 0 | 26 | 84 |
| Added Vol: | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 61 | 746 | 26 | 175 | 979 | 68 | 39 | 19 | 32 | 0 | 26 | 84 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 61 | 746 | 26 | 175 | 979 | 68 | 39 | 19 | 32 | 0 | 26 | 84 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 61 | 746 | 26 | 175 | 979 | 68 | 39 | 19 | 32 | 0 | 26 | 84 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | xxxxx | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | xxxxx | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1047 | xxxx | xxxxx | 772 | xxxx | xxxxx | 2263 | 2221 | 979 | xxxx | 2277 | 759 |
| Potent Cap.: | 672 | xxxx | xxxxx | 852 | xxxx | xxxxx | 29 | 44 | 306 | xxxx | 41 | 410 |
| Move Cap.: | 672 | xxxx | xxxxx | 852 | xxxx | xxxxx | 4 | 32 | 306 | xxxx | 29 | 410 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 10.9 | xxxx | xxxxx | 10.3 | xxxx | xxxxx | xxxxx | xxxx | 18.1 | xxxxx | xxxx | xxxxx |
| LOS by Move: | B | * | * | B | * | * | * | * | C | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 6 | xxxx | xxxxx | xxxx | xxxx | 99 |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 5111 | xxxx | xxxxx | xxxxx | xxxx | 201.7 |
| Shared LOS: | * | * | * | * | * | * | F | * | * | * | * | F |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 3287.4 | | | 201.7 | | |
| ApproachLOS: | * | | | * | | | F | | | F | | |

Marine Science Center

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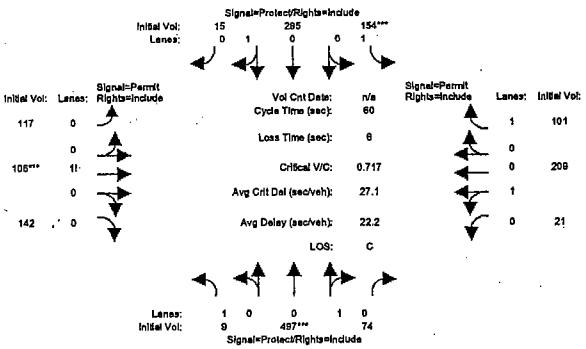
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project AM

## Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 452 | 67 | 140 | 268 | 14 | 106 | 96 | 129 | 19 | 190 | 92 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 9 | 497 | 74 | 154 | 295 | 15 | 117 | 106 | 142 | 21 | 209 | 101 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 9 | 497 | 74 | 154 | 295 | 15 | 117 | 106 | 142 | 21 | 209 | 101 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 9 | 497 | 74 | 154 | 295 | 15 | 117 | 106 | 142 | 21 | 209 | 101 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 9 | 497 | 74 | 154 | 295 | 15 | 117 | 106 | 142 | 21 | 209 | 101 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 9 | 497 | 74 | 154 | 295 | 15 | 117 | 106 | 142 | 21 | 209 | 101 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.96 | 0.96 | 0.93 | 0.97 | 0.97 | 0.73 | 0.73 | 0.73 | 0.94 | 0.94 | 0.83 |
| Lanes: | 1.00 | 0.87 | 0.13 | 1.00 | 0.95 | 0.05 | 0.32 | 0.29 | 0.39 | 0.09 | 0.91 | 1.00 |
| Final Sat.: | 1769 | 1591 | 236 | 1769 | 1757 | 92 | 442 | 400 | 538 | 162 | 1620 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.31 | 0.31 | 0.09 | 0.17 | 0.17 | 0.26 | 0.26 | 0.26 | 0.13 | 0.13 | 0.06 |
| Crit Moves: | | **** | | **** | | | | **** | | | | |
| Green/Cycle: | 0.02 | 0.44 | 0.44 | 0.12 | 0.54 | 0.54 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 |
| Volume/Cap: | 0.31 | 0.72 | 0.72 | 0.72 | 0.31 | 0.31 | 0.72 | 0.72 | 0.72 | 0.35 | 0.35 | 0.17 |
| Delay/Veh: | 45.1 | 21.7 | 21.7 | 44.8 | 10.3 | 10.3 | 26.6 | 26.6 | 26.6 | 18.7 | 18.7 | 17.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 45.1 | 21.7 | 21.7 | 44.8 | 10.3 | 10.3 | 26.6 | 26.6 | 26.6 | 18.7 | 18.7 | 17.2 |
| DesignQueue: | 0 | 14 | 2 | 6 | 6 | 0 | 3 | 3 | 4 | 1 | 6 | 3 |





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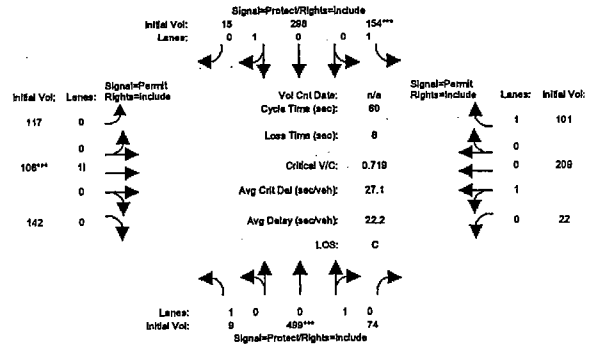
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 AM

## Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 452 | 67 | 140 | 268 | 14 | 106 | 96 | 129 | 19 | 190 | 92 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 9 | 497 | 74 | 154 | 295 | 15 | 117 | 106 | 142 | 21 | 209 | 101 |
| Added Vol: | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 9 | 499 | 74 | 154 | 298 | 15 | 117 | 106 | 142 | 22 | 209 | 101 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 9 | 499 | 74 | 154 | 298 | 15 | 117 | 106 | 142 | 22 | 209 | 101 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 9 | 499 | 74 | 154 | 298 | 15 | 117 | 106 | 142 | 22 | 209 | 101 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 9 | 499 | 74 | 154 | 298 | 15 | 117 | 106 | 142 | 22 | 209 | 101 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.96 | 0.96 | 0.93 | 0.97 | 0.97 | 0.73 | 0.73 | 0.73 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 0.87 | 0.13 | 1.00 | 0.95 | 0.05 | 0.32 | 0.29 | 0.39 | 0.09 | 0.91 | 1.00 |
| Final Sat.: | 1769 | 1592 | 235 | 1769 | 1758 | 91 | 442 | 400 | 537 | 168 | 1604 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.31 | 0.31 | 0.09 | 0.17 | 0.17 | 0.26 | 0.26 | 0.26 | 0.13 | 0.13 | 0.06 |
| Crit Moves: | | **** | | **** | | | | **** | | | | |
| Green/Cycle: | 0.02 | 0.44 | 0.44 | 0.12 | 0.54 | 0.54 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 |
| Volume/Cap: | 0.31 | 0.72 | 0.72 | 0.72 | 0.31 | 0.31 | 0.72 | 0.72 | 0.72 | 0.35 | 0.35 | 0.17 |
| Delay/Veh: | 45.2 | 21.7 | 21.7 | 45.0 | 10.3 | 10.3 | 26.7 | 26.7 | 26.7 | 18.7 | 18.7 | 17.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 45.2 | 21.7 | 21.7 | 45.0 | 10.3 | 10.3 | 26.7 | 26.7 | 26.7 | 18.7 | 18.7 | 17.2 |
| DesignQueue: | 0 | 14 | 2 | 6 | 6 | 0 | 3 | 3 | 4 | 1 | 6 | 3 |

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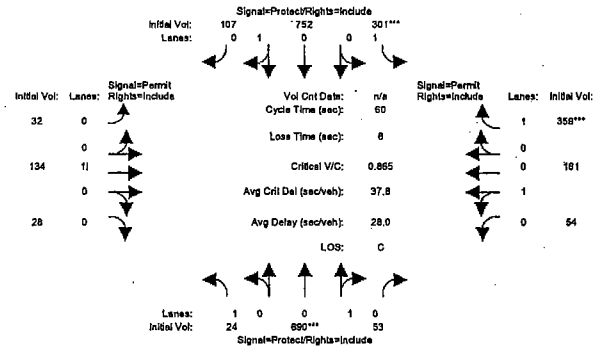
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 No Project PM

Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 22 | 627 | 48 | 274 | 684 | 97 | 29 | 122 | 25 | 49 | 146 | 326 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 24 | 690 | 53 | 301 | 752 | 107 | 32 | 134 | 28 | 54 | 161 | 359 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 24 | 690 | 53 | 301 | 752 | 107 | 32 | 134 | 28 | 54 | 161 | 359 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 24 | 690 | 53 | 301 | 752 | 107 | 32 | 134 | 28 | 54 | 161 | 359 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 24 | 690 | 53 | 301 | 752 | 107 | 32 | 134 | 28 | 54 | 161 | 359 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 24 | 690 | 53 | 301 | 752 | 107 | 32 | 134 | 28 | 54 | 161 | 359 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.97 | 0.97 | 0.93 | 0.96 | 0.96 | 0.89 | 0.89 | 0.89 | 0.87 | 0.87 | 0.83 |
| Lanes: | 1.00 | 0.93 | 0.07 | 1.00 | 0.88 | 0.12 | 0.16 | 0.70 | 0.14 | 0.25 | 0.75 | 1.00 |
| Final Sat.: | 1769 | 1711 | 131 | 1769 | 1600 | 227 | 280 | 1176 | 241 | 413 | 1231 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.40 | 0.40 | 0.17 | 0.47 | 0.47 | 0.11 | 0.11 | 0.11 | 0.13 | 0.13 | 0.23 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.02 | 0.47 | 0.47 | 0.20 | 0.64 | 0.64 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Volume/Cap: | 0.73 | 0.87 | 0.87 | 0.87 | 0.73 | 0.73 | 0.44 | 0.44 | 0.44 | 0.50 | 0.50 | 0.87 |
| Delay/Veh: | 96.9 | 28.3 | 28.3 | 50.7 | 11.9 | 11.9 | 25.3 | 25.3 | 25.3 | 26.0 | 26.0 | 45.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 96.9 | 28.3 | 28.3 | 50.7 | 11.9 | 11.9 | 25.3 | 25.3 | 25.3 | 26.0 | 26.0 | 45.2 |
| DesignQueue: | 1 | 18 | 1 | 11 | 13 | 2 | 1 | 5 | 1 | 2 | 5 | 12 |





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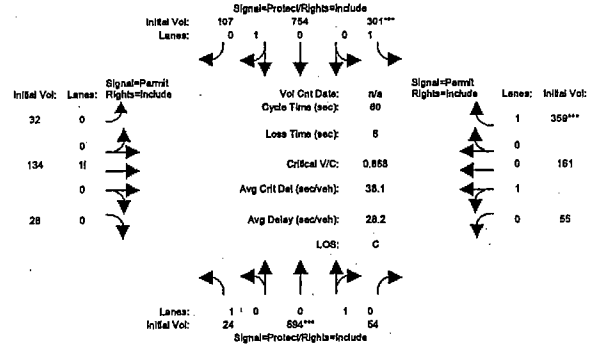
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 22 | 627 | 48 | 274 | 684 | 97 | 29 | 122 | 25 | 49 | 146 | 326 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 24 | 690 | 53 | 301 | 752 | 107 | 32 | 134 | 28 | 54 | 161 | 359 |
| Added Vol: | 0 | 4 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 24 | 694 | 54 | 301 | 754 | 107 | 32 | 134 | 28 | 55 | 161 | 359 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 24 | 694 | 54 | 301 | 754 | 107 | 32 | 134 | 28 | 55 | 161 | 359 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 24 | 694 | 54 | 301 | 754 | 107 | 32 | 134 | 28 | 55 | 161 | 359 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 24 | 694 | 54 | 301 | 754 | 107 | 32 | 134 | 28 | 55 | 161 | 359 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.97 | 0.97 | 0.93 | 0.96 | 0.96 | 0.89 | 0.89 | 0.89 | 0.86 | 0.86 | 0.83 |
| Lanes: | 1.00 | 0.93 | 0.07 | 1.00 | 0.88 | 0.12 | 0.16 | 0.70 | 0.14 | 0.25 | 0.75 | 1.00 |
| Final Sat.: | 1769 | 1709 | 133 | 1769 | 1600 | 226 | 280 | 1176 | 241 | 416 | 1217 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.41 | 0.41 | 0.17 | 0.47 | 0.47 | 0.11 | 0.11 | 0.11 | 0.13 | 0.13 | 0.23 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.02 | 0.47 | 0.47 | 0.20 | 0.65 | 0.65 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Volume/Cap: | 0.73 | 0.87 | 0.87 | 0.87 | 0.73 | 0.73 | 0.44 | 0.44 | 0.44 | 0.51 | 0.51 | 0.87 |
| Delay/Veh: | 97.1 | 28.4 | 28.4 | 51.2 | 11.9 | 11.9 | 25.3 | 25.3 | 25.3 | 26.1 | 26.1 | 45.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 97.1 | 28.4 | 28.4 | 51.2 | 11.9 | 11.9 | 25.3 | 25.3 | 25.3 | 26.1 | 26.1 | 45.7 |
| DesignQueue: | 1 | 18 | 1 | 11 | 14 | 2 | 1 | 5 | 1 | 2 | 5 | 12 |

Marine Science Center

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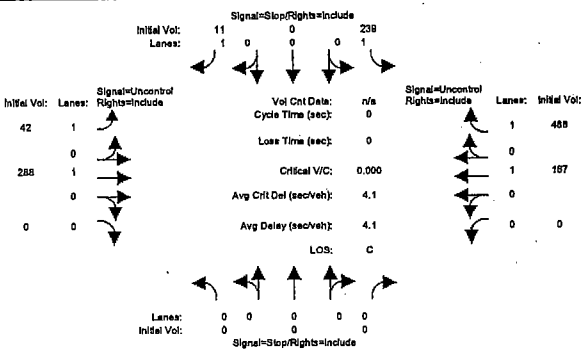
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 No Project AM

## Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 217 | 0 | 10 | 38 | 262 | 0 | 0 | 152 | 444 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 0 | 0 | 0 | 239 | 0 | 11 | 42 | 288 | 0 | 0 | 167 | 488 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 239 | 0 | 11 | 42 | 288 | 0 | 0 | 167 | 488 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 239 | 0 | 11 | 42 | 288 | 0 | 0 | 167 | 488 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 239 | 0 | 11 | 42 | 288 | 0 | 0 | 167 | 488 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 539 | xxxx | 167 | 656 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 507 | xxxx | 882 | 941 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 490 | xxxx | 882 | 941 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 19.1 | xxxx | 9.1 | 9.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | C | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 18.7 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | C | | | * | | | * | | |





Marine Science Center

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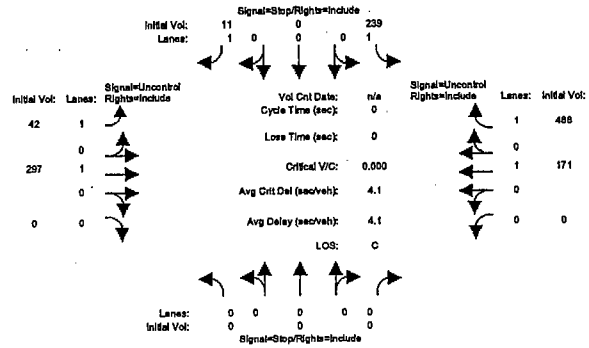
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 Plus Phase 1 AM

## Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 217 | 0 | 10 | 38 | 262 | 0 | 0 | 152 | 444 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 0 | 0 | 0 | 239 | 0 | 11 | 42 | 288 | 0 | 0 | 167 | 488 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 4 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 239 | 0 | 11 | 42 | 297 | 0 | 0 | 171 | 488 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 239 | 0 | 11 | 42 | 297 | 0 | 0 | 171 | 488 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 239 | 0 | 11 | 42 | 297 | 0 | 0 | 171 | 488 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 552 | xxxx | 171 | 660 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 498 | xxxx | 878 | 938 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 481 | xxxx | 878 | 938 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 19.6 | xxxx | 9.2 | 9.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | C | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 19.2 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | C | | | * | | | * | | |

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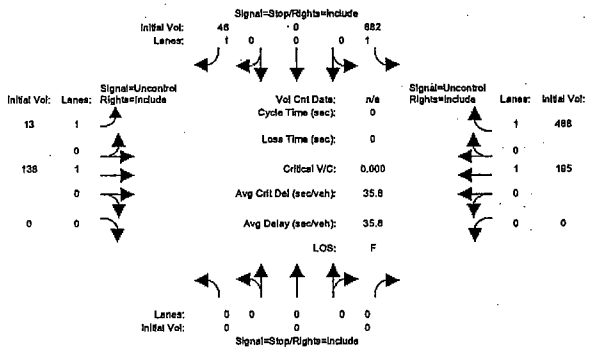
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 No Project PM

Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 620 | 0 | 42 | 12 | 125 | 0 | 0 | 177 | 444 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 0 | 0 | 0 | 682 | 0 | 46 | 13 | 138 | 0 | 0 | 195 | 488 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 682 | 0 | 46 | 13 | 138 | 0 | 0 | 195 | 488 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 682 | 0 | 46 | 13 | 138 | 0 | 0 | 195 | 488 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 682 | 0 | 46 | 13 | 138 | 0 | 0 | 195 | 488 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 359 | xxxx | 195 | 683 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 644 | xxxx | 852 | 919 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 637 | xxxx | 852 | 919 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 81.1 | xxxx | 9.5 | 9.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | F | * | A | A | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 76.6 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | F | | | * | | | * | | |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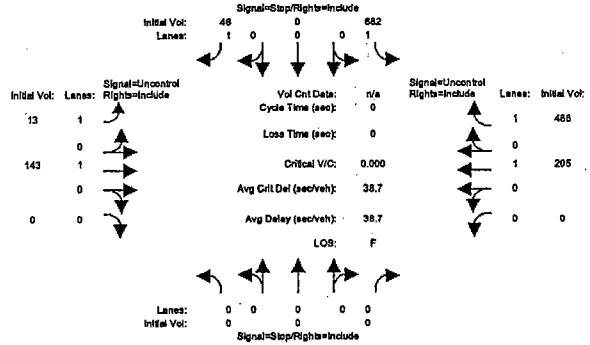
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2010 Plus Phase 1 PM

Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 620 | 0 | 42 | 12 | 125 | 0 | 0 | 177 | 444 |
| Growth Adj: | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Initial Bse: | 0 | 0 | 0 | 682 | 0 | 46 | 13 | 138 | 0 | 0 | 195 | 488 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 10 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 682 | 0 | 46 | 13 | 143 | 0 | 0 | 205 | 488 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 682 | 0 | 46 | 13 | 143 | 0 | 0 | 205 | 488 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 682 | 0 | 46 | 13 | 143 | 0 | 0 | 205 | 488 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 374 | xxxx | 205 | 693 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 631 | xxxx | 841 | 912 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 624 | xxxx | 841 | 912 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 88.7 | xxxx | 9.5 | 9.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | F | * | A | A | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 83.6 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | F | | | * | | | * | | |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Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

| Intersection | | 2020 Baseline AM | | | | 2020 Plus Phase 1 and 2 AM | | | | 2020 Baseline PM | | | | | | 2020 Plus Phase 1 and 2 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LOS | Avg Del (sec) | Crit V/C | Avg Crit Del (sec) | LOS | Avg Del (sec) | Crit V/C | Avg Crit Del (sec) | LOS | Avg Del (sec) | Crit V/C | Crit V/C Change | Avg Crit Del (sec) | Avg Crit Del Change | LOS | Avg Del (sec) | Crit V/C | Avg Crit Del (sec) |
| #1 | Delaware/Shaffer [N/S:Shaffer E/W:Delaware] | A | 1.8 | 0.000 | 1.8 | B | 0.6 | 0.000 | 0.6 | A | 1.5 | 0.000 | + 0.000 | 1.5 | + 0.9 | B | 0.4 | 0.000 | 0.4 |
| #2 | Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware] | A | 8.3 | 0.248 | 8.3 | A | 10.0 | 0.439 | 10.0 | A | 8.9 | 0.209 | - 0.230 | 8.9 | - 1.1 | B | 11.5 | 0.516 | 11.5 |
| #3 | Delaware/Swanton [N/S: Swanton E/W: Delaware] | B | 3.9 | 0.000 | 3.9 | B | 3.6 | 0.000 | 3.6 | B | 3.6 | 0.000 | + 0.000 | 3.6 | + 0.1 | B | 3.3 | 0.000 | 3.3 |
| #4 | Bay/Laguna [N/S:Laguna E/W: Bay] | B | 4.5 | 0.000 | 4.5 | C | 4.9 | 0.000 | 4.9 | C | 5.0 | 0.000 | + 0.000 | 5.0 | + 0.2 | C | 5.9 | 0.000 | 5.9 |
| #5 | SR 1/Shaffer [N/S: Shaffer E/w: SR 1] | B | 2.9 | 0.000 | 2.9 | B | 3.0 | 0.000 | 3.0 | C | 3.0 | 0.000 | + 0.000 | 3.0 | + 0.0 | C | 3.2 | 0.000 | 3.2 |
| #6 | Delaware/Swift [N/S: Swift E/W: Delaware] | C | 15.5 | 0.651 | 15.5 | C | 24.7 | 0.848 | 24.7 | C | 15.1 | 0.680 | - 0.168 | 15.1 | - 9.6 | C | 23.4 | 0.847 | 23.4 |
| #7 | Delaware/Almar [N/S: Almar E/W: Delaware] | B | 11.0 | 0.503 | 11.0 | B | 12.6 | 0.584 | 12.6 | C | 16.9 | 0.769 | + 0.185 | 16.9 | + 4.3 | D | 28.8 | 0.944 | 28.8 |
| #8 | SR 1/Western [N/S: Western E/w: SR 1] | C | 25.1 | 0.554 | 27.4 | C | 26.3 | 0.593 | 29.7 | C | 26.4 | 0.784 | + 0.191 | 30.0 | + 0.2 | C | 29.5 | 0.831 | 35.9 |
| #9 | SR 1/Swift [N/S: Swift E/w: SR 1] | C | 25.6 | 0.554 | 34.5 | C | 25.8 | 0.593 | 35.0 | C | 24.2 | 0.569 | - 0.024 | 29.3 | - 5.8 | C | 24.7 | 0.599 | 30.2 |
| #10 | Mission/Almar [N/S: Almar E/w: Mission] | C | 22.2 | 0.608 | 30.2 | C | 24.6 | 0.674 | 34.0 | C | 26.8 | 0.756 | + 0.082 | 36.1 | + 2.1 | C | 31.4 | 0.838 | 42.6 |
| #11 | Mission/Bay [N/S: Bay E/w: Mission] | D | 51.9 | 0.968 | 58.7 | E | 61.0 | 1.020 | 71.2 | F | 168.0 | 1.349 | + 0.328 | 203.2 | + 132.0 | F | 191.5 | 1.395 | 221.8 |
| #12 | Laurel/California [N/S: California E/w: Laurel] | C | 23.0 | 0.646 | 27.8 | C | 23.4 | 0.657 | 28.4 | C | 31.8 | 0.859 | + 0.202 | 38.8 | + 10.4 | C | 33.0 | 0.870 | 40.2 |
| #13 | Mission/Laurel [N/S: Laurel E/w: Missionl] | C | 29.1 | 0.820 | 32.2 | C | 30.0 | 0.844 | 33.3 | D | 46.0 | 0.963 | + 0.119 | 56.8 | + 23.5 | D | 52.5 | 1.012 | 67.2 |
| #14 | Mission/Walnut [N/S: Walnut E/w: Mission] | C | 26.2 | 0.725 | 29.5 | C | 26.3 | 0.747 | 29.8 | B | 19.8 | 0.598 | - 0.149 | 21.9 | - 7.8 | B | 19.4 | 0.643 | 21.6 |
| #15 | Mission/Union [N/S: Union E/w: Mission] | C | 34.5 | 0.891 | 35.6 | D | 36.5 | 0.912 | 36.9 | D | 44.0 | 0.985 | + 0.073 | 45.6 | + 8.7 | D | 50.8 | 1.022 | 54.4 |
| #16 | Mission/Chestnut [N/S: Chestnut E/w: Mission] | F | 139.4 | 1.318 | 186.6 | F | 151.8 | 1.344 | 198.0 | F | 233.2 | 1.580 | + 0.236 | 293.5 | + 95.5 | F | 244.6 | 1.611 | 303.2 |
| #17 | Mission/River [N/S: River E/w: Mission] | E | 68.4 | 1.120 | 107.8 | E | 71.1 | 1.134 | 113.1 | F | 110.6 | 1.229 | + 0.094 | 157.5 | + 44.5 | F | 118.8 | 1.258 | 169.3 |
| #18 | Western/Meder [N/S: Western E/w: Meder] | A | 9.5 | 0.412 | 9.5 | A | 9.8 | 0.431 | 9.8 | B | 10.7 | 0.436 | + 0.005 | 10.7 | + 0.9 | B | 11.2 | 0.465 | 11.2 |
| #19 | High/Western [N/S: Western E/w: High] | F | 33.9 | 0.000 | 33.9 | F | 39.8 | 0.000 | 39.8 | F | 46.6 | 0.000 | + 0.000 | 46.6 | + 6.8 | F | 59.8 | 0.000 | 59.8 |
| #20 | High/Bay [N/S: Bay E/w: High] | C | 25.0 | 0.781 | 28.7 | C | 25.2 | 0.781 | 28.7 | D | 46.1 | 0.967 | + 0.186 | 56.9 | + 28.2 | D | 47.3 | 0.973 | 58.2 |
| #21 | Bay/Iowa [N/S: Bay E/w: Iowa] | B | 11.2 | 0.496 | 9.5 | B | 11.2 | 0.497 | 9.5 | B | 10.5 | 0.622 | + 0.125 | 10.6 | + 1.1 | B | 10.5 | 0.623 | 10.6 |
| #22 | Bay/Escalona [N/S: Bay E/w: Escalana] | F | 85.3 | 0.000 | 85.3 | F | 93.7 | 0.000 | 93.7 | F | 42.2 | 0.000 | + 0.000 | 42.2 | - 51.5 | F | 1.2 | 0.000 | 1.2 |
| #23 | Bay/King [N/S: Bay E/w: King] | C | 29.9 | 0.874 | 39.2 | C | 30.2 | 0.878 | 39.7 | D | 50.8 | 1.041 | + 0.163 | 75.8 | + 36.1 | D | 51.8 | 1.048 | 77.7 |
| #24 | Empire Grade/Heller [N/S: Heller E/w: Empire Grade] | D | 6.1 | 0.000 | 6.1 | D | 6.6 | 0.000 | 6.6 | F | 101.6 | 0.000 | + 0.000 | 101.6 | + 95.0 | F | 112.7 | 0.000 | 112.7 |

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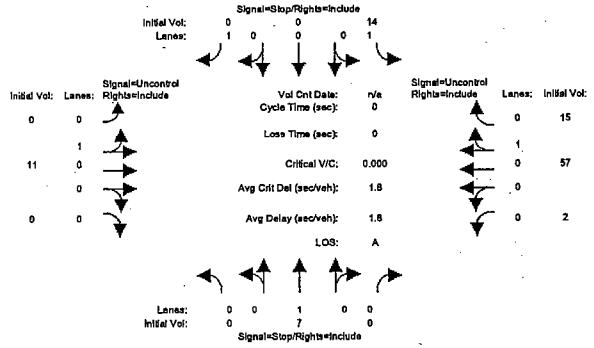
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline AM

Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 6 | 0 | 11 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 12 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 0 | 7 | 0 | 14 | 0 | 0 | 0 | 11 | 0 | 2 | 57 | 15 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 7 | 0 | 14 | 0 | 0 | 0 | 11 | 0 | 2 | 57 | 15 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 7 | 0 | 14 | 0 | 0 | 0 | 11 | 0 | 2 | 57 | 15 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 7 | 0 | 14 | 0 | 0 | 0 | 11 | 0 | 2 | 57 | 15 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | 6.6 | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | xxxxx | 4.1 | xxxxx | 3.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | 88 | xxxxx | 84 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 11 | xxxx | xxxxx |
| Potent Cap.: | xxxx | 791 | xxxxx | 888 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1589 | xxxx | xxxxx |
| Move Cap.: | xxxx | 790 | xxxxx | 881 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1589 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | 9.6 | xxxxx | 9.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.3 | xxxx | xxxxx |
| LOS by Move: | * | A | * | A | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | 9.6 | | | 9.2 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | A | | | A | | | * | | | * | | |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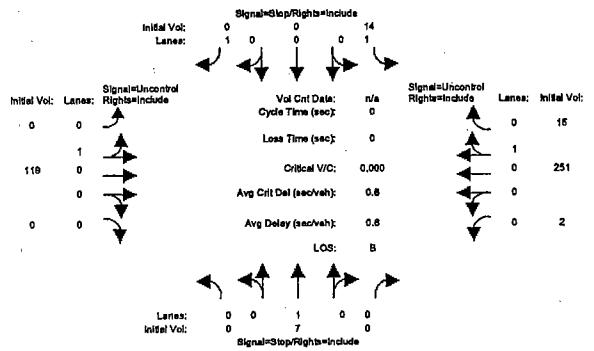
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 6 | 0 | 11 | 0 | 0 | 0 | 9 | 0 | 2 | 46 | 12 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 0 | 7 | 0 | 14 | 0 | 0 | 0 | 11 | 0 | 2 | 57 | 15 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 108 | 0 | 0 | 194 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 7 | 0 | 14 | 0 | 0 | 0 | 119 | 0 | 2 | 251 | 15 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 7 | 0 | 14 | 0 | 0 | 0 | 119 | 0 | 2 | 251 | 15 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 7 | 0 | 14 | 0 | 0 | 0 | 119 | 0 | 2 | 251 | 15 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | 6.6 | xxxxx | 7.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | xxxxx | 4.1 | xxxxx | 3.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | 390 | xxxxx | 386 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 119 | xxxx | xxxxx |
| Potent Cap.: | xxxx | 536 | xxxxx | 562 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1450 | xxxx | xxxxx |
| Move Cap.: | xxxx | 535 | xxxxx | 555 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1450 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | 11.8 | xxxxx | 11.7 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.5 | xxxx | xxxxx |
| LOS by Move: | * | B | * | B | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | 11.8 | | | 11.7 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | B | | | * | | | * | | |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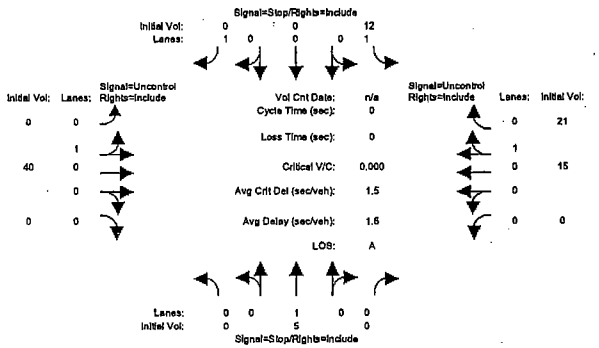
Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline PM

Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]




| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - R | L | - | T | - R | L | - | T | - R | L | - | T | - R |
| **Volume Module:** | | | | | | | | | | | | | | | | |
| Base Vol: | 0 | | 4 | 0 | 10 | | 0 | 0 | 0 | | 32 | 0 | 0 | | 12 | 17 |
| Growth Adj: | 1.24 | | 1.24 | 1.24 | 1.24 | | 1.24 | 1.24 | 1.24 | | 1.24 | 1.24 | 1.24 | | 1.24 | 1.24 |
| Initial Bse: | 0 | | 5 | 0 | 12 | | 0 | 0 | 0 | | 40 | 0 | 0 | | 15 | 21 |
| Added Vol: | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 |
| Campus Incr: | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 |
| Initial Fut: | 0 | | 5 | 0 | 12 | | 0 | 0 | 0 | | 40 | 0 | 0 | | 15 | 21 |
| User Adj: | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 |
| PHF Adj: | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 |
| PHF Volume: | 0 | | 5 | 0 | 12 | | 0 | 0 | 0 | | 40 | 0 | 0 | | 15 | 21 |
| Reduct Vol: | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 |
| Final Vol.: | 0 | | 5 | 0 | 12 | | 0 | 0 | 0 | | 40 | 0 | 0 | | 15 | 21 |
| **Critical Gap Module:** | | | | | | | | | | | | | | | | |
| Critical Gp: | xxxxx | | 6.6 | xxxxx | 7.2 | | xxxx | xxxxx | xxxxx | | xxxx | xxxxx | xxxxx | | xxxx | xxxxx |
| FollowUpTim: | xxxxx | | 4.1 | xxxxx | 3.6 | | xxxx | xxxxx | xxxxx | | xxxx | xxxxx | xxxxx | | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | | 76 | xxxxx | 68 | | xxxx | xxxxx | xxxx | | xxxx | xxxxx | xxxx | | xxxx | xxxxx |
| Potent Cap.: | xxxx | | 803 | xxxxx | 911 | | xxxx | xxxxx | xxxx | | xxxx | xxxxx | xxxx | | xxxx | xxxxx |
| Move Cap.: | xxxx | | 803 | xxxxx | 906 | | xxxx | xxxxx | xxxx | | xxxx | xxxxx | xxxx | | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | | | | | |
| Stopped Del: | xxxxx | | 9.5 | xxxxx | 9.0 | | xxxx | xxxxx | xxxxx | | xxxx | xxxxx | xxxxx | | xxxx | xxxxx |
| LOS by Move: | * | | A | * | A | | * | * | * | | * | * | * | | * | * |
| Movement: | LT - LTR - RT | | | | LT - LTR - RT | | | | LT - LTR - RT | | | | LT - LTR - RT | | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | | xxxx | xxxx | xxxxx | | xxxx | xxxx | xxxxx | | xxxx | xxxx | xxxxx | |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | | xxxxx | xxxx | xxxxx | | xxxxx | xxxx | xxxxx | | xxxxx | xxxx | xxxxx | |
| Shared LOS: | * | * | * | | * | * | * | | * | * | * | | * | * | * | |
| ApproachDel: | | 9.5 | | | | 9.0 | | | | xxxxxx | | | | xxxxxx | | |
| ApproachLOS: | | A | | | | A | | | | * | | | | * | | |



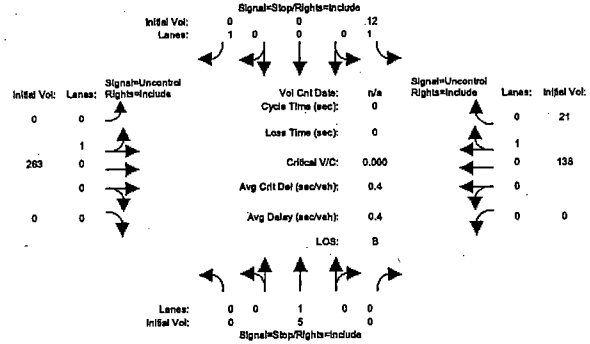


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

Intersection #1: Delaware/Shaffer [N/S:Shaffer E/W:Delaware]



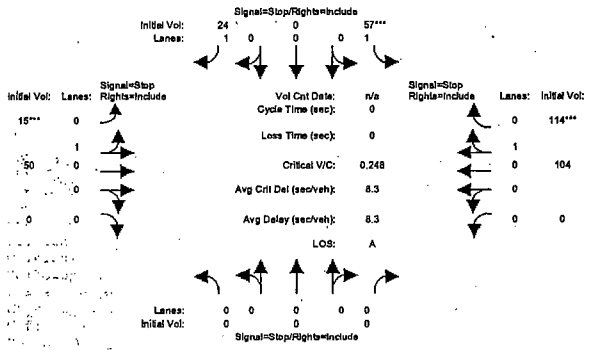

| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - R | L | - | T | - R | L | - | T | - R | L | - | T | - R |
| **Volume Module:** | | | | | | | | | | | | | | | | |
| Base Vol: | 0 | | 4 | 0 | 10 | | 0 | 0 | 0 | | 32 | 0 | 0 | | 12 | 17 |
| Growth Adj: | 1.24 | | 1.24 | 1.24 | 1.24 | | 1.24 | 1.24 | 1.24 | | 1.24 | 1.24 | 1.24 | | 1.24 | 1.24 |
| Initial Bse: | 0 | | 5 | 0 | 12 | | 0 | 0 | 0 | | 40 | 0 | 0 | | 15 | 21 |
| Added Vol: | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 223 | 0 | 0 | | 123 | 0 |
| Campus Incr: | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 |
| Initial Fut: | 0 | | 5 | 0 | 12 | | 0 | 0 | 0 | | 263 | 0 | 0 | | 138 | 21 |
| User Adj: | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 |
| PHF Adj: | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 |
| PHF Volume: | 0 | | 5 | 0 | 12 | | 0 | 0 | 0 | | 263 | 0 | 0 | | 138 | 21 |
| Reduct Vol: | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 |
| Final Vol.: | 0 | | 5 | 0 | 12 | | 0 | 0 | 0 | | 263 | 0 | 0 | | 138 | 21 |
| **Critical Gap Module:** | | | | | | | | | | | | | | | | |
| Critical Gp: | xxxxx | | 6.6 | xxxxx | 7.2 | | xxxx | xxxxx | xxxxx | | xxxx | xxxxx | xxxxx | | xxxx | xxxxx |
| FollowUpTim: | xxxxx | | 4.1 | xxxxx | 3.6 | | xxxx | xxxxx | xxxxx | | xxxx | xxxxx | xxxxx | | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | | 422 | xxxxx | 414 | | xxxx | xxxxx | xxxx | | xxxx | xxxxx | xxxx | | xxxx | xxxxx |
| Potent Cap.: | xxxx | | 514 | xxxxx | 539 | | xxxx | xxxxx | xxxx | | xxxx | xxxxx | xxxx | | xxxx | xxxxx |
| Move Cap.: | xxxx | | 514 | xxxxx | 535 | | xxxx | xxxxx | xxxx | | xxxx | xxxxx | xxxx | | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | | | | | |
| Stopped Del: | xxxxx | | 12.1 | xxxxx | 11.9 | | xxxx | xxxxx | xxxxx | | xxxx | xxxxx | xxxxx | | xxxx | xxxxx |
| LOS by Move: | * | | B | * | B | | * | * | * | | * | * | * | | * | * |
| Movement: | LT - LTR - RT | | | | LT - LTR - RT | | | | LT - LTR - RT | | | | LT - LTR - RT | | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | | xxxx | xxxx | xxxxx | | xxxx | xxxx | xxxxx | | xxxx | xxxx | xxxxx | |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | | xxxxx | xxxx | xxxxx | | xxxxx | xxxx | xxxxx | | xxxxx | xxxx | xxxxx | |
| Shared LOS: | * | * | * | | * | * | * | | * | * | * | | * | * | * | |
| ApproachDel: | | 12.1 | | | | 11.9 | | | | xxxxxx | | | | xxxxxx | | |
| ApproachLOS: | | B | | | | B | | | | * | | | | * | | |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Baseline AM

Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 40 | 0 | 0 | 84 | 92 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 0 | 0 | 0 | 57 | 0 | 24 | 15 | 50 | 0 | 0 | 104 | 114 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 57 | 0 | 24 | 15 | 50 | 0 | 0 | 104 | 114 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 57 | 0 | 24 | 15 | 50 | 0 | 0 | 104 | 114 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 57 | 0 | 24 | 15 | 50 | 0 | 0 | 104 | 114 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 57 | 0 | 24 | 15 | 50 | 0 | 0 | 104 | 114 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.23 | 0.77 | 0.00 | 0.00 | 0.48 | 0.52 |
| Final Sat.: | 0 | 0 | 0 | 621 | 0 | 783 | 179 | 597 | 0 | 0 | 420 | 459 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.09 | xxxx | 0.03 | 0.08 | 0.08 | xxxx | xxxx | 0.25 | 0.25 |
| Crit Moves: | | | | **** | | | **** | | | | | **** |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 8.8 | 0.0 | 7.2 | 7.9 | 7.9 | 0.0 | 0.0 | 8.3 | 8.3 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 8.8 | 0.0 | 7.2 | 7.9 | 7.9 | 0.0 | 0.0 | 8.3 | 8.3 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | 8.3 | | | 7.9 | | | 8.3 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 8.3 | | | 7.9 | | | 8.3 | | |
| LOS by Appr: | * | | | A | | | A | | | A | | |



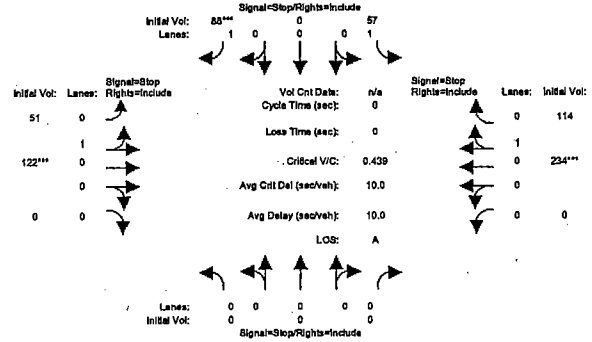


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]



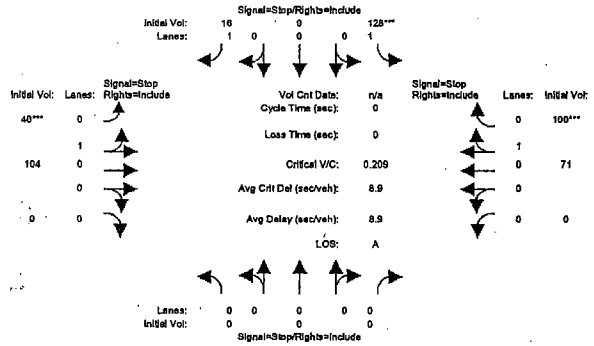

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 46 | 0 | 19 | 12 | 40 | 0 | 0 | 84 | 92 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 0 | 0 | 0 | 57 | 0 | 24 | 15 | 50 | 0 | 0 | 104 | 114 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 64 | 36 | 72 | 0 | 0 | 130 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 57 | 0 | 88 | 51 | 122 | 0 | 0 | 234 | 114 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 57 | 0 | 88 | 51 | 122 | 0 | 0 | 234 | 114 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 57 | 0 | 88 | 51 | 122 | 0 | 0 | 234 | 114 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 57 | 0 | 88 | 51 | 122 | 0 | 0 | 234 | 114 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.29 | 0.71 | 0.00 | 0.00 | 0.67 | 0.33 |
| Final Sat.: | 0 | 0 | 0 | 556 | 0 | 680 | 211 | 505 | 0 | 0 | 533 | 260 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.10 | xxxx | 0.13 | 0.24 | 0.24 | xxxx | xxxx | 0.44 | 0.44 |
| Crit Moves: | | | | | | **** | | **** | | | **** | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 9.5 | 0.0 | 8.3 | 9.4 | 9.4 | 0.0 | 0.0 | 10.8 | 10.8 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 9.5 | 0.0 | 8.3 | 9.4 | 9.4 | 0.0 | 0.0 | 10.8 | 10.8 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | B | B |
| ApproachDel: | xxxxxx | | | 8.8 | | | 9.4 | | | 10.8 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 8.8 | | | 9.4 | | | 10.8 | | |
| LOS by Appr: | * | | | A | | | A | | | B | | |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Baseline PM

Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 84 | 0 | 0 | 57 | 81 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 0 | 0 | 0 | 128 | 0 | 16 | 40 | 104 | 0 | 0 | 71 | 100 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 128 | 0 | 16 | 40 | 104 | 0 | 0 | 71 | 100 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 128 | 0 | 16 | 40 | 104 | 0 | 0 | 71 | 100 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 128 | 0 | 16 | 40 | 104 | 0 | 0 | 71 | 100 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 128 | 0 | 16 | 40 | 104 | 0 | 0 | 71 | 100 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.28 | 0.72 | 0.00 | 0.00 | 0.41 | 0.59 |
| Final Sat.: | 0 | 0 | 0 | 611 | 0 | 766 | 206 | 540 | 0 | 0 | 338 | 480 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.21 | xxxx | 0.02 | 0.19 | 0.19 | xxxx | xxxx | 0.21 | 0.21 |
| Crit Moves: | | | | **** | | | **** | | | | | **** |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 9.8 | 0.0 | 7.3 | 8.8 | 8.8 | 0.0 | 0.0 | 8.4 | 8.4 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 9.8 | 0.0 | 7.3 | 8.8 | 8.8 | 0.0 | 0.0 | 8.4 | 8.4 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | 9.5 | | | 8.8 | | | 8.4 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 9.5 | | | 8.8 | | | 8.4 | | |
| LOS by Appr: | * | | | A | | | A | | | A | | |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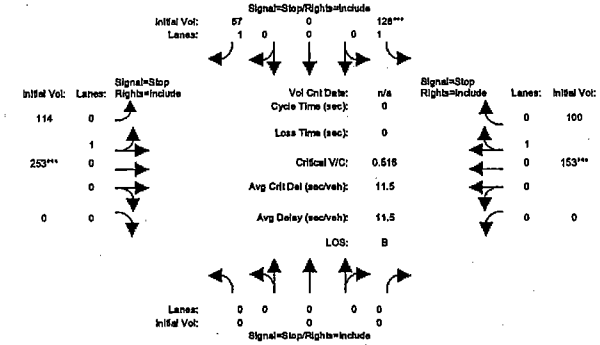
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

Intersection #2: Delaware/Natural Bridges [N/S:Natural Bridges E/W:Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 103 | 0 | 13 | 32 | 84 | 0 | 0 | 57 | 81 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 0 | 0 | 0 | 128 | 0 | 16 | 40 | 104 | 0 | 0 | 71 | 100 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 41 | 74 | 149 | 0 | 0 | 82 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 128 | 0 | 57 | 114 | 253 | 0 | 0 | 153 | 100 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 128 | 0 | 57 | 114 | 253 | 0 | 0 | 153 | 100 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 128 | 0 | 57 | 114 | 253 | 0 | 0 | 153 | 100 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 128 | 0 | 57 | 114 | 253 | 0 | 0 | 153 | 100 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.31 | 0.69 | 0.00 | 0.00 | 0.60 | 0.40 |
| Final Sat.: | 0 | 0 | 0 | 532 | 0 | 646 | 220 | 491 | 0 | 0 | 437 | 288 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | xxxx | xxxx | xxxx | 0.24 | xxxx | 0.09 | 0.52 | 0.52 | xxxx | xxxx | 0.35 | 0.35 |
| Crit Moves: | | | | **** | | | | **** | | | **** | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 10.9 | 0.0 | 8.4 | 12.9 | 12.9 | 0.0 | 0.0 | 10.3 | 10.3 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 10.9 | 0.0 | 8.4 | 12.9 | 12.9 | 0.0 | 0.0 | 10.3 | 10.3 |
| LOS by Move: | * | * | * | B | * | A | B | B | * | * | B | B |
| ApproachDel: | xxxxxx | | | 10.1 | | | 12.9 | | | 10.3 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 10.1 | | | 12.9 | | | 10.3 | | |
| LOS by Appr: | * | | | B | | | B | | | B | | |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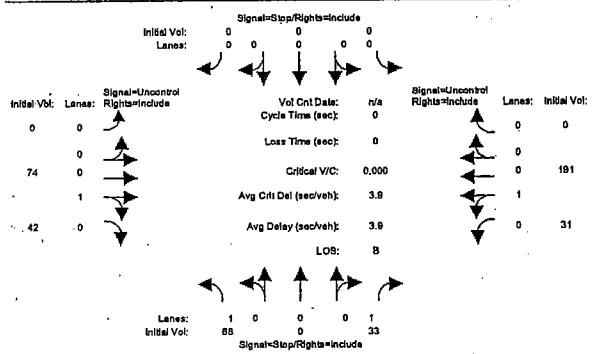
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline AM

## Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 60 | 34 | 25 | 154 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 68 | 0 | 33 | 0 | 0 | 0 | 0 | 74 | 42 | 31 | 191 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 68 | 0 | 33 | 0 | 0 | 0 | 0 | 74 | 42 | 31 | 191 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 68 | 0 | 33 | 0 | 0 | 0 | 0 | 74 | 42 | 31 | 191 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 68 | 0 | 33 | 0 | 0 | 0 | 0 | 74 | 42 | 31 | 191 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 348 | xxxx | 95 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 117 | xxxx | xxxxx |
| Potent Cap.: | 649 | xxxx | 961 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1454 | xxxx | xxxxx |
| Move Cap.: | 638 | xxxx | 961 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1454 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 11.3 | xxxx | 8.9 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.5 | xxxx | xxxxx |
| LOS by Move: | B | * | A | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.5 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 10.5 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |





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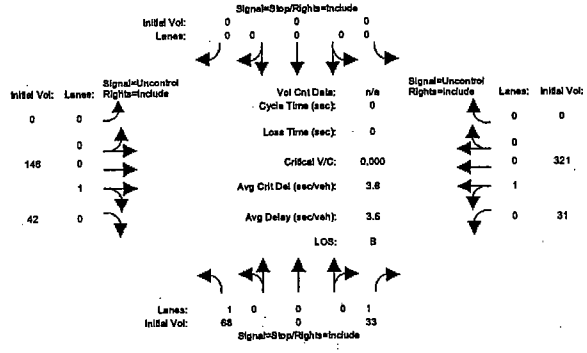
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

## Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]



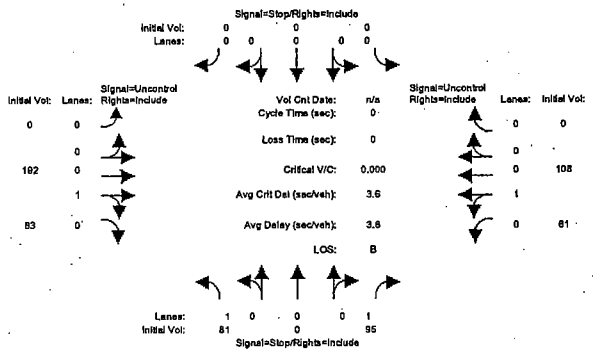

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 60 | 34 | 25 | 154 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 68 | 0 | 33 | 0 | 0 | 0 | 0 | 74 | 42 | 31 | 191 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 0 | 130 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 68 | 0 | 33 | 0 | 0 | 0 | 0 | 146 | 42 | 31 | 321 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 68 | 0 | 33 | 0 | 0 | 0 | 0 | 146 | 42 | 31 | 321 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 68 | 0 | 33 | 0 | 0 | 0 | 0 | 146 | 42 | 31 | 321 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 550 | xxxx | 167 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 189 | xxxx | xxxxx |
| Potent Cap.: | 496 | xxxx | 877 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1368 | xxxx | xxxxx |
| Move Cap.: | 487 | xxxx | 877 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1368 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 13.6 | xxxx | 9.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.7 | xxxx | xxxxx |
| LOS by Move: | B | * | A | * | * | * | * | * | * | A | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.7 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 12.2 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline PM

Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 155 | 67 | 49 | 87 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 81 | 0 | 95 | 0 | 0 | 0 | 0 | 192 | 83 | 61 | 108 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 81 | 0 | 95 | 0 | 0 | 0 | 0 | 192 | 83 | 61 | 108 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 81 | 0 | 95 | 0 | 0 | 0 | 0 | 192 | 83 | 61 | 108 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 81 | 0 | 95 | 0 | 0 | 0 | 0 | 192 | 83 | 61 | 108 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | | 6.2 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 4.1 | xxxx xxxxx |
| FollowUpTim: | 3.5 | xxxx | | 3.3 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 2.2 | xxxx xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 463 | xxxx | 234 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 275 | xxxx | xxxxx |
| Potent Cap.: | 557 | xxxx | 805 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1271 | xxxx | xxxxx |
| Move Cap.: | 536 | xxxx | 805 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1271 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 12.9 | xxxx | 10.1 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx |
| LOS by Move: | B | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 11.4 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |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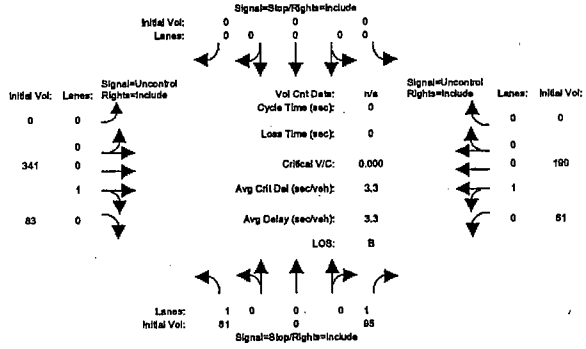
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

Intersection #3: Delaware/Swanton [N/S: Swanton E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 65 | 0 | 77 | 0 | 0 | 0 | 0 | 155 | 67 | 49 | 87 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 81 | 0 | 95 | 0 | 0 | 0 | 0 | 192 | 83 | 61 | 108 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 149 | 0 | 0 | 82 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 81 | 0 | 95 | 0 | 0 | 0 | 0 | 341 | 83 | 61 | 190 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 81 | 0 | 95 | 0 | 0 | 0 | 0 | 341 | 83 | 61 | 190 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 81 | 0 | 95 | 0 | 0 | 0 | 0 | 341 | 83 | 61 | 190 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | | 6.2 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 4.1 | xxxx xxxxx |
| FollowUpTim: | 3.5 | xxxx | | 3.3 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 2.2 | xxxx xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 694 | xxxx | 383 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 424 | xxxx | xxxxx |
| Potent Cap.: | 409 | xxxx | 665 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1119 | xxxx | xxxxx |
| Move Cap.: | 391 | xxxx | 665 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1119 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 16.6 | xxxx | 11.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.4 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.4 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 13.7 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | B | | | * | | | * | | | * | |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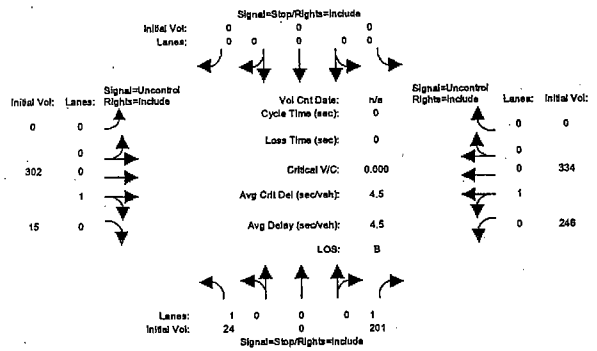
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline AM

Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 19 | 0 | 162 | 0 | 0 | 0 | 0 | 239 | 12 | 198 | 253 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 24 | 0 | 201 | 0 | 0 | 0 | 0 | 296 | 15 | 246 | 314 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 20 | 0 |
| Initial Fut: | 24 | 0 | 201 | 0 | 0 | 0 | 0 | 302 | 15 | 246 | 334 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 24 | 0 | 201 | 0 | 0 | 0 | 0 | 302 | 15 | 246 | 334 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 24 | 0 | 201 | 0 | 0 | 0 | 0 | 302 | 15 | 246 | 334 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1135 | xxxx | 310 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 317 | xxxx | xxxxx |
| Potent Cap.: | 226 | xxxx | 735 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1254 | xxxx | xxxxx |
| Move Cap.: | 186 | xxxx | 735 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1254 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 27.1 | xxxx | 11.7 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.6 | xxxx | xxxxx |
| LOS by Move: | D | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.6 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 13.3 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |





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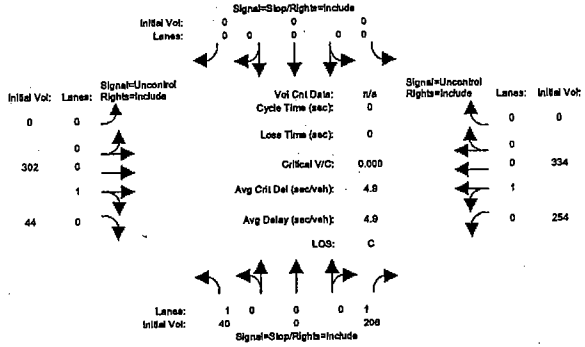
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 19 | 0 | 162 | 0 | 0 | 0 | 0 | 239 | 12 | 198 | 253 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 24 | 0 | 201 | 0 | 0 | 0 | 0 | 296 | 15 | 246 | 314 | 0 |
| Added Vol: | 16 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 29 | 8 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 20 | 0 |
| Initial Fut: | 40 | 0 | 206 | 0 | 0 | 0 | 0 | 302 | 44 | 254 | 334 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 40 | 0 | 206 | 0 | 0 | 0 | 0 | 302 | 44 | 254 | 334 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 40 | 0 | 206 | 0 | 0 | 0 | 0 | 302 | 44 | 254 | 334 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1165 | xxxx | 324 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 346 | xxxx | xxxxx |
| Potent Cap.: | 217 | xxxx | 721 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1224 | xxxx | xxxxx |
| Move Cap.: | 176 | xxxx | 721 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1224 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 31.2 | xxxx | 12.0 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.7 | xxxx | xxxxx |
| LOS by Move: | D | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.7 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 15.1 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | C | | | * | | | * | | | * | | |

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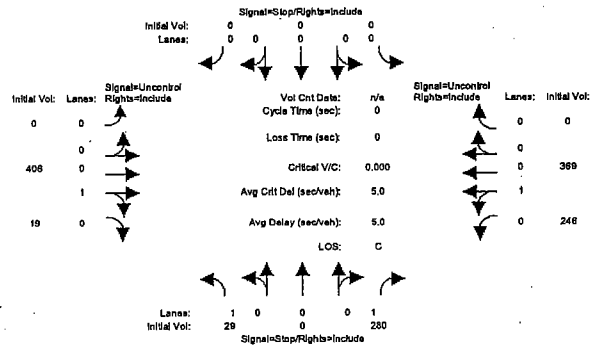
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline PM

## Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 23 | 0 | 226 | 0 | 0 | 0 | 0 | 313 | 15 | 198 | 288 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 29 | 0 | 280 | 0 | 0 | 0 | 0 | 388 | 19 | 246 | 357 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 12 | 0 |
| Initial Fut: | 29 | 0 | 280 | 0 | 0 | 0 | 0 | 406 | 19 | 246 | 369 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 29 | 0 | 280 | 0 | 0 | 0 | 0 | 406 | 19 | 246 | 369 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 29 | 0 | 280 | 0 | 0 | 0 | 0 | 406 | 19 | 246 | 369 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1276 | xxxx | 415 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 425 | xxxx | xxxxx |
| Potent Cap.: | 186 | xxxx | 641 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1145 | xxxx | xxxxx |
| Move Cap.: | 150 | xxxx | 641 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1145 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 34.5 | xxxx | 14.9 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 9.0 | xxxx | xxxxx |
| LOS by Move: | D | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 9.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 16.7 | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | | C | | * | | | * | | | * | | |





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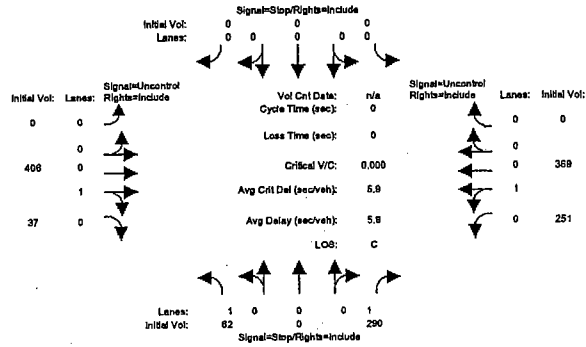
2020 Plus Phase 1 and 2 PM

## Intersection #4: Bay/Laguna [N/S:Laguna E/W: Bay]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 23 | 0 | 226 | 0 | 0 | 0 | 0 | 313 | 15 | 198 | 288 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 29 | 0 | 280 | 0 | 0 | 0 | 0 | 388 | 19 | 246 | 357 | 0 |
| Added Vol: | 33 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 18 | 5 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 12 | 0 |
| Initial Fut: | 62 | 0 | 290 | 0 | 0 | 0 | 0 | 406 | 37 | 251 | 369 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 62 | 0 | 290 | 0 | 0 | 0 | 0 | 406 | 37 | 251 | 369 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 62 | 0 | 290 | 0 | 0 | 0 | 0 | 406 | 37 | 251 | 369 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1295 | xxxx | 424 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 443 | xxxx | xxxxx |
| Potent Cap.: | 181 | xxxx | 634 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1128 | xxxx | xxxxx |
| Move Cap.: | 145 | xxxx | 634 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1128 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 47.0 | xxxx | 15.4 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 9.1 | xxxx | xxxxx |
| LOS by Move: | E | * | C | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 9.1 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | | 20.9 | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | | C | | * | | | * | | | * | | |

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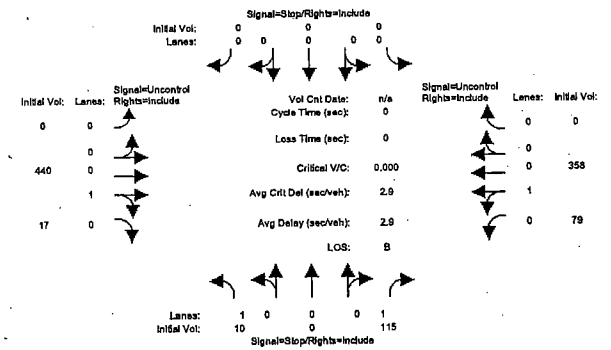
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline AM

Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 0 | 93 | 0 | 0 | 0 | 0 | 351 | 14 | 64 | 288 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 10 | 0 | 115 | 0 | 0 | 0 | 0 | 435 | 17 | 79 | 357 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 0 |
| Initial Fut: | 10 | 0 | 115 | 0 | 0 | 0 | 0 | 440 | 17 | 79 | 358 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 10 | 0 | 115 | 0 | 0 | 0 | 0 | 440 | 17 | 79 | 358 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 10 | 0 | 115 | 0 | 0 | 0 | 0 | 440 | 17 | 79 | 358 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 966 | xxxx | 449 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 458 | xxxx | xxxxx |
| Potent Cap.: | 285 | xxxx | 614 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1114 | xxxx | xxxxx |
| Move Cap.: | 269 | xxxx | 614 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1114 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 18.9 | xxxx | 12.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.5 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.5 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 12.7 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |





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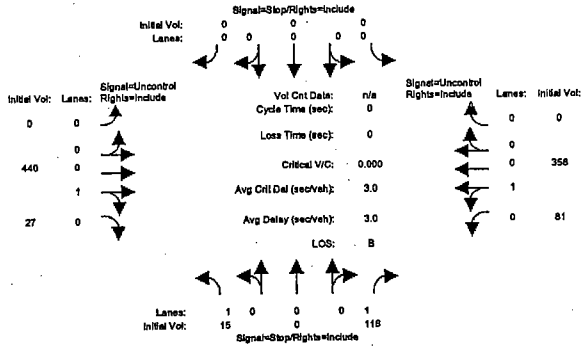
2020 Plus Phase 1 and 2 AM

Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 0 | 93 | 0 | 0 | 0 | 0 | 351 | 14 | 64 | 288 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 10 | 0 | 115 | 0 | 0 | 0 | 0 | 435 | 17 | 79 | 357 | 0 |
| Added Vol: | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 2 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 0 |
| Initial Fut: | 15 | 0 | 116 | 0 | 0 | 0 | 0 | 440 | 27 | 81 | 358 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 15 | 0 | 116 | 0 | 0 | 0 | 0 | 440 | 27 | 81 | 358 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 15 | 0 | 116 | 0 | 0 | 0 | 0 | 440 | 27 | 81 | 358 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 975 | xxxx | 454 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 468 | xxxx | xxxxx |
| Potent Cap.: | 281 | xxxx | 610 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1105 | xxxx | xxxxx |
| Move Cap.: | 265 | xxxx | 610 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1105 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 19.4 | xxxx | 12.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.5 | xxxx | xxxxx |
| LOS by Move: | C | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.5 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 13.1 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | B | | | * | | | * | | | * | | |

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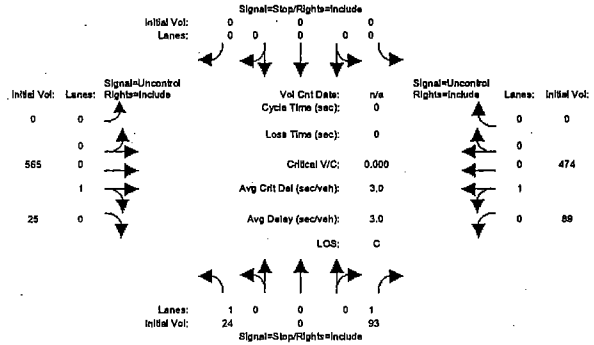
2020 Baseline PM

Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 19 | 0 | 75 | 0 | 0 | 0 | 0 | 453 | 20 | 72 | 378 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 24 | 0 | 93 | 0 | 0 | 0 | 0 | 562 | 25 | 89 | 469 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 5 | 0 |
| Initial Fut: | 24 | 0 | 93 | 0 | 0 | 0 | 0 | 565 | 25 | 89 | 474 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 24 | 0 | 93 | 0 | 0 | 0 | 0 | 565 | 25 | 89 | 474 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 24 | 0 | 93 | 0 | 0 | 0 | 0 | 565 | 25 | 89 | 474 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | | 6.2 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | | 3.3 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1229 | xxxx | | 577 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 590 | xxxx | xxxxx |
| Potent Cap.: | 198 | xxxx | | 520 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 996 | xxxx | xxxxx |
| Move Cap.: | 184 | xxxx | | 520 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 996 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 27.4 | xxxx | | 13.4 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 9.0 | xxxx | xxxxx |
| LOS by Move: | D | * | | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | 9.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | | A | * | * |
| ApproachDel: | | 16.3 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | C | | | * | | | * | | | * | |





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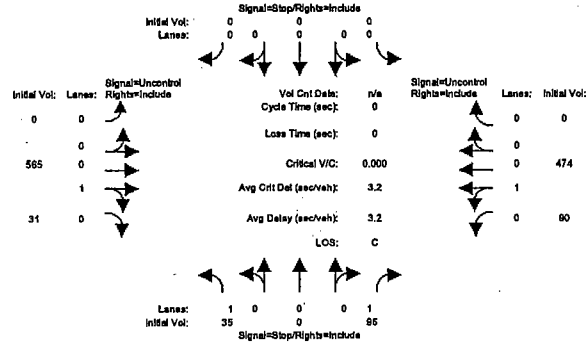
2020 Plus Phase 1 and 2 PM

Intersection #5: SR 1/Shaffer [N/S: Shaffer E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 19 | 0 | 75 | 0 | 0 | 0 | 0 | 453 | 20 | 72 | 378 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 24 | 0 | 93 | 0 | 0 | 0 | 0 | 562 | 25 | 89 | 469 | 0 |
| Added Vol: | 11 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 5 | 0 |
| Initial Fut: | 35 | 0 | 95 | 0 | 0 | 0 | 0 | 565 | 31 | 90 | 474 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 35 | 0 | 95 | 0 | 0 | 0 | 0 | 565 | 31 | 90 | 474 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 35 | 0 | 95 | 0 | 0 | 0 | 0 | 565 | 31 | 90 | 474 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | | 6.2 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | | 3.3 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1234 | xxxx | | 580 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 596 | xxxx | xxxxx |
| Potent Cap.: | 197 | xxxx | | 518 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 991 | xxxx | xxxxx |
| Move Cap.: | 182 | xxxx | | 518 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 991 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 29.3 | xxxx | | 13.5 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 9.0 | xxxx | xxxxx |
| LOS by Move: | D | * | | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | 9.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | | A | * | * |
| ApproachDel: | | 17.7 | | | xxxxxx | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | C | | | * | | | * | | | * | |

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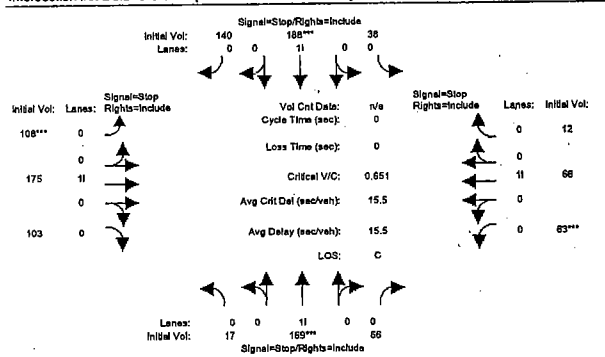
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Baseline AM

## Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 14 | 136 | 53 | 31 | 152 | 113 | 87 | 141 | 83 | 51 | 53 | 10 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 17 | 169 | 66 | 38 | 188 | 140 | 108 | 175 | 103 | 63 | 66 | 12 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 17 | 169 | 66 | 38 | 188 | 140 | 108 | 175 | 103 | 63 | 66 | 12 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 17 | 169 | 66 | 38 | 188 | 140 | 108 | 175 | 103 | 63 | 66 | 12 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 17 | 169 | 66 | 38 | 188 | 140 | 108 | 175 | 103 | 63 | 66 | 12 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 17 | 169 | 66 | 38 | 188 | 140 | 108 | 175 | 103 | 63 | 66 | 12 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.07 | 0.67 | 0.26 | 0.10 | 0.52 | 0.38 | 0.28 | 0.45 | 0.27 | 0.45 | 0.46 | 0.09 |
| Final Sat.: | 38 | 373 | 146 | 63 | 308 | 229 | 166 | 268 | 158 | 219 | 228 | 43 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.45 | 0.45 | 0.45 | 0.61 | 0.61 | 0.61 | 0.65 | 0.65 | 0.65 | 0.29 | 0.29 | 0.29 |
| Crit Moves: | | **** | | | **** | | **** | | | **** | | |
| Delay/Veh: | 13.1 | 13.1 | 13.1 | 16.2 | 16.2 | 16.2 | 17.7 | 17.7 | 17.7 | 11.5 | 11.5 | 11.5 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 13.1 | 13.1 | 13.1 | 16.2 | 16.2 | 16.2 | 17.7 | 17.7 | 17.7 | 11.5 | 11.5 | 11.5 |
| LOS by Move: | B | B | B | C | C | C | C | C | C | B | B | B |
| ApproachDel: | | 13.1 | | | 16.2 | | | 17.7 | | | 11.5 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 13.1 | | | 16.2 | | | 17.7 | | | 11.5 | |
| LOS by Appr: | | B | | | C | | | C | | | B | |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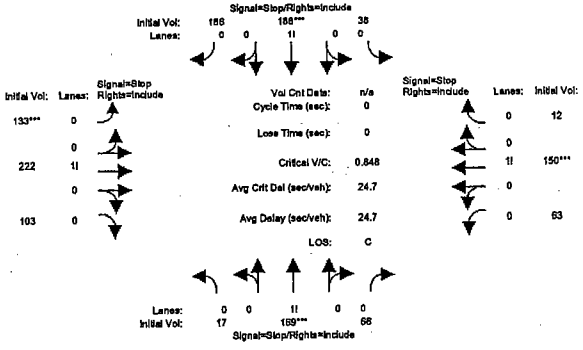
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

## Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 14 | 136 | 53 | 31 | 152 | 113 | 87 | 141 | 83 | 51 | 53 | 10 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 17 | 169 | 66 | 38 | 188 | 140 | 108 | 175 | 103 | 63 | 66 | 12 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 46 | 25 | 47 | 0 | 0 | 84 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 17 | 169 | 66 | 38 | 188 | 186 | 133 | 222 | 103 | 63 | 150 | 12 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 17 | 169 | 66 | 38 | 188 | 186 | 133 | 222 | 103 | 63 | 150 | 12 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 17 | 169 | 66 | 38 | 188 | 186 | 133 | 222 | 103 | 63 | 150 | 12 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 17 | 169 | 66 | 38 | 188 | 186 | 133 | 222 | 103 | 63 | 150 | 12 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.07 | 0.67 | 0.26 | 0.09 | 0.46 | 0.45 | 0.29 | 0.49 | 0.22 | 0.28 | 0.66 | 0.06 |
| Final Sat.: | 32 | 309 | 120 | 50 | 243 | 240 | 157 | 262 | 121 | 125 | 296 | 25 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.55 | 0.55 | 0.55 | 0.77 | 0.77 | 0.77 | 0.85 | 0.85 | 0.85 | 0.51 | 0.51 | 0.51 |
| Crit Moves: | | **** | | | **** | | **** | | | | **** | |
| Delay/Veh: | 16.3 | 16.3 | 16.3 | 25.6 | 25.6 | 25.6 | 32.9 | 32.9 | 32.9 | 15.8 | 15.8 | 15.8 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 16.3 | 16.3 | 16.3 | 25.6 | 25.6 | 25.6 | 32.9 | 32.9 | 32.9 | 15.8 | 15.8 | 15.8 |
| LOS by Move: | C | C | C | D | D | D | D | D | D | C | C | C |
| ApproachDel: | | 16.3 | | | 25.6 | | | 32.9 | | | 15.8 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 16.3 | | | 25.6 | | | 32.9 | | | 15.8 | |
| LOS by Appr: | | C | | | D | | | D | | | C | |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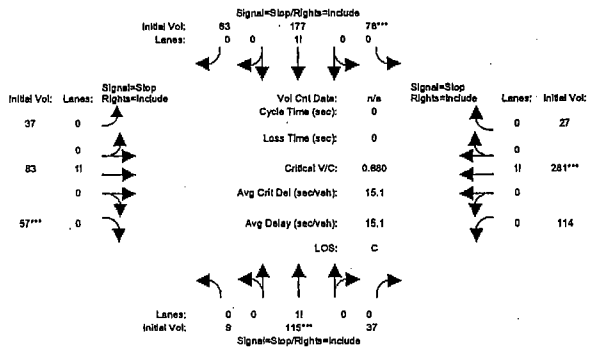
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Baseline PM

Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 7 | 93 | 30 | 63 | 143 | 51 | 30 | 67 | 46 | 92 | 227 | 22 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 9 | 115 | 37 | 78 | 177 | 63 | 37 | 83 | 57 | 114 | 281 | 27 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 9 | 115 | 37 | 78 | 177 | 63 | 37 | 83 | 57 | 114 | 281 | 27 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 9 | 115 | 37 | 78 | 177 | 63 | 37 | 83 | 57 | 114 | 281 | 27 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 9 | 115 | 37 | 78 | 177 | 63 | 37 | 83 | 57 | 114 | 281 | 27 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 9 | 115 | 37 | 78 | 177 | 63 | 37 | 83 | 57 | 114 | 281 | 27 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.05 | 0.72 | 0.23 | 0.24 | 0.56 | 0.20 | 0.21 | 0.47 | 0.32 | 0.27 | 0.67 | 0.06 |
| Final Sat.: | 29 | 382 | 123 | 144 | 326 | 116 | 117 | 261 | 179 | 168 | 414 | 40 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.30 | 0.30 | 0.30 | 0.54 | 0.54 | 0.54 | 0.32 | 0.32 | 0.32 | 0.68 | 0.68 | 0.68 |
| Crit Moves: | | **** | | **** | | | | | **** | | **** | |
| Delay/Veh: | 11.2 | 11.2 | 11.2 | 14.6 | 14.6 | 14.6 | 11.2 | 11.2 | 11.2 | 18.6 | 18.6 | 18.6 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 11.2 | 11.2 | 11.2 | 14.6 | 14.6 | 14.6 | 11.2 | 11.2 | 11.2 | 18.6 | 18.6 | 18.6 |
| LOS by Move: | B | B | B | B | B | B | B | B | B | C | C | C |
| ApproachDel: | | 11.2 | | | 14.6 | | | 11.2 | | | 18.6 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 11.2 | | | 14.6 | | | 11.2 | | | 18.6 | |
| LOS by Appr: | | B | | | B | | | B | | | C | |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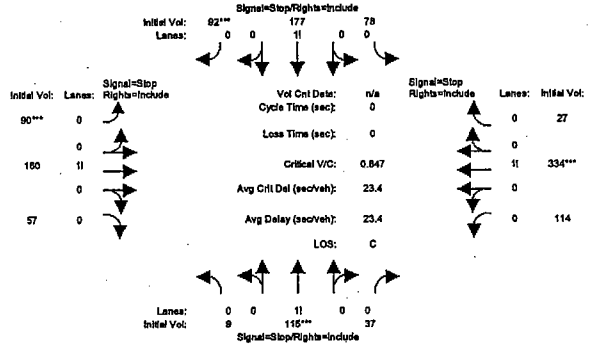
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

Intersection #6: Delaware/Swift [N/S: Swift E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 7 | 93 | 30 | 63 | 143 | 51 | 30 | 67 | 46 | 92 | 227 | 22 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 9 | 115 | 37 | 78 | 177 | 63 | 37 | 83 | 57 | 114 | 281 | 27 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 29 | 53 | 97 | 0 | 0 | 53 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 9 | 115 | 37 | 78 | 177 | 92 | 90 | 180 | 57 | 114 | 334 | 27 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 9 | 115 | 37 | 78 | 177 | 92 | 90 | 180 | 57 | 114 | 334 | 27 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 9 | 115 | 37 | 78 | 177 | 92 | 90 | 180 | 57 | 114 | 334 | 27 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 9 | 115 | 37 | 78 | 177 | 92 | 90 | 180 | 57 | 114 | 334 | 27 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.05 | 0.72 | 0.23 | 0.22 | 0.51 | 0.27 | 0.28 | 0.55 | 0.17 | 0.24 | 0.70 | 0.06 |
| Final Sat.: | 24 | 316 | 102 | 115 | 262 | 136 | 143 | 285 | 90 | 135 | 395 | 32 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.36 | 0.36 | 0.36 | 0.68 | 0.68 | 0.68 | 0.63 | 0.63 | 0.63 | 0.85 | 0.85 | 0.85 |
| Crit Moves: | | **** | | | | **** | **** | | | | **** | |
| Delay/Veh: | 13.3 | 13.3 | 13.3 | 20.2 | 20.2 | 20.2 | 18.4 | 18.4 | 18.4 | 32.4 | 32.4 | 32.4 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 13.3 | 13.3 | 13.3 | 20.2 | 20.2 | 20.2 | 18.4 | 18.4 | 18.4 | 32.4 | 32.4 | 32.4 |
| LOS by Move: | B | B | B | C | C | C | C | C | C | D | D | D |
| ApproachDel: | | 13.3 | | | 20.2 | | | 18.4 | | | 32.4 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 13.3 | | | 20.2 | | | 18.4 | | | 32.4 | |
| LOS by Appr: | | B | | | C | | | C | | | D | |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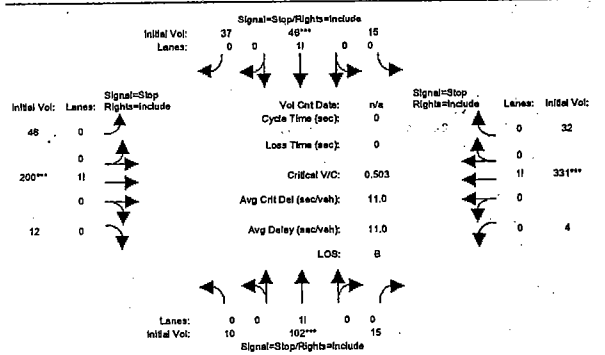
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Baseline AM

## Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 161 | 10 | 3 | 267 | 26 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 10 | 102 | 15 | 15 | 46 | 37 | 46 | 200 | 12 | 4 | 331 | 32 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 10 | 102 | 15 | 15 | 46 | 37 | 46 | 200 | 12 | 4 | 331 | 32 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 10 | 102 | 15 | 15 | 46 | 37 | 46 | 200 | 12 | 4 | 331 | 32 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 10 | 102 | 15 | 15 | 46 | 37 | 46 | 200 | 12 | 4 | 331 | 32 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 10 | 102 | 15 | 15 | 46 | 37 | 46 | 200 | 12 | 4 | 331 | 32 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.08 | 0.80 | 0.12 | 0.15 | 0.47 | 0.38 | 0.18 | 0.77 | 0.05 | 0.01 | 0.90 | 0.09 |
| Final Sat.: | 47 | 481 | 70 | 91 | 281 | 228 | 124 | 538 | 33 | 7 | 658 | 64 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.21 | 0.21 | 0.21 | 0.16 | 0.16 | 0.16 | 0.37 | 0.37 | 0.37 | 0.50 | 0.50 | 0.50 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Delay/Veh: | 9.7 | 9.7 | 9.7 | 9.3 | 9.3 | 9.3 | 10.7 | 10.7 | 10.7 | 12.2 | 12.2 | 12.2 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.7 | 9.7 | 9.7 | 9.3 | 9.3 | 9.3 | 10.7 | 10.7 | 10.7 | 12.2 | 12.2 | 12.2 |
| LOS by Move: | A | A | A | A | A | A | B | B | B | B | B | B |
| ApproachDel: | | 9.7 | | | 9.3 | | | 10.7 | | | 12.2 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 9.7 | | | 9.3 | | | 10.7 | | | 12.2 | |
| LOS by Appr: | | A | | | A | | | B | | | B | |





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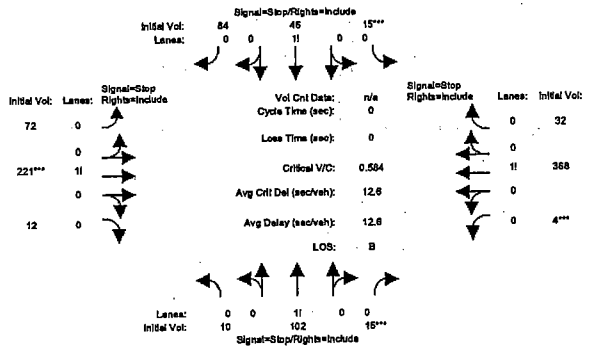
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

## Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 82 | 12 | 12 | 37 | 30 | 37 | 161 | 10 | 3 | 267 | 26 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 10 | 102 | 15 | 15 | 46 | 37 | 46 | 200 | 12 | 4 | 331 | 32 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 47 | 26 | 21 | 0 | 0 | 37 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 10 | 102 | 15 | 15 | 46 | 84 | 72 | 221 | 12 | 4 | 368 | 32 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 10 | 102 | 15 | 15 | 46 | 84 | 72 | 221 | 12 | 4 | 368 | 32 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 10 | 102 | 15 | 15 | 46 | 84 | 72 | 221 | 12 | 4 | 368 | 32 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 10 | 102 | 15 | 15 | 46 | 84 | 72 | 221 | 12 | 4 | 368 | 32 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.08 | 0.80 | 0.12 | 0.10 | 0.32 | 0.58 | 0.24 | 0.72 | 0.04 | 0.01 | 0.91 | 0.08 |
| Final Sat.: | 43 | 442 | 65 | 60 | 184 | 337 | 155 | 477 | 27 | 6 | 631 | 55 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.23 | 0.23 | 0.23 | 0.25 | 0.25 | 0.25 | 0.46 | 0.46 | 0.46 | 0.58 | 0.58 | 0.58 |
| Crit Moves: | | | **** | **** | | | | **** | | | **** | |
| Delay/Veh: | 10.3 | 10.3 | 10.3 | 10.1 | 10.1 | 10.1 | 12.3 | 12.3 | 12.3 | 14.4 | 14.4 | 14.4 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.3 | 10.3 | 10.3 | 10.1 | 10.1 | 10.1 | 12.3 | 12.3 | 12.3 | 14.4 | 14.4 | 14.4 |
| LOS by Move: | B | B | B | B | B | B | B | B | B | B | B | B |
| ApproachDel: | | 10.3 | | | 10.1 | | | 12.3 | | | 14.4 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.3 | | | 10.1 | | | 12.3 | | | 14.4 | |
| LOS by Appr: | | B | | | B | | | B | | | B | |

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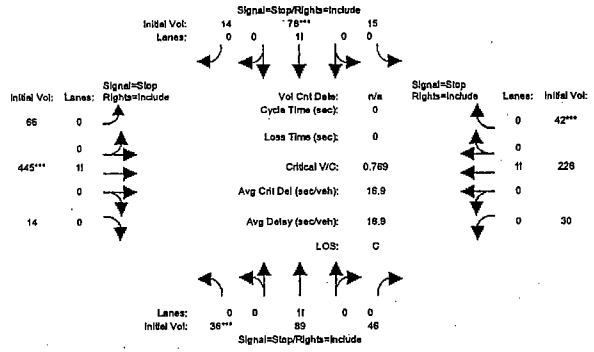
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Baseline PM

## Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 359 | 11 | 24 | 182 | 34 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 36 | 89 | 46 | 15 | 78 | 14 | 66 | 445 | 14 | 30 | 226 | 42 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 36 | 89 | 46 | 15 | 78 | 14 | 66 | 445 | 14 | 30 | 226 | 42 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 36 | 89 | 46 | 15 | 78 | 14 | 66 | 445 | 14 | 30 | 226 | 42 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 36 | 89 | 46 | 15 | 78 | 14 | 66 | 445 | 14 | 30 | 226 | 42 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 36 | 89 | 46 | 15 | 78 | 14 | 66 | 445 | 14 | 30 | 226 | 42 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.21 | 0.52 | 0.27 | 0.14 | 0.73 | 0.13 | 0.12 | 0.85 | 0.03 | 0.10 | 0.76 | 0.14 |
| Final Sat.: | 112 | 279 | 143 | 71 | 370 | 65 | 85 | 579 | 18 | 63 | 481 | 90 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.32 | 0.32 | 0.32 | 0.21 | 0.21 | 0.21 | 0.77 | 0.77 | 0.77 | 0.47 | 0.47 | 0.47 |
| Crit Moves: | **** | | | | **** | | | **** | | | | **** |
| Delay/Veh: | 11.4 | 11.4 | 11.4 | 10.6 | 10.6 | 10.6 | 22.3 | 22.3 | 22.3 | 12.7 | 12.7 | 12.7 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 11.4 | 11.4 | 11.4 | 10.6 | 10.6 | 10.6 | 22.3 | 22.3 | 22.3 | 12.7 | 12.7 | 12.7 |
| LOS by Move: | B | B | B | B | B | B | C | C | C | B | B | B |
| ApproachDel: | | 11.4 | | | 10.6 | | | 22.3 | | | 12.7 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 11.4 | | | 10.6 | | | 22.3 | | | 12.7 | |
| LOS by Appr: | | B | | | B | | | C | | | B | |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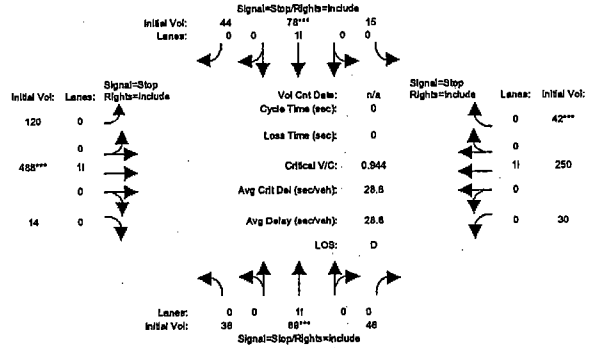
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

## Intersection #7: Delaware/Almar [N/S: Almar E/W: Delaware]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 29 | 72 | 37 | 12 | 63 | 11 | 53 | 359 | 11 | 24 | 182 | 34 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 36 | 89 | 46 | 15 | 78 | 14 | 66 | 445 | 14 | 30 | 226 | 42 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 30 | 54 | 43 | 0 | 0 | 24 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 36 | 89 | 46 | 15 | 78 | 44 | 120 | 488 | 14 | 30 | 250 | 42 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 36 | 89 | 46 | 15 | 78 | 44 | 120 | 488 | 14 | 30 | 250 | 42 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 36 | 89 | 46 | 15 | 78 | 44 | 120 | 488 | 14 | 30 | 250 | 42 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 36 | 89 | 46 | 15 | 78 | 44 | 120 | 488 | 14 | 30 | 250 | 42 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.21 | 0.52 | 0.27 | 0.11 | 0.57 | 0.32 | 0.19 | 0.79 | 0.02 | 0.09 | 0.78 | 0.13 |
| Final Sat.: | 109 | 270 | 139 | 55 | 290 | 162 | 127 | 517 | 14 | 55 | 465 | 79 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.33 | 0.33 | 0.33 | 0.27 | 0.27 | 0.27 | 0.94 | 0.94 | 0.94 | 0.54 | 0.54 | 0.54 |
| Crit Moves: | | **** | | | **** | | | **** | | | | **** |
| Delay/Veh: | 12.4 | 12.4 | 12.4 | 11.7 | 11.7 | 11.7 | 44.4 | 44.4 | 44.4 | 14.8 | 14.8 | 14.8 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 12.4 | 12.4 | 12.4 | 11.7 | 11.7 | 11.7 | 44.4 | 44.4 | 44.4 | 14.8 | 14.8 | 14.8 |
| LOS by Move: | B | B | B | B | B | B | E | E | E | B | B | B |
| ApproachDel: | | 12.4 | | | 11.7 | | | 44.4 | | | 14.8 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 12.4 | | | 11.7 | | | 44.4 | | | 14.8 | |
| LOS by Appr: | | B | | | B | | | E | | | B | |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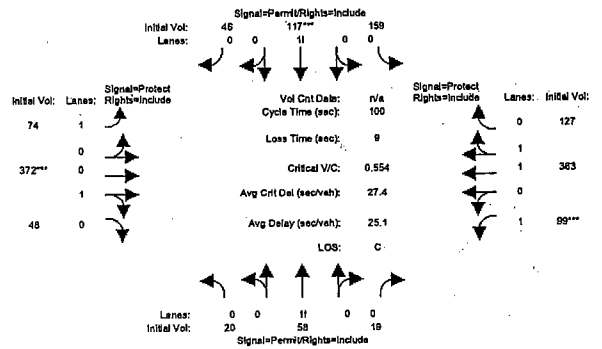
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 16 | 47 | 15 | 125 | 94 | 36 | 56 | 300 | 39 | 80 | 293 | 93 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 20 | 58 | 19 | 155 | 117 | 45 | 69 | 372 | 48 | 99 | 363 | 115 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 4 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 12 |
| Initial Fut: | 20 | 58 | 19 | 159 | 117 | 46 | 74 | 372 | 48 | 99 | 363 | 127 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 20 | 58 | 19 | 159 | 117 | 46 | 74 | 372 | 48 | 99 | 363 | 127 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 20 | 58 | 19 | 159 | 117 | 46 | 74 | 372 | 48 | 99 | 363 | 127 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 20 | 58 | 19 | 159 | 117 | 46 | 74 | 372 | 48 | 99 | 363 | 127 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.87 | 0.87 | 0.87 | 0.77 | 0.77 | 0.77 | 0.93 | 0.96 | 0.96 | 0.93 | 0.89 | 0.89 |
| Lanes: | 0.21 | 0.60 | 0.19 | 0.50 | 0.36 | 0.14 | 1.00 | 0.88 | 0.12 | 1.00 | 1.48 | 0.52 |
| Final Sat.: | 340 | 998 | 318 | 728 | 534 | 209 | 1769 | 1620 | 211 | 1769 | 2518 | 882 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.06 | 0.06 | 0.22 | 0.22 | 0.22 | 0.04 | 0.23 | 0.23 | 0.06 | 0.14 | 0.14 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.12 | 0.41 | 0.41 | 0.10 | 0.40 | 0.40 |
| Volume/Cap: | 0.15 | 0.15 | 0.15 | 0.55 | 0.55 | 0.55 | 0.36 | 0.55 | 0.55 | 0.55 | 0.36 | 0.36 |
| Delay/Veh: | 19.6 | 19.6 | 19.6 | 24.6 | 24.6 | 24.6 | 41.8 | 23.1 | 23.1 | 46.5 | 21.2 | 21.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 19.6 | 19.6 | 19.6 | 24.6 | 24.6 | 24.6 | 41.8 | 23.1 | 23.1 | 46.5 | 21.2 | 21.2 |
| DesignQueue: | 1 | 2 | 1 | 6 | 4 | 2 | 4 | 13 | 2 | 5 | 13 | 4 |





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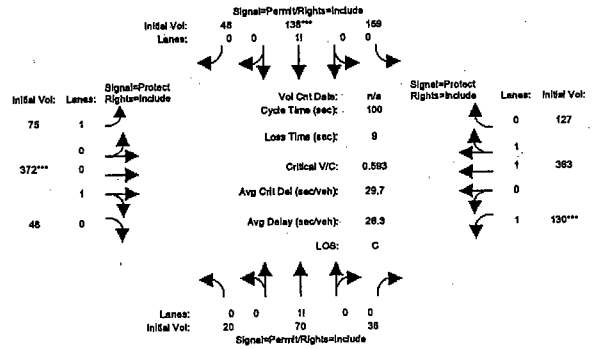
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 16 | 47 | 15 | 125 | 94 | 36 | 56 | 300 | 39 | 80 | 293 | 93 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 20 | 58 | 19 | 155 | 117 | 45 | 69 | 372 | 48 | 99 | 363 | 115 |
| Added Vol: | 0 | 12 | 17 | 0 | 21 | 2 | 1 | 0 | 0 | 31 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 4 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 12 |
| Initial Fut: | 20 | 70 | 36 | 159 | 138 | 48 | 75 | 372 | 48 | 130 | 363 | 127 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 20 | 70 | 36 | 159 | 138 | 48 | 75 | 372 | 48 | 130 | 363 | 127 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 20 | 70 | 36 | 159 | 138 | 48 | 75 | 372 | 48 | 130 | 363 | 127 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 20 | 70 | 36 | 159 | 138 | 48 | 75 | 372 | 48 | 130 | 363 | 127 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.87 | 0.87 | 0.87 | 0.77 | 0.77 | 0.77 | 0.93 | 0.96 | 0.96 | 0.93 | 0.89 | 0.89 |
| Lanes: | 0.16 | 0.56 | 0.28 | 0.46 | 0.40 | 0.14 | 1.00 | 0.88 | 0.12 | 1.00 | 1.48 | 0.52 |
| Final Sat.: | 262 | 929 | 471 | 672 | 581 | 201 | 1769 | 1620 | 211 | 1769 | 2518 | 882 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.08 | 0.08 | 0.24 | 0.24 | 0.24 | 0.04 | 0.23 | 0.23 | 0.07 | 0.14 | 0.14 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.12 | 0.39 | 0.39 | 0.12 | 0.39 | 0.39 |
| Volume/Cap: | 0.19 | 0.19 | 0.19 | 0.59 | 0.59 | 0.59 | 0.37 | 0.59 | 0.59 | 0.59 | 0.37 | 0.37 |
| Delay/Veh: | 19.7 | 19.7 | 19.7 | 25.3 | 25.3 | 25.3 | 41.9 | 25.7 | 25.7 | 45.7 | 21.6 | 21.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 19.7 | 19.7 | 19.7 | 25.3 | 25.3 | 25.3 | 41.9 | 25.7 | 25.7 | 45.7 | 21.6 | 21.6 |
| DesignQueue: | 1 | 2 | 1 | 6 | 5 | 2 | 4 | 13 | 2 | 6 | 13 | 4 |

Marine Science Center

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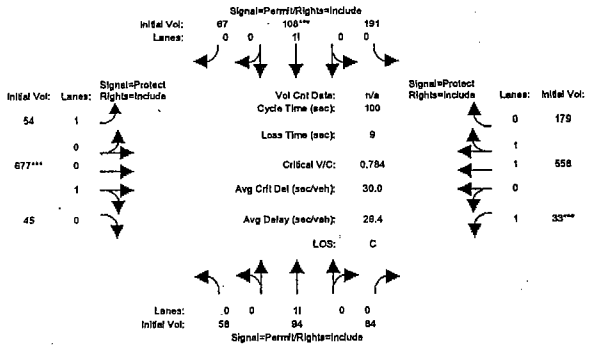
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

## Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 47 | 76 | 68 | 145 | 87 | 50 | 41 | 546 | 36 | 27 | 450 | 139 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 58 | 94 | 84 | 180 | 108 | 62 | 51 | 677 | 45 | 33 | 558 | 172 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 11 | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 7 |
| Initial Fut: | 58 | 94 | 84 | 191 | 108 | 67 | 54 | 677 | 45 | 33 | 558 | 179 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 58 | 94 | 84 | 191 | 108 | 67 | 54 | 677 | 45 | 33 | 558 | 179 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 58 | 94 | 84 | 191 | 108 | 67 | 54 | 677 | 45 | 33 | 558 | 179 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 58 | 94 | 84 | 191 | 108 | 67 | 54 | 677 | 45 | 33 | 558 | 179 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.79 | 0.79 | 0.79 | 0.63 | 0.63 | 0.63 | 0.93 | 0.97 | 0.97 | 0.93 | 0.90 | 0.90 |
| Lanes: | 0.25 | 0.40 | 0.35 | 0.52 | 0.30 | 0.18 | 1.00 | 0.94 | 0.06 | 1.00 | 1.51 | 0.49 |
| Final Sat.: | 372 | 601 | 538 | 628 | 355 | 221 | 1769 | 1731 | 114 | 1769 | 2581 | 830 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.16 | 0.16 | 0.16 | 0.30 | 0.30 | 0.30 | 0.03 | 0.39 | 0.39 | 0.02 | 0.22 | 0.22 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.06 | 0.50 | 0.50 | 0.02 | 0.46 | 0.46 |
| Volume/Cap: | 0.40 | 0.40 | 0.40 | 0.78 | 0.78 | 0.78 | 0.47 | 0.78 | 0.78 | 0.78 | 0.47 | 0.47 |
| Delay/Veh: | 22.7 | 22.7 | 22.7 | 35.5 | 35.5 | 35.5 | 48.2 | 25.1 | 25.1 | 110.3 | 19.0 | 19.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 22.7 | 22.7 | 22.7 | 35.5 | 35.5 | 35.5 | 48.2 | 25.1 | 25.1 | 110.3 | 19.0 | 19.0 |
| DesignQueue: | 2 | 3 | 3 | 7 | 4 | 2 | 3 | 21 | 1 | 2 | 18 | 6 |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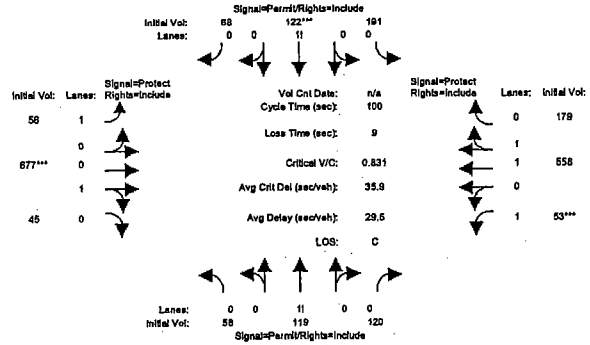
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

## Intersection #8: SR 1/Western [N/S: Western E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 47 | 76 | 68 | 145 | 87 | 50 | 41 | 546 | 36 | 27 | 450 | 139 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 58 | 94 | 84 | 180 | 108 | 62 | 51 | 677 | 45 | 33 | 558 | 172 |
| Added Vol: | 0 | 25 | 36 | 0 | 14 | 1 | 2 | 0 | 0 | 20 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 11 | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 7 |
| Initial Fut: | 58 | 119 | 120 | 191 | 122 | 68 | 56 | 677 | 45 | 53 | 558 | 179 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 58 | 119 | 120 | 191 | 122 | 68 | 56 | 677 | 45 | 53 | 558 | 179 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 58 | 119 | 120 | 191 | 122 | 68 | 56 | 677 | 45 | 53 | 558 | 179 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 58 | 119 | 120 | 191 | 122 | 68 | 56 | 677 | 45 | 53 | 558 | 179 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.81 | 0.81 | 0.81 | 0.60 | 0.60 | 0.60 | 0.93 | 0.97 | 0.97 | 0.93 | 0.90 | 0.90 |
| Lanes: | 0.20 | 0.40 | 0.40 | 0.50 | 0.32 | 0.18 | 1.00 | 0.94 | 0.06 | 1.00 | 1.51 | 0.49 |
| Final Sat.: | 301 | 616 | 622 | 569 | 364 | 203 | 1769 | 1731 | 114 | 1769 | 2581 | 830 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.19 | 0.19 | 0.19 | 0.34 | 0.34 | 0.34 | 0.03 | 0.39 | 0.39 | 0.03 | 0.22 | 0.22 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.06 | 0.47 | 0.47 | 0.04 | 0.44 | 0.44 |
| Volume/Cap: | 0.48 | 0.48 | 0.48 | 0.83 | 0.83 | 0.83 | 0.49 | 0.83 | 0.83 | 0.83 | 0.49 | 0.49 |
| Delay/Veh: | 22.7 | 22.7 | 22.7 | 39.0 | 39.0 | 39.0 | 48.4 | 29.9 | 29.9 | 105.2 | 20.1 | 20.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 22.7 | 22.7 | 22.7 | 39.0 | 39.0 | 39.0 | 48.4 | 29.9 | 29.9 | 105.2 | 20.1 | 20.1 |
| DesignQueue: | 2 | 4 | 4 | 7 | 4 | 2 | 3 | 22 | 1 | 3 | 18 | 6 |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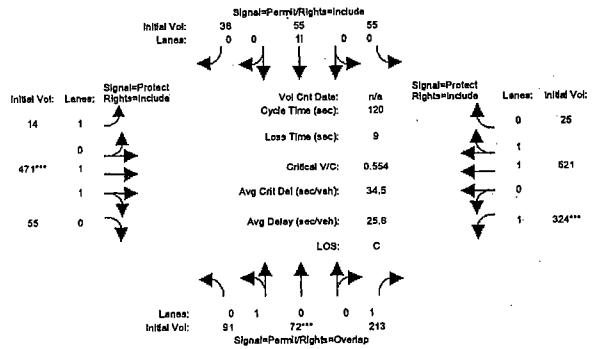
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

## Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 73 | 46 | 172 | 44 | 41 | 21 | 8 | 380 | 44 | 261 | 420 | 20 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 91 | 57 | 213 | 55 | 51 | 26 | 10 | 471 | 55 | 324 | 521 | 25 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 15 | 0 | 0 | 4 | 12 | 4 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 91 | 72 | 213 | 55 | 55 | 38 | 14 | 471 | 55 | 324 | 521 | 25 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 101 | 80 | 237 | 61 | 61 | 42 | 15 | 524 | 61 | 360 | 579 | 28 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 101 | 80 | 237 | 61 | 61 | 42 | 15 | 524 | 61 | 360 | 579 | 28 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 101 | 80 | 237 | 61 | 61 | 42 | 15 | 524 | 61 | 360 | 579 | 28 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.67 | 0.67 | 0.83 | 0.73 | 0.73 | 0.73 | 0.93 | 0.92 | 0.92 | 0.93 | 0.92 | 0.92 |
| Lanes: | 0.56 | 0.44 | 1.00 | 0.37 | 0.37 | 0.26 | 1.00 | 1.79 | 0.21 | 1.00 | 1.91 | 0.09 |
| Final Sat.: | 710 | 565 | 1583 | 515 | 517 | 359 | 1769 | 3120 | 361 | 1769 | 3353 | 160 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.14 | 0.14 | 0.15 | 0.12 | 0.12 | 0.12 | 0.01 | 0.17 | 0.17 | 0.20 | 0.17 | 0.17 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.26 | 0.26 | 0.62 | 0.26 | 0.26 | 0.26 | 0.03 | 0.30 | 0.30 | 0.37 | 0.64 | 0.64 |
| Volume/Cap: | 0.55 | 0.55 | 0.24 | 0.46 | 0.46 | 0.46 | 0.27 | 0.55 | 0.55 | 0.55 | 0.27 | 0.27 |
| Delay/Veh: | 40.8 | 40.8 | 10.2 | 38.6 | 38.6 | 38.6 | 59.2 | 35.7 | 35.7 | 31.3 | 9.6 | 9.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 40.8 | 40.8 | 10.2 | 38.6 | 38.6 | 38.6 | 59.2 | 35.7 | 35.7 | 31.3 | 9.6 | 9.6 |
| DesignQueue: | 5 | 4 | 6 | 3 | 3 | 2 | 1 | 25 | 3 | 16 | 15 | 1 |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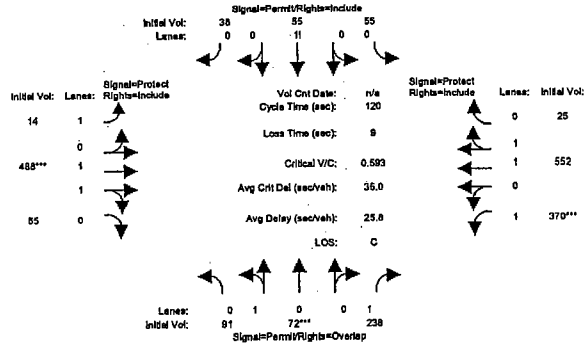
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

## Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 73 | 46 | 172 | 44 | 41 | 21 | 8 | 380 | 44 | 261 | 420 | 20 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 91 | 57 | 213 | 55 | 51 | 26 | 10 | 471 | 55 | 324 | 521 | 25 |
| Added Vol: | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 17 | 0 | 46 | 31 | 0 |
| Campus Incr: | 0 | 15 | 0 | 0 | 4 | 12 | 4 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 91 | 72 | 238 | 55 | 55 | 38 | 14 | 488 | 55 | 370 | 552 | 25 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 101 | 80 | 265 | 61 | 61 | 42 | 15 | 542 | 61 | 411 | 613 | 28 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 101 | 80 | 265 | 61 | 61 | 42 | 15 | 542 | 61 | 411 | 613 | 28 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 101 | 80 | 265 | 61 | 61 | 42 | 15 | 542 | 61 | 411 | 613 | 28 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.66 | 0.66 | 0.83 | 0.71 | 0.71 | 0.71 | 0.93 | 0.92 | 0.92 | 0.93 | 0.93 | 0.93 |
| Lanes: | 0.56 | 0.44 | 1.00 | 0.37 | 0.37 | 0.26 | 1.00 | 1.80 | 0.20 | 1.00 | 1.91 | 0.09 |
| Final Sat.: | 701 | 558 | 1583 | 501 | 503 | 349 | 1769 | 3134 | 350 | 1769 | 3365 | 151 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.14 | 0.14 | 0.17 | 0.12 | 0.12 | 0.12 | 0.01 | 0.17 | 0.17 | 0.23 | 0.18 | 0.18 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.24 | 0.24 | 0.63 | 0.24 | 0.24 | 0.24 | 0.03 | 0.29 | 0.29 | 0.39 | 0.65 | 0.65 |
| Volume/Cap: | 0.59 | 0.59 | 0.26 | 0.50 | 0.50 | 0.50 | 0.28 | 0.59 | 0.59 | 0.59 | 0.28 | 0.28 |
| Delay/Veh: | 43.4 | 43.4 | 9.8 | 40.4 | 40.4 | 40.4 | 59.6 | 37.3 | 37.3 | 30.3 | 9.0 | 9.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 43.4 | 43.4 | 9.8 | 40.4 | 40.4 | 40.4 | 59.6 | 37.3 | 37.3 | 30.3 | 9.0 | 9.0 |
| DesignQueue: | 5 | 4 | 7 | 3 | 3 | 2 | 1 | 27 | 3 | 18 | 15 | 1 |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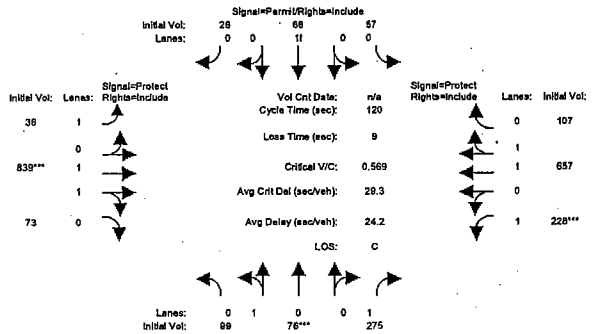
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

## Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 80 | 54 | 222 | 46 | 42 | 15 | 20 | 677 | 59 | 184 | 530 | 86 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 99 | 67 | 275 | 57 | 52 | 19 | 25 | 839 | 73 | 228 | 657 | 107 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 9 | 0 | 0 | 14 | 7 | 11 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 99 | 76 | 275 | 57 | 66 | 26 | 36 | 839 | 73 | 228 | 657 | 107 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 99 | 76 | 275 | 57 | 66 | 26 | 36 | 839 | 73 | 228 | 657 | 107 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 99 | 76 | 275 | 57 | 66 | 26 | 36 | 839 | 73 | 228 | 657 | 107 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 99 | 76 | 275 | 57 | 66 | 26 | 36 | 839 | 73 | 228 | 657 | 107 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.68 | 0.68 | 0.83 | 0.74 | 0.74 | 0.74 | 0.93 | 0.92 | 0.92 | 0.93 | 0.91 | 0.91 |
| Lanes: | 0.57 | 0.43 | 1.00 | 0.38 | 0.45 | 0.17 | 1.00 | 1.84 | 0.16 | 1.00 | 1.72 | 0.28 |
| Final Sat.: | 728 | 557 | 1583 | 538 | 623 | 241 | 1769 | 3215 | 280 | 1769 | 2980 | 484 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.14 | 0.14 | 0.17 | 0.11 | 0.11 | 0.11 | 0.02 | 0.26 | 0.26 | 0.13 | 0.22 | 0.22 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.24 | 0.24 | 0.47 | 0.24 | 0.24 | 0.24 | 0.06 | 0.46 | 0.46 | 0.23 | 0.63 | 0.63 |
| Volume/Cap: | 0.57 | 0.57 | 0.37 | 0.44 | 0.44 | 0.44 | 0.35 | 0.57 | 0.57 | 0.57 | 0.35 | 0.35 |
| Delay/Veh: | 42.7 | 42.7 | 21.0 | 39.7 | 39.7 | 39.7 | 56.5 | 24.3 | 24.3 | 43.1 | 10.8 | 10.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 42.7 | 42.7 | 21.0 | 39.7 | 39.7 | 39.7 | 56.5 | 24.3 | 24.3 | 43.1 | 10.8 | 10.8 |
| DesignQueue: | 5 | 4 | 10 | 3 | 3 | 1 | 2 | 32 | 3 | 12 | 17 | 3 |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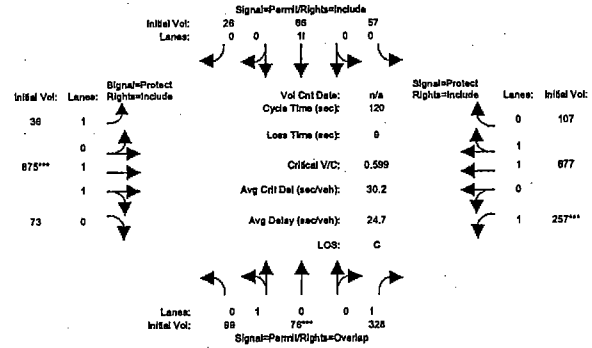
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

## Intersection #9: SR 1/Swift [N/S: Swift E/w: SR 1]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 80 | 54 | 222 | 46 | 42 | 15 | 20 | 677 | 59 | 184 | 530 | 86 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 99 | 67 | 275 | 57 | 52 | 19 | 25 | 839 | 73 | 228 | 657 | 107 |
| Added Vol: | 0 | 0 | 53 | 0 | 0 | 0 | 0 | 36 | 0 | 29 | 20 | 0 |
| Campus Incr: | 0 | 9 | 0 | 0 | 14 | 7 | 11 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 99 | 76 | 328 | 57 | 66 | 26 | 36 | 875 | 73 | 257 | 677 | 107 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 99 | 76 | 328 | 57 | 66 | 26 | 36 | 875 | 73 | 257 | 677 | 107 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 99 | 76 | 328 | 57 | 66 | 26 | 36 | 875 | 73 | 257 | 677 | 107 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 99 | 76 | 328 | 57 | 66 | 26 | 36 | 875 | 73 | 257 | 677 | 107 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.67 | 0.67 | 0.83 | 0.72 | 0.72 | 0.72 | 0.93 | 0.92 | 0.92 | 0.93 | 0.91 | 0.91 |
| Lanes: | 0.57 | 0.43 | 1.00 | 0.38 | 0.45 | 0.17 | 1.00 | 1.85 | 0.15 | 1.00 | 1.73 | 0.27 |
| Final Sat.: | 720 | 552 | 1583 | 527 | 610 | 236 | 1769 | 3226 | 270 | 1769 | 2995 | 472 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.14 | 0.14 | 0.21 | 0.11 | 0.11 | 0.11 | 0.02 | 0.27 | 0.27 | 0.15 | 0.23 | 0.23 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.23 | 0.23 | 0.47 | 0.23 | 0.23 | 0.23 | 0.06 | 0.45 | 0.45 | 0.24 | 0.64 | 0.64 |
| Volume/Cap: | 0.60 | 0.60 | 0.44 | 0.47 | 0.47 | 0.47 | 0.35 | 0.60 | 0.60 | 0.60 | 0.35 | 0.35 |
| Delay/Veh: | 44.7 | 44.7 | 21.5 | 41.0 | 41.0 | 41.0 | 56.6 | 25.3 | 25.3 | 42.6 | 10.3 | 10.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 44.7 | 44.7 | 21.5 | 41.0 | 41.0 | 41.0 | 56.6 | 25.3 | 25.3 | 42.6 | 10.3 | 10.3 |
| DesignQueue: | 5 | 4 | 12 | 3 | 3 | 1 | 2 | 34 | 3 | 13 | 17 | 3 |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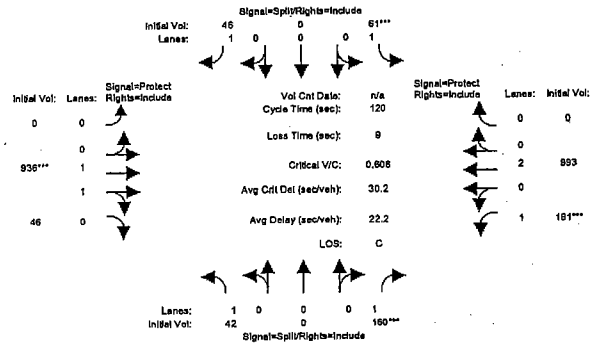
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 755 | 37 | 130 | 801 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 42 | 0 | 160 | 61 | 0 | 46 | 0 | 936 | 46 | 161 | 993 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 42 | 0 | 160 | 61 | 0 | 46 | 0 | 936 | 46 | 161 | 993 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 47 | 0 | 178 | 68 | 0 | 51 | 0 | 1040 | 51 | 179 | 1104 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 47 | 0 | 178 | 68 | 0 | 51 | 0 | 1040 | 51 | 179 | 1104 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 47 | 0 | 178 | 68 | 0 | 51 | 0 | 1040 | 51 | 179 | 1104 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.92 | 0.92 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.91 | 0.09 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3349 | 164 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.00 | 0.11 | 0.04 | 0.00 | 0.03 | 0.00 | 0.31 | 0.31 | 0.10 | 0.31 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.18 | 0.00 | 0.18 | 0.06 | 0.00 | 0.06 | 0.00 | 0.51 | 0.51 | 0.17 | 0.68 | 0.00 |
| Volume/Cap: | 0.14 | 0.00 | 0.61 | 0.61 | 0.00 | 0.51 | 0.00 | 0.61 | 0.61 | 0.61 | 0.46 | 0.00 |
| Delay/Veh: | 41.2 | 0.0 | 48.6 | 64.2 | 0.0 | 59.0 | 0.0 | 21.4 | 21.4 | 50.0 | 9.2 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 41.2 | 0.0 | 48.6 | 64.2 | 0.0 | 59.0 | 0.0 | 21.4 | 21.4 | 50.0 | 9.2 | 0.0 |
| DesignQueue: | 3 | 0 | 10 | 4 | 0 | 3 | 0 | 37 | 2 | 10 | 26 | 0 |





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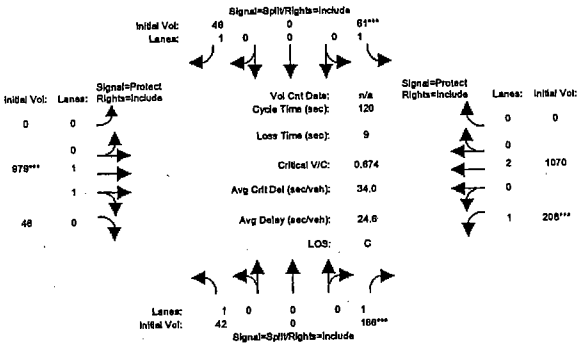
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 34 | 0 | 129 | 49 | 0 | 37 | 0 | 755 | 37 | 130 | 801 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 42 | 0 | 160 | 61 | 0 | 46 | 0 | 936 | 46 | 161 | 993 | 0 |
| Added Vol: | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 43 | 0 | 47 | 77 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 42 | 0 | 186 | 61 | 0 | 46 | 0 | 979 | 46 | 208 | 1070 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| PHF Volume: | 47 | 0 | 207 | 68 | 0 | 51 | 0 | 1088 | 51 | 231 | 1189 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 47 | 0 | 207 | 68 | 0 | 51 | 0 | 1088 | 51 | 231 | 1189 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 47 | 0 | 207 | 68 | 0 | 51 | 0 | 1088 | 51 | 231 | 1189 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.92 | 0.92 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.91 | 0.09 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3356 | 157 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.00 | 0.13 | 0.04 | 0.00 | 0.03 | 0.00 | 0.32 | 0.32 | 0.13 | 0.34 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.19 | 0.00 | 0.19 | 0.06 | 0.00 | 0.06 | 0.00 | 0.48 | 0.48 | 0.19 | 0.67 | 0.00 |
| Volume/Cap: | 0.14 | 0.00 | 0.67 | 0.67 | 0.00 | 0.57 | 0.00 | 0.67 | 0.67 | 0.67 | 0.50 | 0.00 |
| Delay/Veh: | 40.3 | 0.0 | 50.7 | 72.2 | 0.0 | 63.6 | 0.0 | 25.0 | 25.0 | 50.1 | 9.7 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 40.3 | 0.0 | 50.7 | 72.2 | 0.0 | 63.6 | 0.0 | 25.0 | 25.0 | 50.1 | 9.7 | 0.0 |
| DesignQueue: | 3 | 0 | 11 | 4 | 0 | 3 | 0 | 41 | 2 | 13 | 28 | 0 |

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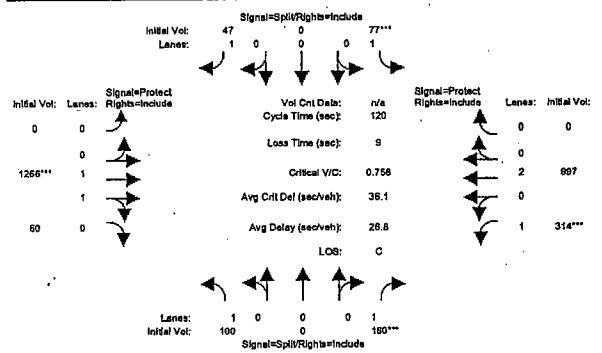
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 1021 | 48 | 253 | 804 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 100 | 0 | 160 | 77 | 0 | 47 | 0 | 1266 | 60 | 314 | 997 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 100 | 0 | 160 | 77 | 0 | 47 | 0 | 1266 | 60 | 314 | 997 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 100 | 0 | 160 | 77 | 0 | 47 | 0 | 1266 | 60 | 314 | 997 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 100 | 0 | 160 | 77 | 0 | 47 | 0 | 1266 | 60 | 314 | 997 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 100 | 0 | 160 | 77 | 0 | 47 | 0 | 1266 | 60 | 314 | 997 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.92 | 0.92 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.91 | 0.09 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3355 | 158 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.00 | 0.10 | 0.04 | 0.00 | 0.03 | 0.00 | 0.38 | 0.38 | 0.18 | 0.28 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.13 | 0.00 | 0.13 | 0.06 | 0.00 | 0.06 | 0.00 | 0.50 | 0.50 | 0.23 | 0.73 | 0.00 |
| Volume/Cap: | 0.42 | 0.00 | 0.76 | 0.76 | 0.00 | 0.52 | 0.00 | 0.76 | 0.76 | 0.76 | 0.38 | 0.00 |
| Delay/Veh: | 49.0 | 0.0 | 64.5 | 82.9 | 0.0 | 60.1 | 0.0 | 26.1 | 26.1 | 50.5 | 6.0 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 49.0 | 0.0 | 64.5 | 82.9 | 0.0 | 60.1 | 0.0 | 26.1 | 26.1 | 50.5 | 6.0 | 0.0 |
| DesignQueue: | 6 | 0 | 9 | 5 | 0 | 3 | 0 | 47 | 2 | 17 | 19 | 0 |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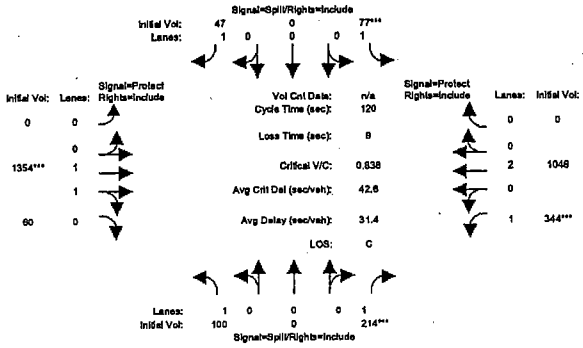
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

Intersection #10: Mission/Almar [N/S: Almar E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 81 | 0 | 129 | 62 | 0 | 38 | 0 | 1021 | 48 | 253 | 804 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 100 | 0 | 160 | 77 | 0 | 47 | 0 | 1266 | 60 | 314 | 997 | 0 |
| Added Vol: | 0 | 0 | 54 | 0 | 0 | 0 | 0 | 88 | 0 | 30 | 49 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 100 | 0 | 214 | 77 | 0 | 47 | 0 | 1354 | 60 | 344 | 1046 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 100 | 0 | 214 | 77 | 0 | 47 | 0 | 1354 | 60 | 344 | 1046 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 100 | 0 | 214 | 77 | 0 | 47 | 0 | 1354 | 60 | 344 | 1046 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 100 | 0 | 214 | 77 | 0 | 47 | 0 | 1354 | 60 | 344 | 1046 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 1.00 | 0.83 | 0.93 | 1.00 | 0.83 | 1.00 | 0.93 | 0.93 | 0.93 | 0.93 | 1.00 |
| Lanes: | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 1.92 | 0.08 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1769 | 0 | 1583 | 1769 | 0 | 1583 | 0 | 3369 | 148 | 1769 | 3538 | 0 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.00 | 0.14 | 0.04 | 0.00 | 0.03 | 0.00 | 0.40 | 0.40 | 0.19 | 0.30 | 0.00 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.16 | 0.00 | 0.16 | 0.05 | 0.00 | 0.05 | 0.00 | 0.48 | 0.48 | 0.23 | 0.71 | 0.00 |
| Volume/Cap: | 0.35 | 0.00 | 0.84 | 0.84 | 0.00 | 0.57 | 0.00 | 0.84 | 0.84 | 0.84 | 0.42 | 0.00 |
| Delay/Veh: | 45.5 | 0.0 | 69.7 | 102.4 | 0.0 | 65.1 | 0.0 | 31.0 | 31.0 | 58.0 | 7.2 | 0.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 45.5 | 0.0 | 69.7 | 102.4 | 0.0 | 65.1 | 0.0 | 31.0 | 31.0 | 58.0 | 7.2 | 0.0 |
| DesignQueue: | 6 | 0 | 12 | 5 | 0 | 3 | 0 | 52 | 2 | 18 | 22 | 0 |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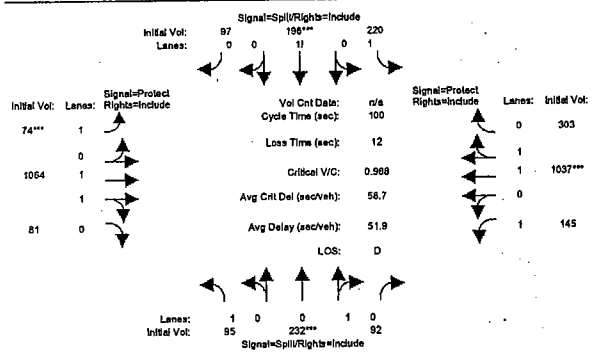
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 77 | 171 | 74 | 170 | 155 | 78 | 60 | 858 | 65 | 117 | 836 | 219 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 95 | 212 | 92 | 211 | 192 | 97 | 74 | 1064 | 81 | 145 | 1037 | 272 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 20 | 0 | 9 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 31 |
| Initial Fut: | 95 | 232 | 92 | 220 | 198 | 97 | 74 | 1064 | 81 | 145 | 1037 | 303 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 95 | 232 | 92 | 220 | 198 | 97 | 74 | 1064 | 81 | 145 | 1037 | 303 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 95 | 232 | 92 | 220 | 198 | 97 | 74 | 1064 | 81 | 145 | 1037 | 303 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 95 | 232 | 92 | 220 | 198 | 97 | 74 | 1064 | 81 | 145 | 1037 | 303 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.93 | 0.92 | 0.92 | 0.93 | 0.90 | 0.90 |
| Lanes: | 1.00 | 0.72 | 0.28 | 1.27 | 0.49 | 0.24 | 1.00 | 1.86 | 0.14 | 1.00 | 1.55 | 0.45 |
| Final Sat.: | 1736 | 1255 | 496 | 2211 | 852 | 416 | 1769 | 3256 | 247 | 1769 | 2645 | 772 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.18 | 0.18 | 0.10 | 0.23 | 0.23 | 0.04 | 0.33 | 0.33 | 0.08 | 0.39 | 0.39 |
| Crit Moves: | | **** | | | **** | | **** | | | | **** | |
| Green/Cycle: | 0.19 | 0.19 | 0.19 | 0.24 | 0.24 | 0.24 | 0.04 | 0.36 | 0.36 | 0.09 | 0.40 | 0.40 |
| Volume/Cap: | 0.29 | 0.97 | 0.97 | 0.41 | 0.97 | 0.97 | 0.97 | 0.91 | 0.91 | 0.91 | 0.97 | 0.97 |
| Delay/Veh: | 35.1 | 80.6 | 80.6 | 32.2 | 68.4 | 68.4 | 139.1 | 40.7 | 40.7 | 91.4 | 46.1 | 46.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 35.1 | 80.6 | 80.6 | 32.2 | 68.4 | 68.4 | 139.1 | 40.7 | 40.7 | 91.4 | 46.1 | 46.1 |
| DesignQueue: | 4 | 11 | 4 | 10 | 9 | 4 | 4 | 41 | 3 | 7 | 38 | 11 |





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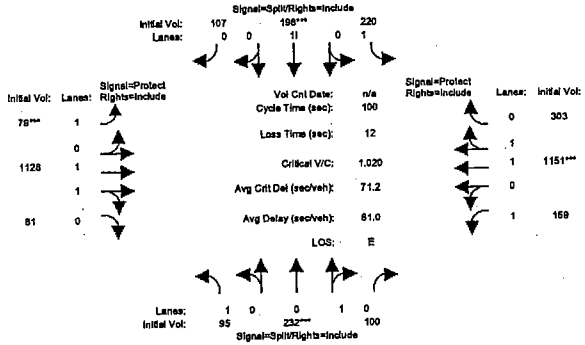
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 77 | 171 | 74 | 170 | 155 | 78 | 60 | 858 | 65 | 117 | 836 | 219 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 95 | 212 | 92 | 211 | 192 | 97 | 74 | 1064 | 81 | 145 | 1037 | 272 |
| Added Vol: | 0 | 0 | 8 | 0 | 0 | 10 | 5 | 64 | 0 | 14 | 114 | 0 |
| Campus Incr: | 0 | 20 | 0 | 9 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 31 |
| Initial Fut: | 95 | 232 | 100 | 220 | 198 | 107 | 79 | 1128 | 81 | 159 | 1151 | 303 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 95 | 232 | 100 | 220 | 198 | 107 | 79 | 1128 | 81 | 159 | 1151 | 303 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 95 | 232 | 100 | 220 | 198 | 107 | 79 | 1128 | 81 | 159 | 1151 | 303 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 95 | 232 | 100 | 220 | 198 | 107 | 79 | 1128 | 81 | 159 | 1151 | 303 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.90 | 0.90 |
| Lanes: | 1.00 | 0.70 | 0.30 | 1.26 | 0.48 | 0.26 | 1.00 | 1.87 | 0.13 | 1.00 | 1.58 | 0.42 |
| Final Sat.: | 1736 | 1221 | 525 | 2196 | 829 | 447 | 1769 | 3269 | 234 | 1769 | 2714 | 714 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.19 | 0.19 | 0.10 | 0.24 | 0.24 | 0.04 | 0.35 | 0.35 | 0.09 | 0.42 | 0.42 |
| Crit Moves: | | **** | | | **** | | **** | | | | **** | |
| Green/Cycle: | 0.19 | 0.19 | 0.19 | 0.23 | 0.23 | 0.23 | 0.04 | 0.36 | 0.36 | 0.09 | 0.42 | 0.42 |
| Volume/Cap: | 0.30 | 1.02 | 1.02 | 0.43 | 1.02 | 1.02 | 1.02 | 0.95 | 0.95 | 0.95 | 1.02 | 1.02 |
| Delay/Veh: | 35.5 | 95.9 | 95.9 | 32.8 | 83.2 | 83.2 | 155.5 | 45.2 | 45.2 | 98.7 | 58.3 | 58.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 35.5 | 95.9 | 95.9 | 32.8 | 83.2 | 83.2 | 155.5 | 45.2 | 45.2 | 98.7 | 58.3 | 58.3 |
| DesignQueue: | 4 | 11 | 5 | 10 | 9 | 5 | 4 | 43 | 3 | 8 | 42 | 11 |

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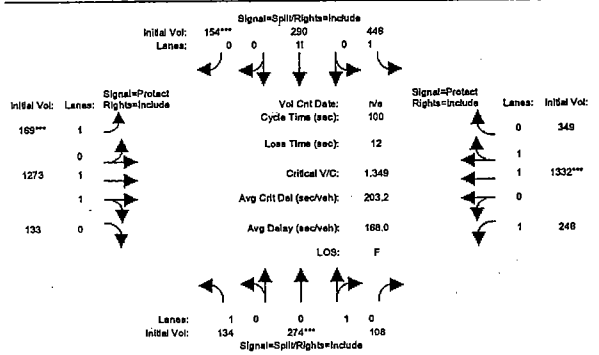
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 108 | 211 | 87 | 336 | 219 | 124 | 136 | 1027 | 107 | 198 | 1074 | 267 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 134 | 262 | 108 | 417 | 272 | 154 | 169 | 1273 | 133 | 246 | 1332 | 331 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 12 | 0 | 29 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| Initial Fut: | 134 | 274 | 108 | 446 | 290 | 154 | 169 | 1273 | 133 | 246 | 1332 | 349 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 134 | 274 | 108 | 446 | 290 | 154 | 169 | 1273 | 133 | 246 | 1332 | 349 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 134 | 274 | 108 | 446 | 290 | 154 | 169 | 1273 | 133 | 246 | 1332 | 349 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 134 | 274 | 108 | 446 | 290 | 154 | 169 | 1273 | 133 | 246 | 1332 | 349 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.90 | 0.90 |
| Lanes: | 1.00 | 0.72 | 0.28 | 1.34 | 0.43 | 0.23 | 1.00 | 1.81 | 0.19 | 1.00 | 1.58 | 0.42 |
| Final Sat.: | 1736 | 1256 | 495 | 2319 | 755 | 401 | 1769 | 3159 | 329 | 1769 | 2716 | 712 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.22 | 0.22 | 0.19 | 0.38 | 0.38 | 0.10 | 0.40 | 0.40 | 0.14 | 0.49 | 0.49 |
| Crit Moves: | | **** | | | | **** | **** | | | | **** | |
| Green/Cycle: | 0.16 | 0.16 | 0.16 | 0.28 | 0.28 | 0.28 | 0.07 | 0.32 | 0.32 | 0.11 | 0.36 | 0.36 |
| Volume/Cap: | 0.48 | 1.35 | 1.35 | 0.68 | 1.35 | 1.35 | 1.35 | 1.25 | 1.25 | 1.25 | 1.35 | 1.35 |
| Delay/Veh: | 39.4 | 220 | 220.5 | 33.1 | 203 | 202.7 | 247.0 | 153 | 153.0 | 191.1 | 194 | 194.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 39.4 | 220 | 220.5 | 33.1 | 203 | 202.7 | 247.0 | 153 | 153.0 | 191.1 | 194 | 194.2 |
| DesignQueue: | 6 | 13 | 5 | 19 | 13 | 7 | 9 | 53 | 6 | 13 | 53 | 14 |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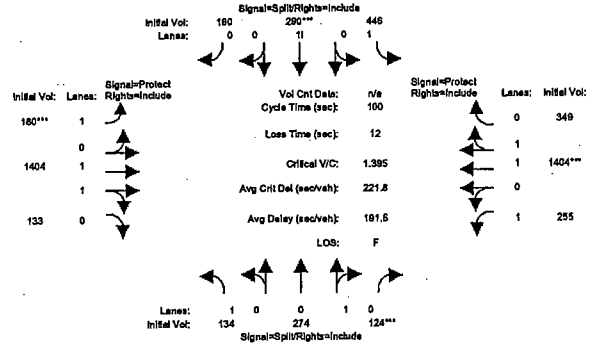
2020 Plus Phase 1 and 2 PM

Intersection #11: Mission/Bay [N/S: Bay E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 108 | 211 | 87 | 336 | 219 | 124 | 136 | 1027 | 107 | 198 | 1074 | 267 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 134 | 262 | 108 | 417 | 272 | 154 | 169 | 1273 | 133 | 246 | 1332 | 331 |
| Added Vol: | 0 | 0 | 16 | 0 | 0 | 6 | 11 | 131 | 0 | 9 | 72 | 0 |
| Campus Incr: | 0 | 12 | 0 | 29 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| Initial Fut: | 134 | 274 | 124 | 446 | 290 | 160 | 180 | 1404 | 133 | 255 | 1404 | 349 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 134 | 274 | 124 | 446 | 290 | 160 | 180 | 1404 | 133 | 255 | 1404 | 349 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 134 | 274 | 124 | 446 | 290 | 160 | 180 | 1404 | 133 | 255 | 1404 | 349 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 134 | 274 | 124 | 446 | 290 | 160 | 180 | 1404 | 133 | 255 | 1404 | 349 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.91 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.93 | 0.92 | 0.92 | 0.93 | 0.90 | 0.90 |
| Lanes: | 1.00 | 0.69 | 0.31 | 1.33 | 0.43 | 0.24 | 1.00 | 1.83 | 0.17 | 1.00 | 1.60 | 0.40 |
| Final Sat.: | 1736 | 1199 | 543 | 2311 | 748 | 413 | 1769 | 3190 | 301 | 1769 | 2748 | 683 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.23 | 0.23 | 0.19 | 0.39 | 0.39 | 0.10 | 0.44 | 0.44 | 0.14 | 0.51 | 0.51 |
| Crit Moves: | | | **** | | **** | | **** | | | | **** | |
| Green/Cycle: | 0.16 | 0.16 | 0.16 | 0.28 | 0.28 | 0.28 | 0.07 | 0.33 | 0.33 | 0.11 | 0.37 | 0.37 |
| Volume/Cap: | 0.47 | 1.40 | 1.40 | 0.69 | 1.40 | 1.40 | 1.40 | 1.33 | 1.33 | 1.33 | 1.40 | 1.40 |
| Delay/Veh: | 39.1 | 240 | 239.7 | 34.0 | 223 | 223.4 | 264.4 | 188 | 188.4 | 224.8 | 214 | 214.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 39.1 | 240 | 239.7 | 34.0 | 223 | 223.4 | 264.4 | 188 | 188.4 | 224.8 | 214 | 214.5 |
| DesignQueue: | 6 | 13 | 6 | 19 | 13 | 7 | 9 | 58 | 6 | 13 | 56 | 14 |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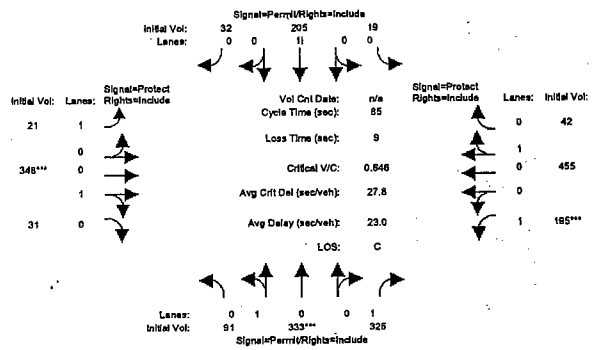
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

## Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 73 | 243 | 262 | 15 | 158 | 26 | 17 | 281 | 25 | 157 | 367 | 34 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 91 | 301 | 325 | 19 | 196 | 32 | 21 | 348 | 31 | 195 | 455 | 42 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 32 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 91 | 333 | 325 | 19 | 205 | 32 | 21 | 348 | 31 | 195 | 455 | 42 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 91 | 333 | 325 | 19 | 205 | 32 | 21 | 348 | 31 | 195 | 455 | 42 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 91 | 333 | 325 | 19 | 205 | 32 | 21 | 348 | 31 | 195 | 455 | 42 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 91 | 333 | 325 | 19 | 205 | 32 | 21 | 348 | 31 | 195 | 455 | 42 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.85 | 0.85 | 0.83 | 0.93 | 0.93 | 0.93 | 0.93 | 0.97 | 0.97 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.21 | 0.79 | 1.00 | 0.07 | 0.80 | 0.13 | 1.00 | 0.92 | 0.08 | 1.00 | 0.92 | 0.08 |
| Final Sat.: | 346 | 1275 | 1583 | 128 | 1411 | 222 | 1769 | 1689 | 150 | 1769 | 1682 | 156 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.26 | 0.26 | 0.21 | 0.15 | 0.15 | 0.15 | 0.01 | 0.21 | 0.21 | 0.11 | 0.27 | 0.27 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.02 | 0.32 | 0.32 | 0.17 | 0.47 | 0.47 |
| Volume/Cap: | 0.65 | 0.65 | 0.51 | 0.36 | 0.36 | 0.36 | 0.58 | 0.65 | 0.65 | 0.65 | 0.58 | 0.58 |
| Delay/Veh: | 22.6 | 22.6 | 19.6 | 17.9 | 17.9 | 17.9 | 62.0 | 27.3 | 27.3 | 37.7 | 17.4 | 17.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 22.6 | 22.6 | 19.6 | 17.9 | 17.9 | 17.9 | 62.0 | 27.3 | 27.3 | 37.7 | 17.4 | 17.4 |
| DesignQueue: | 3 | 10 | 10 | 1 | 6 | 1 | 1 | 12 | 1 | 8 | 12 | 1 |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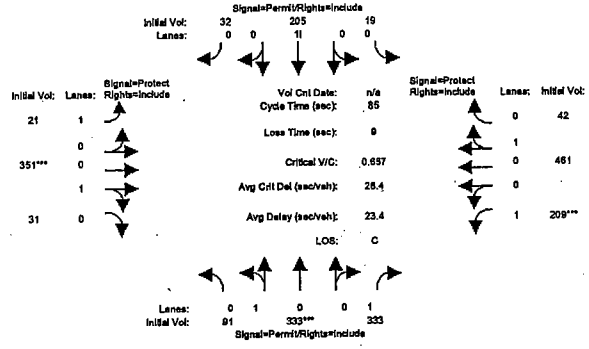
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

## Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 73 | 243 | 262 | 15 | 158 | 26 | 17 | 281 | 25 | 157 | 367 | 34 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 91 | 301 | 325 | 19 | 196 | 32 | 21 | 348 | 31 | 195 | 455 | 42 |
| Added Vol: | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 3 | 0 | 14 | 6 | 0 |
| Campus Incr: | 0 | 32 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 91 | 333 | 333 | 19 | 205 | 32 | 21 | 351 | 31 | 209 | 461 | 42 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 91 | 333 | 333 | 19 | 205 | 32 | 21 | 351 | 31 | 209 | 461 | 42 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 91 | 333 | 333 | 19 | 205 | 32 | 21 | 351 | 31 | 209 | 461 | 42 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 91 | 333 | 333 | 19 | 205 | 32 | 21 | 351 | 31 | 209 | 461 | 42 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.85 | 0.85 | 0.83 | 0.93 | 0.93 | 0.93 | 0.93 | 0.97 | 0.97 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.21 | 0.79 | 1.00 | 0.07 | 0.80 | 0.13 | 1.00 | 0.92 | 0.08 | 1.00 | 0.92 | 0.08 |
| Final Sat.: | 346 | 1273 | 1583 | 128 | 1411 | 222 | 1769 | 1691 | 149 | 1769 | 1684 | 154 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.26 | 0.26 | 0.21 | 0.15 | 0.15 | 0.15 | 0.01 | 0.21 | 0.21 | 0.12 | 0.27 | 0.27 |
| Crit Moves: | | **** | | | | | | **** | | **** | | |
| Green/Cycle: | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.02 | 0.32 | 0.32 | 0.18 | 0.48 | 0.48 |
| Volume/Cap: | 0.66 | 0.66 | 0.53 | 0.36 | 0.36 | 0.36 | 0.58 | 0.66 | 0.66 | 0.66 | 0.58 | 0.58 |
| Delay/Veh: | 23.3 | 23.3 | 20.3 | 18.3 | 18.3 | 18.3 | 61.9 | 27.8 | 27.8 | 37.4 | 17.1 | 17.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 23.3 | 23.3 | 20.3 | 18.3 | 18.3 | 18.3 | 61.9 | 27.8 | 27.8 | 37.4 | 17.1 | 17.1 |
| DesignQueue: | 3 | 10 | 10 | 1 | 6 | 1 | 1 | 12 | 1 | 8 | 12 | 1 |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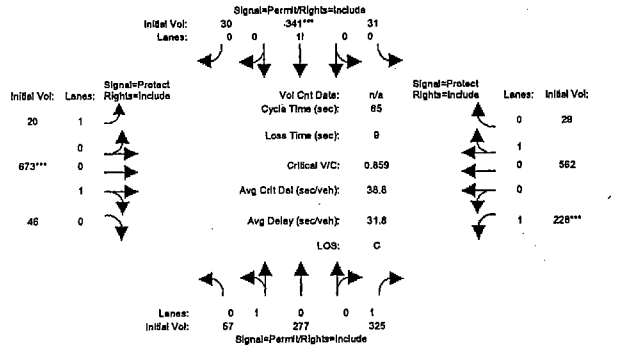
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 46 | 208 | 262 | 25 | 251 | 24 | 16 | 543 | 37 | 184 | 453 | 23 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 57 | 258 | 325 | 31 | 311 | 30 | 20 | 673 | 46 | 228 | 562 | 29 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 19 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 57 | 277 | 325 | 31 | 341 | 30 | 20 | 673 | 46 | 228 | 562 | 29 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 57 | 277 | 325 | 31 | 341 | 30 | 20 | 673 | 46 | 228 | 562 | 29 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 57 | 277 | 325 | 31 | 341 | 30 | 20 | 673 | 46 | 228 | 562 | 29 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 57 | 277 | 325 | 31 | 341 | 30 | 20 | 673 | 46 | 228 | 562 | 29 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.76 | 0.76 | 0.83 | 0.85 | 0.85 | 0.85 | 0.93 | 0.97 | 0.97 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.17 | 0.83 | 1.00 | 0.08 | 0.85 | 0.07 | 1.00 | 0.94 | 0.06 | 1.00 | 0.95 | 0.05 |
| Final Sat.: | 245 | 1190 | 1583 | 124 | 1369 | 119 | 1769 | 1726 | 118 | 1769 | 1760 | 89 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.23 | 0.23 | 0.21 | 0.25 | 0.25 | 0.25 | 0.01 | 0.39 | 0.39 | 0.13 | 0.32 | 0.32 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.02 | 0.45 | 0.45 | 0.15 | 0.58 | 0.58 |
| Volume/Cap: | 0.80 | 0.80 | 0.71 | 0.86 | 0.86 | 0.86 | 0.55 | 0.86 | 0.86 | 0.86 | 0.55 | 0.55 |
| Delay/Veh: | 38.6 | 38.6 | 32.0 | 43.3 | 43.3 | 43.3 | 57.6 | 29.7 | 29.7 | 58.7 | 11.4 | 11.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 38.6 | 38.6 | 32.0 | 43.3 | 43.3 | 43.3 | 57.6 | 29.7 | 29.7 | 58.7 | 11.4 | 11.4 |
| DesignQueue: | 2 | 10 | 11 | 1 | 12 | 1 | 1 | 19 | 1 | 9 | 12 | 1 |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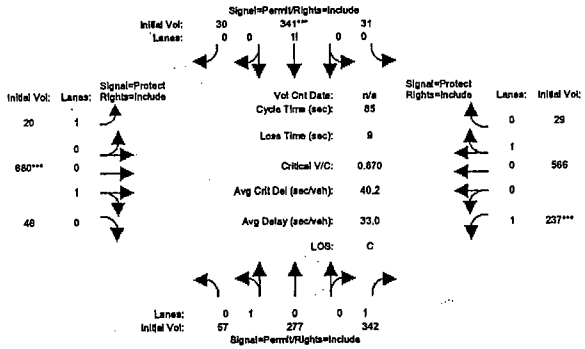
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

Intersection #12: Laurel/California [N/S: California E/w: Laurel]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 46 | 208 | 262 | 25 | 251 | 24 | 16 | 543 | 37 | 184 | 453 | 23 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 57 | 258 | 325 | 31 | 311 | 30 | 20 | 673 | 46 | 228 | 562 | 29 |
| Added Vol: | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 7 | 0 | 9 | 4 | 0 |
| Campus Incr: | 0 | 19 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 57 | 277 | 342 | 31 | 341 | 30 | 20 | 680 | 46 | 237 | 566 | 29 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 57 | 277 | 342 | 31 | 341 | 30 | 20 | 680 | 46 | 237 | 566 | 29 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 57 | 277 | 342 | 31 | 341 | 30 | 20 | 680 | 46 | 237 | 566 | 29 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 57 | 277 | 342 | 31 | 341 | 30 | 20 | 680 | 46 | 237 | 566 | 29 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.75 | 0.75 | 0.83 | 0.84 | 0.84 | 0.84 | 0.93 | 0.97 | 0.97 | 0.93 | 0.97 | 0.97 |
| Lanes: | 0.17 | 0.83 | 1.00 | 0.08 | 0.85 | 0.07 | 1.00 | 0.94 | 0.06 | 1.00 | 0.95 | 0.05 |
| Final Sat.: | 244 | 1186 | 1583 | 124 | 1361 | 119 | 1769 | 1729 | 117 | 1769 | 1760 | 89 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.23 | 0.23 | 0.22 | 0.25 | 0.25 | 0.25 | 0.01 | 0.39 | 0.39 | 0.13 | 0.32 | 0.32 |
| Crit Moves: | | | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.02 | 0.45 | 0.45 | 0.15 | 0.59 | 0.59 |
| Volume/Cap: | 0.81 | 0.81 | 0.75 | 0.87 | 0.87 | 0.87 | 0.55 | 0.87 | 0.87 | 0.87 | 0.55 | 0.55 |
| Delay/Veh: | 39.6 | 39.6 | 34.3 | 45.0 | 45.0 | 45.0 | 57.9 | 30.9 | 30.9 | 59.8 | 11.3 | 11.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 39.6 | 39.6 | 34.3 | 45.0 | 45.0 | 45.0 | 57.9 | 30.9 | 30.9 | 59.8 | 11.3 | 11.3 |
| DesignQueue: | 2 | 10 | 12 | 1 | 12 | 1 | 1 | 20 | 1 | 10 | 12 | 1 |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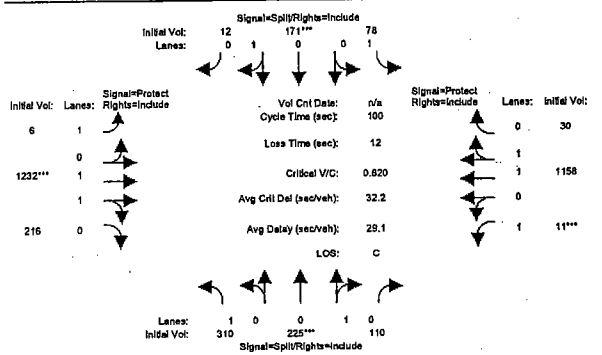
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 242 | 164 | 89 | 63 | 133 | 10 | 5 | 989 | 172 | 9 | 917 | 24 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 300 | 203 | 110 | 78 | 165 | 12 | 6 | 1226 | 213 | 11 | 1137 | 30 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 10 | 22 | 0 | 0 | 6 | 0 | 0 | 6 | 3 | 0 | 21 | 0 |
| Initial Fut: | 310 | 225 | 110 | 78 | 171 | 12 | 6 | 1232 | 216 | 11 | 1158 | 30 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 310 | 225 | 110 | 78 | 171 | 12 | 6 | 1232 | 216 | 11 | 1158 | 30 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 310 | 225 | 110 | 78 | 171 | 12 | 6 | 1232 | 216 | 11 | 1158 | 30 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 310 | 225 | 110 | 78 | 171 | 12 | 6 | 1232 | 216 | 11 | 1158 | 30 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.93 | 0.93 | 0.97 | 0.97 | 0.91 | 0.89 | 0.89 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.67 | 0.33 | 1.00 | 0.93 | 0.07 | 1.00 | 1.70 | 0.30 | 1.00 | 1.95 | 0.05 |
| Final Sat.: | 1769 | 1189 | 582 | 1769 | 1719 | 125 | 1736 | 2889 | 507 | 1736 | 3372 | 87 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.18 | 0.19 | 0.19 | 0.04 | 0.10 | 0.10 | 0.00 | 0.43 | 0.43 | 0.01 | 0.34 | 0.34 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Green/Cycle: | 0.23 | 0.23 | 0.23 | 0.12 | 0.12 | 0.12 | 0.01 | 0.52 | 0.52 | 0.01 | 0.52 | 0.52 |
| Volume/Cap: | 0.76 | 0.82 | 0.82 | 0.36 | 0.82 | 0.82 | 0.66 | 0.82 | 0.82 | 0.82 | 0.66 | 0.66 |
| Delay/Veh: | 43.9 | 48.9 | 48.9 | 41.5 | 63.7 | 63.7 | 153.1 | 23.3 | 23.3 | 200.1 | 18.3 | 18.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 43.9 | 48.9 | 48.9 | 41.5 | 63.7 | 63.7 | 153.1 | 23.3 | 23.3 | 200.1 | 18.3 | 18.3 |
| DesignQueue: | 14 | 10 | 5 | 4 | 9 | 1 | 0 | 37 | 6 | 1 | 33 | 1 |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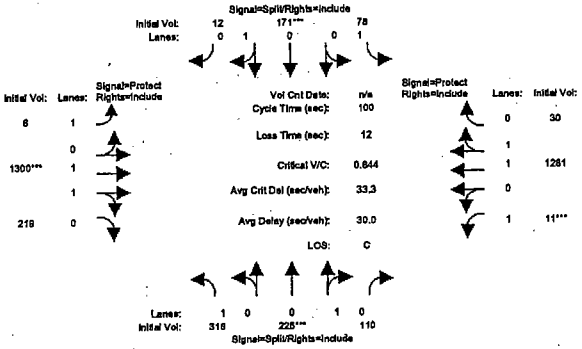
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 242 | 164 | 89 | 63 | 133 | 10 | 5 | 989 | 172 | 9 | 917 | 24 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 300 | 203 | 110 | 78 | 165 | 12 | 6 | 1226 | 213 | 11 | 1137 | 30 |
| Added Vol: | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 3 | 0 | 123 | 0 |
| Campus Incr: | 10 | 22 | 0 | 0 | 6 | 0 | 0 | 6 | 3 | 0 | 21 | 0 |
| Initial Fut: | 316 | 225 | 110 | 78 | 171 | 12 | 6 | 1300 | 219 | 11 | 1281 | 30 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 316 | 225 | 110 | 78 | 171 | 12 | 6 | 1300 | 219 | 11 | 1281 | 30 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 316 | 225 | 110 | 78 | 171 | 12 | 6 | 1300 | 219 | 11 | 1281 | 30 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 316 | 225 | 110 | 78 | 171 | 12 | 6 | 1300 | 219 | 11 | 1281 | 30 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.93 | 0.93 | 0.97 | 0.97 | 0.91 | 0.89 | 0.89 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.67 | 0.33 | 1.00 | 0.93 | 0.07 | 1.00 | 1.71 | 0.29 | 1.00 | 1.95 | 0.05 |
| Final Sat.: | 1769 | 1189 | 582 | 1769 | 1719 | 125 | 1736 | 2906 | 490 | 1736 | 3384 | 79 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.18 | 0.19 | 0.19 | 0.04 | 0.10 | 0.10 | 0.00 | 0.45 | 0.45 | 0.01 | 0.38 | 0.38 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Green/Cycle: | 0.22 | 0.22 | 0.22 | 0.12 | 0.12 | 0.12 | 0.01 | 0.53 | 0.53 | 0.01 | 0.53 | 0.53 |
| Volume/Cap: | 0.80 | 0.84 | 0.84 | 0.37 | 0.84 | 0.84 | 0.71 | 0.84 | 0.84 | 0.84 | 0.71 | 0.71 |
| Delay/Veh: | 47.3 | 52.2 | 52.2 | 41.8 | 68.1 | 68.1 | 186.8 | 23.8 | 23.8 | 214.7 | 18.9 | 18.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 47.3 | 52.2 | 52.2 | 41.8 | 68.1 | 68.1 | 186.8 | 23.8 | 23.8 | 214.7 | 18.9 | 18.9 |
| DesignQueue: | 14 | 10 | 5 | 4 | 9 | 1 | 0 | 38 | 6 | 1 | 37 | 1 |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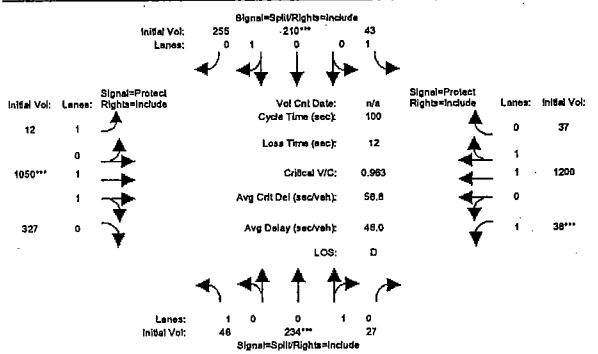
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

## Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 40 | 221 | 27 | 43 | 190 | 255 | 12 | 1031 | 318 | 38 | 1188 | 37 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 40 | 221 | 27 | 43 | 190 | 255 | 12 | 1031 | 318 | 38 | 1188 | 37 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 6 | 13 | 0 | 0 | 20 | 0 | 0 | 19 | 9 | 0 | 12 | 0 |
| Initial Fut: | 46 | 234 | 27 | 43 | 210 | 255 | 12 | 1050 | 327 | 38 | 1200 | 37 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 46 | 234 | 27 | 43 | 210 | 255 | 12 | 1050 | 327 | 38 | 1200 | 37 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 46 | 234 | 27 | 43 | 210 | 255 | 12 | 1050 | 327 | 38 | 1200 | 37 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 46 | 234 | 27 | 43 | 210 | 255 | 12 | 1050 | 327 | 38 | 1200 | 37 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.97 | 0.97 | 0.93 | 0.90 | 0.90 | 0.91 | 0.88 | 0.88 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.90 | 0.10 | 1.00 | 0.45 | 0.55 | 1.00 | 1.53 | 0.47 | 1.00 | 1.94 | 0.06 |
| Final Sat.: | 1769 | 1644 | 190 | 1769 | 772 | 937 | 1736 | 2553 | 795 | 1736 | 3355 | 103 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.14 | 0.14 | 0.02 | 0.27 | 0.27 | 0.01 | 0.41 | 0.41 | 0.02 | 0.36 | 0.36 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Green/Cycle: | 0.15 | 0.15 | 0.15 | 0.28 | 0.28 | 0.28 | 0.01 | 0.43 | 0.43 | 0.02 | 0.44 | 0.44 |
| Volume/Cap: | 0.18 | 0.96 | 0.96 | 0.09 | 0.96 | 0.96 | 0.81 | 0.96 | 0.96 | 0.96 | 0.81 | 0.81 |
| Delay/Veh: | 37.6 | 86.7 | 86.7 | 26.5 | 66.9 | 66.9 | 187.7 | 43.7 | 43.7 | 177.2 | 27.7 | 27.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.6 | 86.7 | 86.7 | 26.5 | 66.9 | 66.9 | 187.7 | 43.7 | 43.7 | 177.2 | 27.7 | 27.7 |
| DesignQueue: | 2 | 11 | 1 | 2 | 9 | 11 | 1 | 37 | 12 | 2 | 41 | 1 |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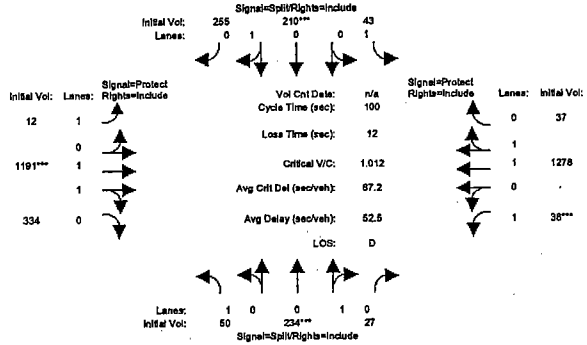
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

## Intersection #13: Mission/Laurel [N/S: Laurel E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 40 | 221 | 27 | 43 | 190 | 255 | 12 | 1031 | 318 | 38 | 1188 | 37 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 40 | 221 | 27 | 43 | 190 | 255 | 12 | 1031 | 318 | 38 | 1188 | 37 |
| Added Vol: | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 141 | 7 | 0 | 78 | 0 |
| Campus Incr: | 6 | 13 | 0 | 0 | 20 | 0 | 0 | 19 | 9 | 0 | 12 | 0 |
| Initial Fut: | 50 | 234 | 27 | 43 | 210 | 255 | 12 | 1191 | 334 | 38 | 1278 | 37 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 50 | 234 | 27 | 43 | 210 | 255 | 12 | 1191 | 334 | 38 | 1278 | 37 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 50 | 234 | 27 | 43 | 210 | 255 | 12 | 1191 | 334 | 38 | 1278 | 37 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 50 | 234 | 27 | 43 | 210 | 255 | 12 | 1191 | 334 | 38 | 1278 | 37 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.97 | 0.97 | 0.93 | 0.90 | 0.90 | 0.91 | 0.88 | 0.88 | 0.91 | 0.91 | 0.91 |
| Lanes: | 1.00 | 0.90 | 0.10 | 1.00 | 0.45 | 0.55 | 1.00 | 1.56 | 0.44 | 1.00 | 1.94 | 0.06 |
| Final Sat.: | 1769 | 1644 | 190 | 1769 | 772 | 937 | 1736 | 2623 | 736 | 1736 | 3362 | 97 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.14 | 0.14 | 0.02 | 0.27 | 0.27 | 0.01 | 0.45 | 0.45 | 0.02 | 0.38 | 0.38 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Green/Cycle: | 0.14 | 0.14 | 0.14 | 0.27 | 0.27 | 0.27 | 0.01 | 0.45 | 0.45 | 0.02 | 0.46 | 0.46 |
| Volume/Cap: | 0.20 | 1.01 | 1.01 | 0.09 | 1.01 | 1.01 | 0.82 | 1.01 | 1.01 | 1.01 | 0.82 | 0.82 |
| Delay/Veh: | 38.4 | 102 | 102.0 | 27.5 | 81.5 | 81.5 | 194.9 | 53.7 | 53.7 | 199.3 | 26.9 | 26.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 38.4 | 102 | 102.0 | 27.5 | 81.5 | 81.5 | 194.9 | 53.7 | 53.7 | 199.3 | 26.9 | 26.9 |
| DesignQueue: | 2 | 12 | 1 | 2 | 9 | 11 | 1 | 41 | 11 | 2 | 42 | 1 |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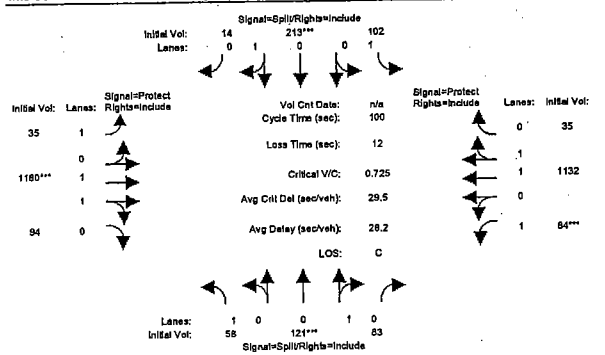
November 2003

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 47 | 92 | 67 | 82 | 170 | 11 | 28 | 947 | 76 | 68 | 896 | 28 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 58 | 114 | 83 | 102 | 211 | 14 | 35 | 1174 | 94 | 84 | 1111 | 35 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 7 | 0 | 0 | 2 | 0 | 0 | 6 | 0 | 0 | 21 | 0 |
| Initial Fut: | 58 | 121 | 83 | 102 | 213 | 14 | 35 | 1180 | 94 | 84 | 1132 | 35 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 58 | 121 | 83 | 102 | 213 | 14 | 35 | 1180 | 94 | 84 | 1132 | 35 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 58 | 121 | 83 | 102 | 213 | 14 | 35 | 1180 | 94 | 84 | 1132 | 35 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 58 | 121 | 83 | 102 | 213 | 14 | 35 | 1180 | 94 | 84 | 1132 | 35 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.94 | 0.94 | 0.95 | 0.99 | 0.99 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.59 | 0.41 | 1.00 | 0.94 | 0.06 | 1.00 | 1.85 | 0.15 | 1.00 | 1.94 | 0.06 |
| Final Sat.: | 1805 | 1058 | 726 | 1805 | 1769 | 113 | 1805 | 3306 | 264 | 1805 | 3489 | 107 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.11 | 0.11 | 0.06 | 0.12 | 0.12 | 0.02 | 0.36 | 0.36 | 0.05 | 0.32 | 0.32 |
| Crit Moves: | | **** | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.03 | 0.49 | 0.49 | 0.06 | 0.53 | 0.53 |
| Volume/Cap: | 0.20 | 0.73 | 0.73 | 0.34 | 0.73 | 0.73 | 0.62 | 0.73 | 0.73 | 0.73 | 0.62 | 0.62 |
| Delay/Veh: | 37.0 | 49.1 | 49.1 | 37.6 | 47.8 | 47.8 | 66.9 | 21.6 | 21.6 | 66.2 | 17.3 | 17.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.0 | 49.1 | 49.1 | 37.6 | 47.8 | 47.8 | 66.9 | 21.6 | 21.6 | 66.2 | 17.3 | 17.3 |
| DesignQueue: | 3 | 6 | 4 | 5 | 10 | 1 | 2 | 37 | 3 | 4 | 32 | 1 |



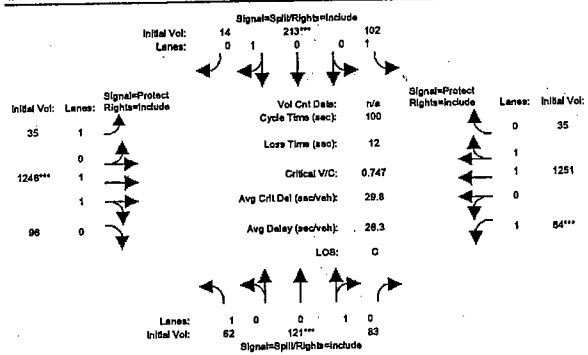


Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 47 | 92 | 67 | 82 | 170 | 11 | 28 | 947 | 76 | 68 | 896 | 28 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 58 | 114 | 83 | 102 | 211 | 14 | 35 | 1174 | 94 | 84 | 1111 | 35 |
| Added Vol: | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 2 | 0 | 119 | 0 |
| Campus Incr: | 0 | 7 | 0 | 0 | 2 | 0 | 0 | 6 | 0 | 0 | 21 | 0 |
| Initial Fut: | 62 | 121 | 83 | 102 | 213 | 14 | 35 | 1246 | 96 | 84 | 1251 | 35 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 62 | 121 | 83 | 102 | 213 | 14 | 35 | 1246 | 96 | 84 | 1251 | 35 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 62 | 121 | 83 | 102 | 213 | 14 | 35 | 1246 | 96 | 84 | 1251 | 35 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 62 | 121 | 83 | 102 | 213 | 14 | 35 | 1246 | 96 | 84 | 1251 | 35 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.94 | 0.94 | 0.95 | 0.99 | 0.99 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.59 | 0.41 | 1.00 | 0.94 | 0.06 | 1.00 | 1.86 | 0.14 | 1.00 | 1.95 | 0.05 |
| Final Sat.: | 1805 | 1058 | 726 | 1805 | 1769 | 113 | 1805 | 3314 | 256 | 1805 | 3498 | 97 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.11 | 0.11 | 0.06 | 0.12 | 0.12 | 0.02 | 0.38 | 0.38 | 0.05 | 0.36 | 0.36 |
| Crit Moves: | | **** | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.03 | 0.50 | 0.50 | 0.06 | 0.54 | 0.54 |
| Volume/Cap: | 0.23 | 0.75 | 0.75 | 0.35 | 0.75 | 0.75 | 0.67 | 0.75 | 0.75 | 0.75 | 0.67 | 0.67 |
| Delay/Veh: | 37.6 | 51.3 | 51.3 | 38.0 | 49.8 | 49.8 | 76.2 | 21.5 | 21.5 | 69.7 | 17.6 | 17.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.6 | 51.3 | 51.3 | 38.0 | 49.8 | 49.8 | 76.2 | 21.5 | 21.5 | 69.7 | 17.6 | 17.6 |
| DesignQueue: | 3 | 6 | 4 | 5 | 10 | 1 | 2 | 38 | 3 | 4 | 35 | 1 |

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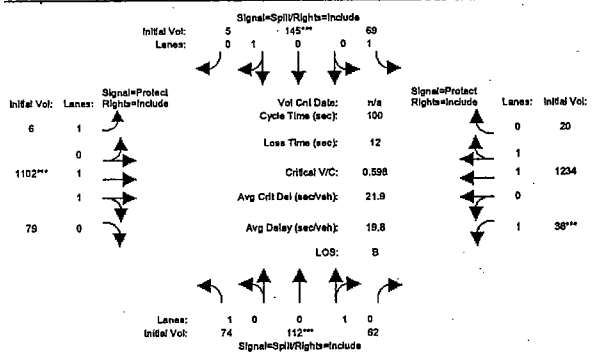
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

## Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 74 | 108 | 62 | 69 | 138 | 5 | 6 | 1083 | 79 | 36 | 1222 | 20 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 74 | 108 | 62 | 69 | 138 | 5 | 6 | 1083 | 79 | 36 | 1222 | 20 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 4 | 0 | 0 | 7 | 0 | 0 | 19 | 0 | 0 | 12 | 0 |
| Initial Fut: | 74 | 112 | 62 | 69 | 145 | 5 | 6 | 1102 | 79 | 36 | 1234 | 20 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 74 | 112 | 62 | 69 | 145 | 5 | 6 | 1102 | 79 | 36 | 1234 | 20 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 74 | 112 | 62 | 69 | 145 | 5 | 6 | 1102 | 79 | 36 | 1234 | 20 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 74 | 112 | 62 | 69 | 145 | 5 | 6 | 1102 | 79 | 36 | 1234 | 20 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.64 | 0.36 | 1.00 | 0.97 | 0.03 | 1.00 | 1.87 | 0.13 | 1.00 | 1.97 | 0.03 |
| Final Sat.: | 1805 | 1158 | 641 | 1805 | 1827 | 63 | 1805 | 3335 | 239 | 1805 | 3545 | 57 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.10 | 0.10 | 0.04 | 0.08 | 0.08 | 0.00 | 0.33 | 0.33 | 0.02 | 0.35 | 0.35 |
| Crit Moves: | | **** | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.16 | 0.16 | 0.16 | 0.13 | 0.13 | 0.13 | 0.01 | 0.55 | 0.55 | 0.03 | 0.58 | 0.58 |
| Volume/Cap: | 0.25 | 0.60 | 0.60 | 0.29 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 |
| Delay/Veh: | 37.1 | 42.3 | 42.3 | 39.8 | 44.8 | 44.8 | 122.6 | 15.5 | 15.5 | 63.1 | 14.0 | 14.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.1 | 42.3 | 42.3 | 39.8 | 44.8 | 44.8 | 122.6 | 15.5 | 15.5 | 63.1 | 14.0 | 14.0 |
| DesignQueue: | 3 | 5 | 3 | 3 | 7 | 0 | 0 | 30 | 2 | 2 | 32 | 1 |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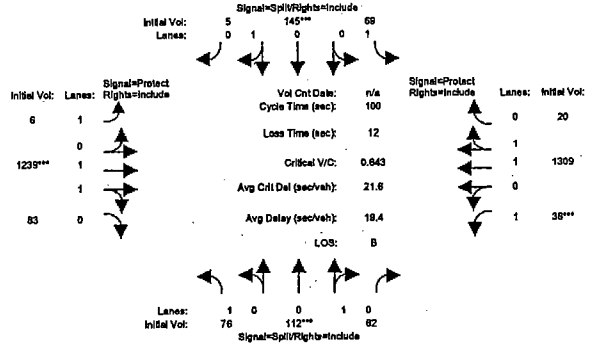
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

## Intersection #14: Mission/Walnut [N/S: Walnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 74 | 108 | 62 | 69 | 138 | 5 | 6 | 1083 | 79 | 36 | 1222 | 20 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 74 | 108 | 62 | 69 | 138 | 5 | 6 | 1083 | 79 | 36 | 1222 | 20 |
| Added Vol: | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 4 | 0 | 75 | 0 |
| Campus Incr: | 0 | 4 | 0 | 0 | 7 | 0 | 0 | 19 | 0 | 0 | 12 | 0 |
| Initial Fut: | 76 | 112 | 62 | 69 | 145 | 5 | 6 | 1239 | 83 | 36 | 1309 | 20 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 76 | 112 | 62 | 69 | 145 | 5 | 6 | 1239 | 83 | 36 | 1309 | 20 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 76 | 112 | 62 | 69 | 145 | 5 | 6 | 1239 | 83 | 36 | 1309 | 20 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 76 | 112 | 62 | 69 | 145 | 5 | 6 | 1239 | 83 | 36 | 1309 | 20 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 0.95 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 |
| Lanes: | 1.00 | 0.64 | 0.36 | 1.00 | 0.97 | 0.03 | 1.00 | 1.87 | 0.13 | 1.00 | 1.97 | 0.03 |
| Final Sat.: | 1805 | 1158 | 641 | 1805 | 1827 | 63 | 1805 | 3353 | 225 | 1805 | 3549 | 54 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.10 | 0.10 | 0.04 | 0.08 | 0.08 | 0.00 | 0.37 | 0.37 | 0.02 | 0.37 | 0.37 |
| Crit Moves: | | **** | | | **** | | | **** | | **** | | |
| Green/Cycle: | 0.15 | 0.15 | 0.15 | 0.12 | 0.12 | 0.12 | 0.01 | 0.58 | 0.58 | 0.03 | 0.60 | 0.60 |
| Volume/Cap: | 0.28 | 0.64 | 0.64 | 0.31 | 0.64 | 0.64 | 0.61 | 0.64 | 0.64 | 0.64 | 0.61 | 0.61 |
| Delay/Veh: | 38.2 | 45.1 | 45.1 | 40.7 | 47.7 | 47.7 | 130.3 | 15.0 | 15.0 | 70.6 | 13.2 | 13.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 38.2 | 45.1 | 45.1 | 40.7 | 47.7 | 47.7 | 130.3 | 15.0 | 15.0 | 70.6 | 13.2 | 13.2 |
| DesignQueue: | 4 | 5 | 3 | 3 | 7 | 0 | 0 | 32 | 2 | 2 | 32 | 0 |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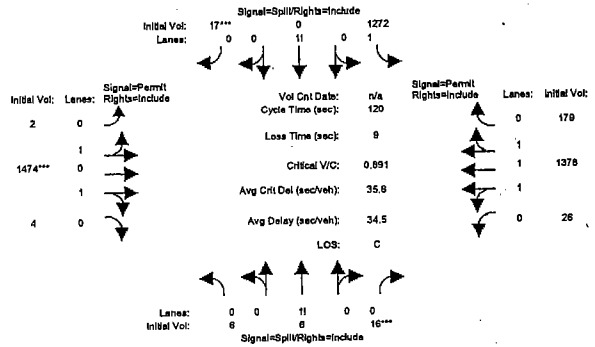
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

## Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 5 | 13 | 1000 | 0 | 14 | 2 | 1184 | 3 | 21 | 1094 | 131 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 6 | 6 | 16 | 1240 | 0 | 17 | 2 | 1468 | 4 | 26 | 1357 | 162 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 32 | 0 | 0 | 0 | 6 | 0 | 0 | 21 | 17 |
| Initial Fut: | 6 | 6 | 16 | 1272 | 0 | 17 | 2 | 1474 | 4 | 26 | 1378 | 179 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 6 | 6 | 16 | 1272 | 0 | 17 | 2 | 1474 | 4 | 26 | 1378 | 179 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 6 | 6 | 16 | 1272 | 0 | 17 | 2 | 1474 | 4 | 26 | 1378 | 179 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 6 | 6 | 16 | 1272 | 0 | 17 | 2 | 1474 | 4 | 26 | 1378 | 179 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.90 | 0.90 | 0.90 | 0.93 | 1.00 | 0.93 | 0.89 | 0.89 | 0.89 | 0.69 | 0.69 | 0.69 |
| Lanes: | 0.22 | 0.22 | 0.56 | 1.97 | 0.00 | 0.03 | 0.00 | 1.99 | 0.01 | 0.05 | 2.61 | 0.34 |
| Final Sat.: | 370 | 370 | 962 | 3495 | 0 | 47 | 6 | 3364 | 8 | 64 | 3405 | 443 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.02 | 0.02 | 0.36 | 0.00 | 0.37 | 0.44 | 0.44 | 0.44 | 0.40 | 0.40 | 0.40 |
| Crit Moves: | | | **** | | | **** | | **** | | | | |
| Green/Cycle: | 0.02 | 0.02 | 0.02 | 0.41 | 0.00 | 0.41 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |
| Volume/Cap: | 0.89 | 0.89 | 0.89 | 0.88 | 0.00 | 0.89 | 0.89 | 0.89 | 0.89 | 0.82 | 0.82 | 0.82 |
| Delay/Veh: | 172.7 | 173 | 172.7 | 38.8 | 0.0 | 39.9 | 34.0 | 34.0 | 34.0 | 29.0 | 29.0 | 29.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 172.7 | 173 | 172.7 | 38.8 | 0.0 | 39.9 | 34.0 | 34.0 | 34.0 | 29.0 | 29.0 | 29.0 |
| DesignQueue: | 0 | 0 | 1 | 55 | 0 | 1 | 0 | 56 | 0 | 1 | 50 | 7 |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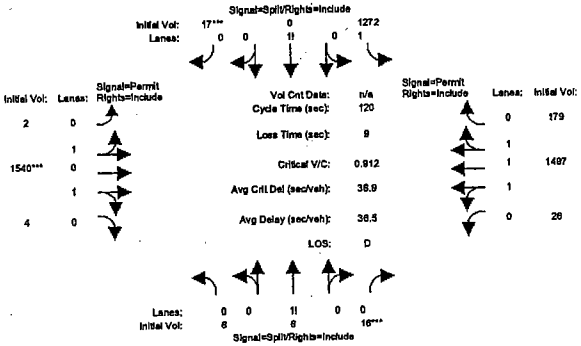
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

## Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 5 | 13 | 1000 | 0 | 14 | 2 | 1184 | 3 | 21 | 1094 | 131 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 6 | 6 | 16 | 1240 | 0 | 17 | 2 | 1468 | 4 | 26 | 1357 | 162 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 0 | 0 | 119 | 0 |
| Campus Incr: | 0 | 0 | 0 | 32 | 0 | 0 | 0 | 6 | 0 | 0 | 21 | 17 |
| Initial Fut: | 6 | 6 | 16 | 1272 | 0 | 17 | 2 | 1540 | 4 | 26 | 1497 | 179 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 6 | 6 | 16 | 1272 | 0 | 17 | 2 | 1540 | 4 | 26 | 1497 | 179 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 6 | 6 | 16 | 1272 | 0 | 17 | 2 | 1540 | 4 | 26 | 1497 | 179 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 6 | 6 | 16 | 1272 | 0 | 17 | 2 | 1540 | 4 | 26 | 1497 | 179 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.90 | 0.90 | 0.90 | 0.93 | 1.00 | 0.93 | 0.89 | 0.89 | 0.89 | 0.68 | 0.68 | 0.68 |
| Lanes: | 0.22 | 0.22 | 0.56 | 1.97 | 0.00 | 0.03 | 0.00 | 1.99 | 0.01 | 0.04 | 2.64 | 0.32 |
| Final Sat.: | 370 | 370 | 962 | 3495 | 0 | 47 | 5 | 3365 | 8 | 59 | 3404 | 408 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.02 | 0.02 | 0.36 | 0.00 | 0.37 | 0.46 | 0.46 | 0.46 | 0.44 | 0.44 | 0.44 |
| Crit Moves: | | | **** | | | **** | | **** | | | | |
| Green/Cycle: | 0.02 | 0.02 | 0.02 | 0.40 | 0.00 | 0.40 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Volume/Cap: | 0.91 | 0.91 | 0.91 | 0.90 | 0.00 | 0.91 | 0.91 | 0.91 | 0.91 | 0.88 | 0.88 | 0.88 |
| Delay/Veh: | 182.7 | 183 | 182.7 | 41.4 | 0.0 | 42.9 | 35.3 | 35.3 | 35.3 | 31.4 | 31.4 | 31.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 182.7 | 183 | 182.7 | 41.4 | 0.0 | 42.9 | 35.3 | 35.3 | 35.3 | 31.4 | 31.4 | 31.4 |
| DesignQueue: | 0 | 0 | 1 | 55 | 0 | 1 | 0 | 57 | 0 | 1 | 54 | 6 |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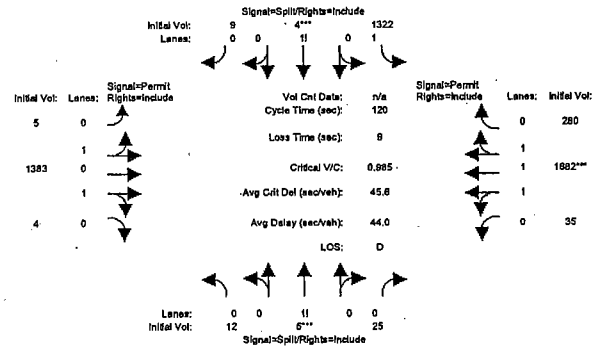
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

## Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 10 | 4 | 20 | 982 | 3 | 7 | 4 | 1100 | 3 | 28 | 1347 | 218 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 12 | 5 | 25 | 1218 | 4 | 9 | 5 | 1364 | 4 | 35 | 1670 | 270 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 104 | 0 | 0 | 0 | 19 | 0 | 0 | 12 | 10 |
| Initial Fut: | 12 | 5 | 25 | 1322 | 4 | 9 | 5 | 1383 | 4 | 35 | 1682 | 280 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 12 | 5 | 25 | 1322 | 4 | 9 | 5 | 1383 | 4 | 35 | 1682 | 280 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 12 | 5 | 25 | 1322 | 4 | 9 | 5 | 1383 | 4 | 35 | 1682 | 280 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 12 | 5 | 25 | 1322 | 4 | 9 | 5 | 1383 | 4 | 35 | 1682 | 280 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.89 | 0.89 | 0.89 | 0.93 | 0.93 | 0.93 | 0.88 | 0.88 | 0.88 | 0.69 | 0.69 | 0.69 |
| Lanes: | 0.29 | 0.12 | 0.59 | 1.98 | 0.01 | 0.01 | 0.01 | 1.98 | 0.01 | 0.05 | 2.53 | 0.42 |
| Final Sat.: | 497 | 199 | 995 | 3513 | 10 | 23 | 12 | 3315 | 9 | 69 | 3324 | 554 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.02 | 0.02 | 0.38 | 0.38 | 0.38 | 0.42 | 0.42 | 0.42 | 0.51 | 0.51 | 0.51 |
| Crit Moves: | | **** | | | **** | | | | | | **** | |
| Green/Cycle: | 0.03 | 0.03 | 0.03 | 0.39 | 0.39 | 0.39 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 |
| Volume/Cap: | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.81 | 0.81 | 0.81 | 0.98 | 0.98 | 0.98 |
| Delay/Veh: | 189.9 | 190 | 189.9 | 55.0 | 57.3 | 57.3 | 27.4 | 27.4 | 27.4 | 45.1 | 45.1 | 45.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 189.9 | 190 | 189.9 | 55.0 | 57.3 | 57.3 | 27.4 | 27.4 | 27.4 | 45.1 | 45.1 | 45.1 |
| DesignQueue: | 1 | 0 | 2 | 60 | 0 | 0 | 0 | 50 | 0 | 1 | 60 | 10 |





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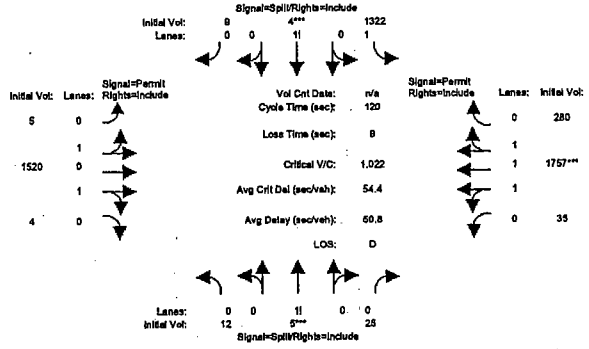
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

## Intersection #15: Mission/Union [N/S: Union E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 10 | 4 | 20 | 982 | 3 | 7 | 4 | 1100 | 3 | 28 | 1347 | 218 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 12 | 5 | 25 | 1218 | 4 | 9 | 5 | 1364 | 4 | 35 | 1670 | 270 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 0 | 0 | 75 | 0 |
| Campus Incr: | 0 | 0 | 0 | 104 | 0 | 0 | 0 | 19 | 0 | 0 | 12 | 10 |
| Initial Fut: | 12 | 5 | 25 | 1322 | 4 | 9 | 5 | 1520 | 4 | 35 | 1757 | 280 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 12 | 5 | 25 | 1322 | 4 | 9 | 5 | 1520 | 4 | 35 | 1757 | 280 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 12 | 5 | 25 | 1322 | 4 | 9 | 5 | 1520 | 4 | 35 | 1757 | 280 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 12 | 5 | 25 | 1322 | 4 | 9 | 5 | 1520 | 4 | 35 | 1757 | 280 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.89 | 0.89 | 0.89 | 0.93 | 0.93 | 0.93 | 0.88 | 0.88 | 0.88 | 0.67 | 0.67 | 0.67 |
| Lanes: | 0.29 | 0.12 | 0.59 | 1.98 | 0.01 | 0.01 | 0.01 | 1.98 | 0.01 | 0.05 | 2.54 | 0.41 |
| Final Sat.: | 497 | 199 | 995 | 3513 | 10 | 23 | 11 | 3314 | 8 | 64 | 3253 | 519 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.02 | 0.02 | 0.38 | 0.38 | 0.38 | 0.46 | 0.46 | 0.46 | 0.54 | 0.54 | 0.54 |
| Crit Moves: | | **** | | | **** | | | | | | **** | |
| Green/Cycle: | 0.02 | 0.02 | 0.02 | 0.37 | 0.37 | 0.37 | 0.53 | 0.53 | 0.53 | 0.53 | 0.53 | 0.53 |
| Volume/Cap: | 1.02 | 1.02 | 1.02 | 1.01 | 1.02 | 1.02 | 0.87 | 0.87 | 0.87 | 1.02 | 1.02 | 1.02 |
| Delay/Veh: | 205.1 | 205 | 205.1 | 65.5 | 68.2 | 68.2 | 29.5 | 29.5 | 29.5 | 53.9 | 53.9 | 53.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 205.1 | 205 | 205.1 | 65.5 | 68.2 | 68.2 | 29.5 | 29.5 | 29.5 | 53.9 | 53.9 | 53.9 |
| DesignQueue: | 1 | 0 | 2 | 61 | 0 | 0 | 0 | 53 | 0 | 1 | 61 | 10 |

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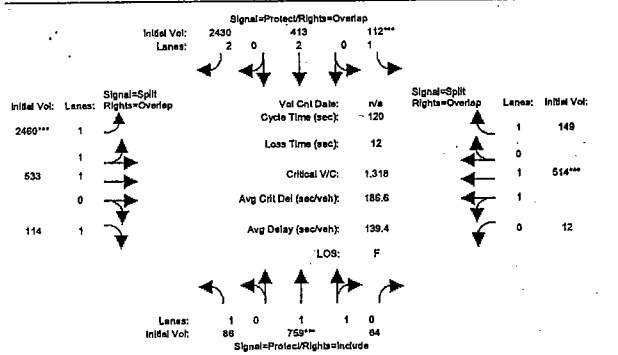
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 69 | 612 | 52 | 90 | 333 | 1866 | 1957 | 426 | 92 | 10 | 401 | 120 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 86 | 759 | 64 | 112 | 413 | 2314 | 2427 | 528 | 114 | 12 | 497 | 149 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 116 | 33 | 5 | 0 | 0 | 17 | 0 |
| Initial Fut: | 86 | 759 | 64 | 112 | 413 | 2430 | 2460 | 533 | 114 | 12 | 514 | 149 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 86 | 759 | 64 | 112 | 413 | 2430 | 2460 | 533 | 114 | 12 | 514 | 149 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 86 | 759 | 64 | 112 | 413 | 2430 | 2460 | 533 | 114 | 12 | 514 | 149 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 86 | 759 | 64 | 112 | 413 | 2430 | 2460 | 533 | 114 | 12 | 514 | 149 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.84 | 0.16 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.05 | 1.95 | 1.00 |
| Final Sat.: | 1769 | 3222 | 274 | 1736 | 3473 | 2734 | 3337 | 1669 | 1554 | 83 | 3451 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.24 | 0.24 | 0.06 | 0.12 | 0.89 | 0.74 | 0.32 | 0.07 | 0.15 | 0.15 | 0.09 |
| Crit Moves: | | **** | | **** | | | **** | | | | **** | |
| Green/Cycle: | 0.06 | 0.18 | 0.18 | 0.05 | 0.17 | 0.73 | 0.56 | 0.56 | 0.61 | 0.11 | 0.11 | 0.16 |
| Volume/Cap: | 0.88 | 1.32 | 1.32 | 1.32 | 0.69 | 1.21 | 1.32 | 0.57 | 0.12 | 1.32 | 1.32 | 0.58 |
| Delay/Veh: | 110.5 | 203 | 203.3 | 261.6 | 50.0 | 117.3 | 172.6 | 17.3 | 9.7 | 212.9 | 213 | 49.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 110.5 | 203 | 203.3 | 261.6 | 50.0 | 117.3 | 172.6 | 17.3 | 9.7 | 212.9 | 213 | 49.9 |
| DesignQueue: | 5 | 44 | 4 | 7 | 23 | 52 | 87 | 17 | 3 | 1 | 32 | 8 |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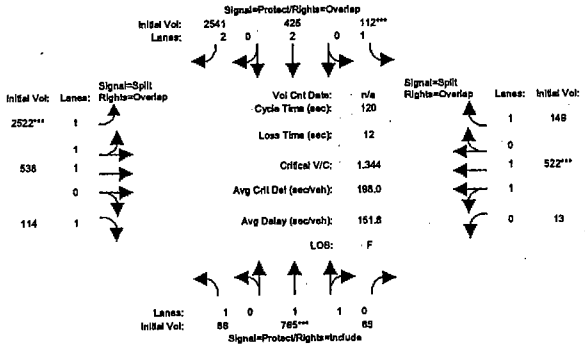
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 69 | 612 | 52 | 90 | 333 | 1866 | 1957 | 426 | 92 | 10 | 401 | 120 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 86 | 759 | 64 | 112 | 413 | 2314 | 2427 | 528 | 114 | 12 | 497 | 149 |
| Added Vol: | 0 | 6 | 1 | 0 | 12 | 111 | 62 | 5 | 0 | 1 | 8 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 116 | 33 | 5 | 0 | 0 | 17 | 0 |
| Initial Fut: | 86 | 765 | 65 | 112 | 425 | 2541 | 2522 | 538 | 114 | 13 | 522 | 149 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 86 | 765 | 65 | 112 | 425 | 2541 | 2522 | 538 | 114 | 13 | 522 | 149 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 86 | 765 | 65 | 112 | 425 | 2541 | 2522 | 538 | 114 | 13 | 522 | 149 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 86 | 765 | 65 | 112 | 425 | 2541 | 2522 | 538 | 114 | 13 | 522 | 149 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.84 | 0.16 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.05 | 1.95 | 1.00 |
| Final Sat.: | 1769 | 3220 | 276 | 1736 | 3473 | 2734 | 3334 | 1667 | 1554 | 88 | 3446 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.24 | 0.24 | 0.06 | 0.12 | 0.93 | 0.76 | 0.32 | 0.07 | 0.15 | 0.15 | 0.09 |
| Crit Moves: | | **** | | **** | | | **** | | | | **** | |
| Green/Cycle: | 0.05 | 0.18 | 0.18 | 0.05 | 0.18 | 0.74 | 0.56 | 0.56 | 0.61 | 0.11 | 0.11 | 0.16 |
| Volume/Cap: | 0.99 | 1.34 | 1.34 | 1.34 | 0.70 | 1.26 | 1.34 | 0.57 | 0.12 | 1.34 | 1.34 | 0.59 |
| Delay/Veh: | 148.4 | 215 | 214.9 | 272.8 | 50.0 | 136.4 | 184.1 | 17.1 | 9.8 | 224.1 | 224 | 50.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 148.4 | 215 | 214.9 | 272.8 | 50.0 | 136.4 | 184.1 | 17.1 | 9.8 | 224.1 | 224 | 50.2 |
| DesignQueue: | 5 | 45 | 4 | 7 | 24 | 54 | 89 | 17 | 3 | 1 | 32 | 9 |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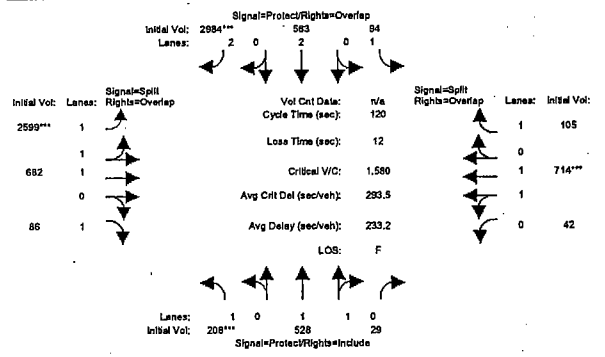
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 166 | 426 | 23 | 76 | 454 | 2352 | 2010 | 537 | 69 | 34 | 568 | 85 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 206 | 528 | 29 | 94 | 563 | 2916 | 2492 | 666 | 86 | 42 | 704 | 105 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 68 | 107 | 16 | 0 | 0 | 10 | 0 |
| Initial Fut: | 206 | 528 | 29 | 94 | 563 | 2984 | 2599 | 682 | 86 | 42 | 714 | 105 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 206 | 528 | 29 | 94 | 563 | 2984 | 2599 | 682 | 86 | 42 | 714 | 105 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 206 | 528 | 29 | 94 | 563 | 2984 | 2599 | 682 | 86 | 42 | 714 | 105 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 206 | 528 | 29 | 94 | 563 | 2984 | 2599 | 682 | 86 | 42 | 714 | 105 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.90 | 0.10 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.11 | 1.89 | 1.00 |
| Final Sat.: | 1769 | 3330 | 180 | 1736 | 3473 | 2734 | 3341 | 1670 | 1554 | 197 | 3331 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.12 | 0.16 | 0.16 | 0.05 | 0.16 | 1.09 | 0.78 | 0.41 | 0.06 | 0.21 | 0.21 | 0.07 |
| Crit Moves: | **** | | | | | **** | **** | | | | **** | |
| Green/Cycle: | 0.07 | 0.20 | 0.20 | 0.07 | 0.20 | 0.69 | 0.49 | 0.49 | 0.57 | 0.14 | 0.14 | 0.21 |
| Volume/Cap: | 1.58 | 0.78 | 0.78 | 0.78 | 0.82 | 1.58 | 1.58 | 0.83 | 0.10 | 1.58 | 1.58 | 0.32 |
| Delay/Veh: | 350.1 | 51.0 | 51.0 | 82.5 | 53.6 | 282.3 | 293.9 | 27.7 | 12.0 | 322.9 | 323 | 41.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 350.1 | 51.0 | 51.0 | 82.5 | 53.6 | 282.3 | 293.9 | 27.7 | 12.0 | 322.9 | 323 | 41.2 |
| DesignQueue: | 13 | 29 | 2 | 6 | 31 | 78 | 107 | 25 | 3 | 3 | 43 | 6 |





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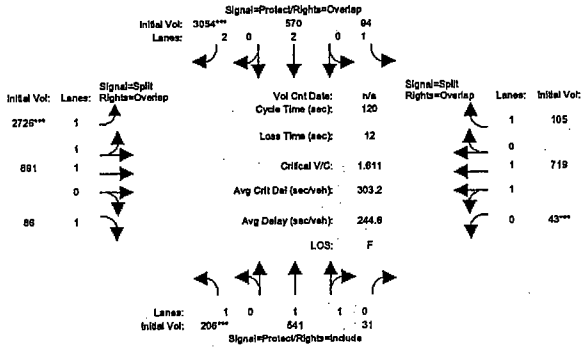
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

Intersection #16: Mission/Chestnut [N/S: Chestnut E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 166 | 426 | 23 | 76 | 454 | 2352 | 2010 | 537 | 69 | 34 | 568 | 85 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 206 | 528 | 29 | 94 | 563 | 2916 | 2492 | 666 | 86 | 42 | 704 | 105 |
| Added Vol: | 0 | 13 | 2 | 0 | 7 | 70 | 127 | 9 | 0 | 1 | 5 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 68 | 107 | 16 | 0 | 0 | 10 | 0 |
| Initial Fut: | 206 | 541 | 31 | 94 | 570 | 3054 | 2726 | 691 | 86 | 43 | 719 | 105 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 206 | 541 | 31 | 94 | 570 | 3054 | 2726 | 691 | 86 | 43 | 719 | 105 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 206 | 541 | 31 | 94 | 570 | 3054 | 2726 | 691 | 86 | 43 | 719 | 105 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 206 | 541 | 31 | 94 | 570 | 3054 | 2726 | 691 | 86 | 43 | 719 | 105 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.72 | 0.88 | 0.88 | 0.82 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 1.89 | 0.11 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 0.11 | 1.89 | 1.00 |
| Final Sat.: | 1769 | 3322 | 187 | 1736 | 3473 | 2734 | 3341 | 1670 | 1554 | 200 | 3328 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.12 | 0.16 | 0.16 | 0.05 | 0.16 | 1.12 | 0.82 | 0.41 | 0.06 | 0.22 | 0.22 | 0.07 |
| Crit Moves: | **** | | | | | **** | **** | | | | **** | |
| Green/Cycle: | 0.07 | 0.19 | 0.19 | 0.06 | 0.19 | 0.69 | 0.51 | 0.51 | 0.58 | 0.13 | 0.13 | 0.20 |
| Volume/Cap: | 1.61 | 0.84 | 0.84 | 0.84 | 0.88 | 1.61 | 1.61 | 0.82 | 0.10 | 1.61 | 1.61 | 0.33 |
| Delay/Veh: | 363.6 | 55.5 | 55.5 | 95.3 | 60.5 | 295.7 | 306.6 | 26.2 | 11.3 | 336.4 | 336 | 41.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 363.6 | 55.5 | 55.5 | 95.3 | 60.5 | 295.7 | 306.6 | 26.2 | 11.3 | 336.4 | 336 | 41.9 |
| DesignQueue: | 13 | 30 | 2 | 6 | 32 | 79 | 111 | 25 | 2 | 3 | 44 | 6 |

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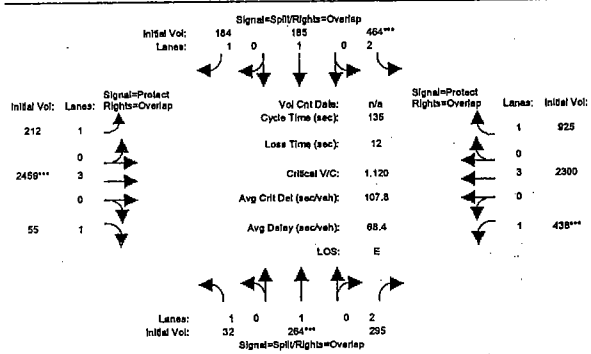
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 26 | 213 | 238 | 374 | 149 | 144 | 170 | 1957 | 44 | 353 | 1765 | 746 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 32 | 264 | 295 | 464 | 185 | 179 | 211 | 2427 | 55 | 438 | 2189 | 925 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 32 | 0 | 0 | 111 | 0 |
| Initial Fut: | 32 | 264 | 295 | 464 | 185 | 184 | 212 | 2459 | 55 | 438 | 2300 | 925 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 32 | 264 | 295 | 464 | 185 | 184 | 212 | 2459 | 55 | 438 | 2300 | 925 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 32 | 264 | 295 | 464 | 185 | 184 | 212 | 2459 | 55 | 438 | 2300 | 925 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 32 | 264 | 295 | 464 | 185 | 184 | 212 | 2459 | 55 | 438 | 2300 | 925 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.14 | 0.11 | 0.14 | 0.10 | 0.12 | 0.12 | 0.48 | 0.03 | 0.25 | 0.45 | 0.58 |
| Crit Moves: | | **** | | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.13 | 0.13 | 0.35 | 0.12 | 0.12 | 0.23 | 0.11 | 0.43 | 0.56 | 0.22 | 0.54 | 0.66 |
| Volume/Cap: | 0.14 | 1.12 | 0.30 | 1.12 | 0.82 | 0.50 | 1.08 | 1.12 | 0.06 | 1.12 | 0.84 | 0.88 |
| Delay/Veh: | 46.9 | 147 | 28.7 | 133.8 | 72.5 | 41.2 | 140.1 | 94.9 | 12.1 | 129.0 | 25.4 | 25.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 46.9 | 147 | 28.7 | 133.8 | 72.5 | 41.2 | 140.1 | 94.9 | 12.1 | 129.0 | 25.4 | 25.4 |
| DesignQueue: | 2 | 16 | 13 | 28 | 11 | 10 | 13 | 105 | 2 | 24 | 79 | 24 |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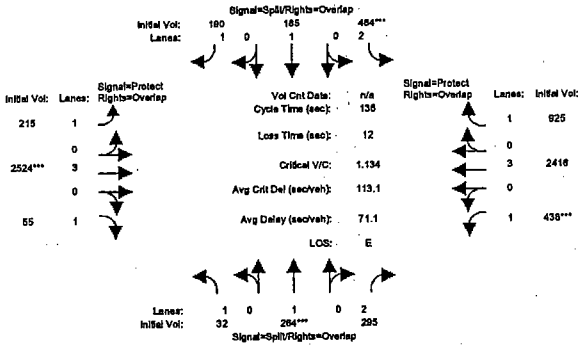
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 26 | 213 | 238 | 374 | 149 | 144 | 170 | 1957 | 44 | 353 | 1765 | 746 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 32 | 264 | 295 | 464 | 185 | 179 | 211 | 2427 | 55 | 438 | 2189 | 925 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 65 | 0 | 0 | 116 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 32 | 0 | 0 | 111 | 0 |
| Initial Fut: | 32 | 264 | 295 | 464 | 185 | 190 | 215 | 2524 | 55 | 438 | 2416 | 925 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 32 | 264 | 295 | 464 | 185 | 190 | 215 | 2524 | 55 | 438 | 2416 | 925 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 32 | 264 | 295 | 464 | 185 | 190 | 215 | 2524 | 55 | 438 | 2416 | 925 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 32 | 264 | 295 | 464 | 185 | 190 | 215 | 2524 | 55 | 438 | 2416 | 925 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.14 | 0.11 | 0.14 | 0.10 | 0.12 | 0.12 | 0.50 | 0.03 | 0.25 | 0.48 | 0.58 |
| Crit Moves: | | **** | | **** | | | | **** | | **** | | |
| Green/Cycle: | 0.13 | 0.13 | 0.34 | 0.12 | 0.12 | 0.23 | 0.11 | 0.44 | 0.56 | 0.22 | 0.54 | 0.66 |
| Volume/Cap: | 0.15 | 1.13 | 0.31 | 1.13 | 0.83 | 0.52 | 1.08 | 1.13 | 0.06 | 1.13 | 0.88 | 0.88 |
| Delay/Veh: | 47.1 | 152 | 29.1 | 139.3 | 74.4 | 41.5 | 138.7 | 100 | 11.9 | 134.5 | 27.3 | 25.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 47.1 | 152 | 29.1 | 139.3 | 74.4 | 41.5 | 138.7 | 100 | 11.9 | 134.5 | 27.3 | 25.5 |
| DesignQueue: | 2 | 16 | 13 | 28 | 11 | 10 | 13 | 107 | 2 | 24 | 83 | 24 |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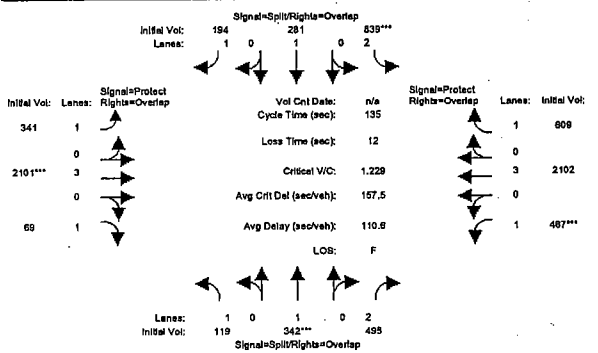
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

## Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 96 | 276 | 399 | 677 | 227 | 154 | 271 | 1611 | 56 | 377 | 1643 | 491 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 119 | 342 | 495 | 839 | 281 | 191 | 336 | 1998 | 69 | 467 | 2037 | 609 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 103 | 0 | 0 | 65 | 0 |
| Initial Fut: | 119 | 342 | 495 | 839 | 281 | 194 | 341 | 2101 | 69 | 467 | 2102 | 609 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 119 | 342 | 495 | 839 | 281 | 194 | 341 | 2101 | 69 | 467 | 2102 | 609 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 119 | 342 | 495 | 839 | 281 | 194 | 341 | 2101 | 69 | 467 | 2102 | 609 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 119 | 342 | 495 | 839 | 281 | 194 | 341 | 2101 | 69 | 467 | 2102 | 609 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.18 | 0.18 | 0.24 | 0.15 | 0.12 | 0.19 | 0.41 | 0.04 | 0.26 | 0.41 | 0.38 |
| Crit Moves: | | **** | | **** | | | | **** | | | **** | |
| Green/Cycle: | 0.15 | 0.15 | 0.36 | 0.20 | 0.20 | 0.37 | 0.18 | 0.34 | 0.49 | 0.22 | 0.38 | 0.58 |
| Volume/Cap: | 0.45 | 1.23 | 0.49 | 1.23 | 0.76 | 0.33 | 1.10 | 1.23 | 0.09 | 1.23 | 1.10 | 0.67 |
| Delay/Veh: | 47.7 | 181 | 29.8 | 163.6 | 54.2 | 27.1 | 130.0 | 148 | 16.6 | 171.2 | 91.0 | 19.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 47.7 | 181 | 29.8 | 163.6 | 54.2 | 27.1 | 130.0 | 148 | 16.6 | 171.2 | 91.0 | 19.5 |
| DesignQueue: | 7 | 20 | 22 | 48 | 16 | 8 | 20 | 103 | 2 | 26 | 97 | 19 |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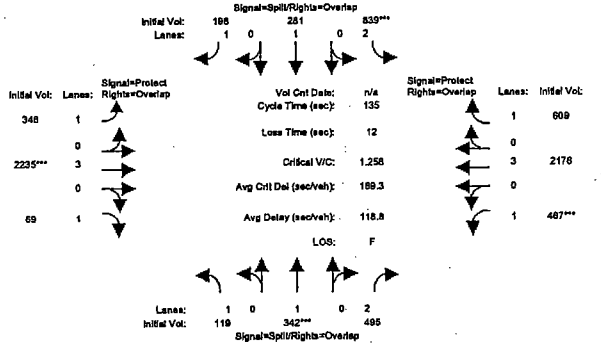
Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

## Intersection #17: Mission/River [N/S: River E/w: Mission]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 96 | 276 | 399 | 677 | 227 | 154 | 271 | 1611 | 56 | 377 | 1643 | 491 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 119 | 342 | 495 | 839 | 281 | 191 | 336 | 1998 | 69 | 467 | 2037 | 609 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 4 | 7 | 134 | 0 | 0 | 74 | 0 |
| Campus Incr: | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 103 | 0 | 0 | 65 | 0 |
| Initial Fut: | 119 | 342 | 495 | 839 | 281 | 198 | 348 | 2235 | 69 | 467 | 2176 | 609 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 119 | 342 | 495 | 839 | 281 | 198 | 348 | 2235 | 69 | 467 | 2176 | 609 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 119 | 342 | 495 | 839 | 281 | 198 | 348 | 2235 | 69 | 467 | 2176 | 609 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 119 | 342 | 495 | 839 | 281 | 198 | 348 | 2235 | 69 | 467 | 2176 | 609 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.98 | 0.73 | 0.90 | 0.98 | 0.83 | 0.93 | 0.89 | 0.83 | 0.93 | 0.89 | 0.83 |
| Lanes: | 1.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1769 | 1862 | 2786 | 3432 | 1862 | 1583 | 1769 | 5083 | 1583 | 1769 | 5083 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.18 | 0.18 | 0.24 | 0.15 | 0.13 | 0.20 | 0.44 | 0.04 | 0.26 | 0.43 | 0.38 |
| Crit Moves: | | **** | | **** | | | | **** | | | **** | |
| Green/Cycle: | 0.15 | 0.15 | 0.36 | 0.19 | 0.19 | 0.37 | 0.18 | 0.35 | 0.50 | 0.21 | 0.38 | 0.58 |
| Volume/Cap: | 0.46 | 1.26 | 0.50 | 1.26 | 0.78 | 0.34 | 1.12 | 1.26 | 0.09 | 1.26 | 1.12 | 0.67 |
| Delay/Veh: | 48.2 | 194 | 30.6 | 176.4 | 56.1 | 27.5 | 135.7 | 160 | 16.0 | 183.7 | 97.3 | 19.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 48.2 | 194 | 30.6 | 176.4 | 56.1 | 27.5 | 135.7 | 160 | 16.0 | 183.7 | 97.3 | 19.3 |
| DesignQueue: | 7 | 20 | 22 | 48 | 16 | 9 | 20 | 108 | 2 | 26 | 99 | 19 |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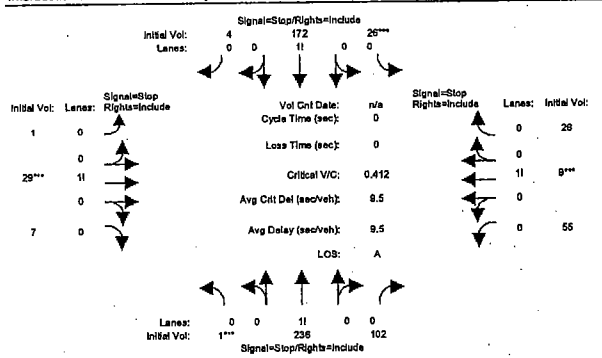
Marina Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Baseline AM

## Intersection #18: Western/Meder [N/S: Western E/w: Meder]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 1 | 177 | 82 | 21 | 135 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 1 | 219 | 102 | 26 | 167 | 4 | 1 | 29 | 7 | 55 | 9 | 26 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 17 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 236 | 102 | 26 | 172 | 4 | 1 | 29 | 7 | 55 | 9 | 26 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1 | 236 | 102 | 26 | 172 | 4 | 1 | 29 | 7 | 55 | 9 | 26 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1 | 236 | 102 | 26 | 172 | 4 | 1 | 29 | 7 | 55 | 9 | 26 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1 | 236 | 102 | 26 | 172 | 4 | 1 | 29 | 7 | 55 | 9 | 26 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.01 | 0.69 | 0.30 | 0.13 | 0.85 | 0.02 | 0.03 | 0.77 | 0.20 | 0.61 | 0.10 | 0.29 |
| Final Sat.: | 3 | 575 | 247 | 98 | 649 | 14 | 21 | 492 | 128 | 399 | 63 | 190 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.41 | 0.41 | 0.41 | 0.27 | 0.27 | 0.27 | 0.06 | 0.06 | 0.06 | 0.14 | 0.14 | 0.14 |
| Crit Moves: | **** | | | **** | | | | **** | | | **** | |
| Delay/Veh: | 10.1 | 10.1 | 10.1 | 9.2 | 9.2 | 9.2 | 8.3 | 8.3 | 8.3 | 8.8 | 8.8 | 8.8 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.1 | 10.1 | 10.1 | 9.2 | 9.2 | 9.2 | 8.3 | 8.3 | 8.3 | 8.8 | 8.8 | 8.8 |
| LOS by Move: | B | B | B | A | A | A | A | A | A | A | A | A |
| ApproachDel: | | 10.1 | | | 9.2 | | | 8.3 | | | 8.8 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.1 | | | 9.2 | | | 8.3 | | | 8.8 | |
| LOS by Appr: | | B | | | A | | | A | | | A | |





Marina Science Center

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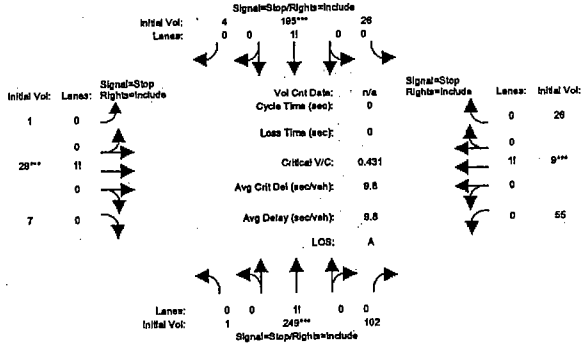
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

## Intersection #18: Western/Meder [N/S: Western E/w: Meder]



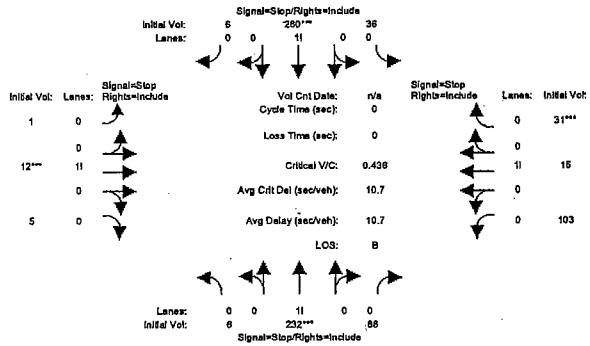

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 1 | 177 | 82 | 21 | 135 | 3 | 1 | 23 | 6 | 44 | 7 | 21 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 1 | 219 | 102 | 26 | 167 | 4 | 1 | 29 | 7 | 55 | 9 | 26 |
| Added Vol: | 0 | 13 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 17 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 249 | 102 | 26 | 195 | 4 | 1 | 29 | 7 | 55 | 9 | 26 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1 | 249 | 102 | 26 | 195 | 4 | 1 | 29 | 7 | 55 | 9 | 26 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1 | 249 | 102 | 26 | 195 | 4 | 1 | 29 | 7 | 55 | 9 | 26 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1 | 249 | 102 | 26 | 195 | 4 | 1 | 29 | 7 | 55 | 9 | 26 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.01 | 0.70 | 0.29 | 0.11 | 0.87 | 0.02 | 0.03 | 0.77 | 0.20 | 0.61 | 0.10 | 0.29 |
| Final Sat.: | 3 | 579 | 236 | 88 | 658 | 13 | 21 | 481 | 125 | 391 | 62 | 187 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.43 | 0.43 | 0.43 | 0.30 | 0.30 | 0.30 | 0.06 | 0.06 | 0.06 | 0.14 | 0.14 | 0.14 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Delay/Veh: | 10.4 | 10.4 | 10.4 | 9.4 | 9.4 | 9.4 | 8.4 | 8.4 | 8.4 | 8.9 | 8.9 | 8.9 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.4 | 10.4 | 10.4 | 9.4 | 9.4 | 9.4 | 8.4 | 8.4 | 8.4 | 8.9 | 8.9 | 8.9 |
| LOS by Move: | B | B | B | A | A | A | A | A | A | A | A | A |
| ApproachDel: | | 10.4 | | | 9.4 | | | 8.4 | | | 8.9 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.4 | | | 9.4 | | | 8.4 | | | 8.9 | |
| LOS by Appr: | | B | | | A | | | A | | | A | |

Marina Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Baseline PM

Intersection #18: Western/Meder [N/S: Western E/w: Meder]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 179 | 71 | 29 | 213 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 6 | 222 | 88 | 36 | 264 | 6 | 1 | 12 | 5 | 103 | 15 | 31 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 10 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 6 | 232 | 88 | 36 | 280 | 6 | 1 | 12 | 5 | 103 | 15 | 31 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 6 | 232 | 88 | 36 | 280 | 6 | 1 | 12 | 5 | 103 | 15 | 31 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 6 | 232 | 88 | 36 | 280 | 6 | 1 | 12 | 5 | 103 | 15 | 31 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 6 | 232 | 88 | 36 | 280 | 6 | 1 | 12 | 5 | 103 | 15 | 31 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.02 | 0.71 | 0.27 | 0.11 | 0.87 | 0.02 | 0.06 | 0.67 | 0.27 | 0.69 | 0.10 | 0.21 |
| Final Sat.: | 15 | 544 | 206 | 82 | 642 | 14 | 39 | 385 | 154 | 426 | 62 | 128 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.43 | 0.43 | 0.43 | 0.44 | 0.44 | 0.44 | 0.03 | 0.03 | 0.03 | 0.24 | 0.24 | 0.24 |
| Crit Moves: | | **** | | | **** | | | **** | | | | **** |
| Delay/Veh: | 10.8 | 10.8 | 10.8 | 11.2 | 11.2 | 11.2 | 8.6 | 8.6 | 8.6 | 9.9 | 9.9 | 9.9 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 10.8 | 10.8 | 10.8 | 11.2 | 11.2 | 11.2 | 8.6 | 8.6 | 8.6 | 9.9 | 9.9 | 9.9 |
| LOS by Move: | B | B | B | B | B | B | A | A | A | A | A | A |
| ApproachDel: | | 10.8 | | | 11.2 | | | 8.6 | | | 9.9 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 10.8 | | | 11.2 | | | 8.6 | | | 9.9 | |
| LOS by Appr: | | B | | | B | | | A | | | A | |



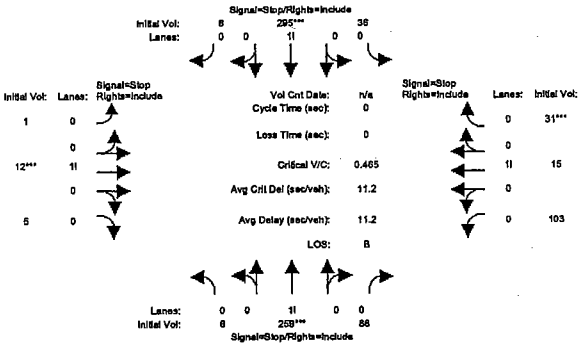


Marina Science Center

November 2003

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

Intersection #18: Western/Meder [N/S: Western E/w: Meder]



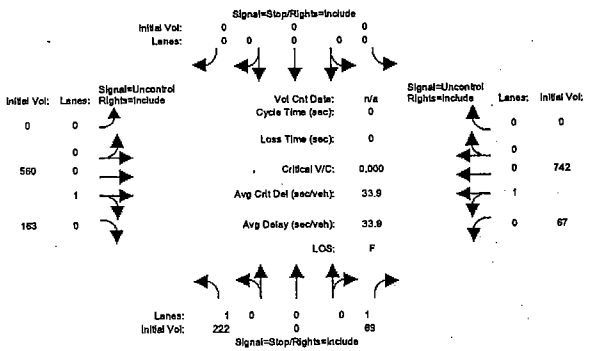

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 5 | 179 | 71 | 29 | 213 | 5 | 1 | 10 | 4 | 83 | 12 | 25 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 6 | 222 | 88 | 36 | 264 | 6 | 1 | 12 | 5 | 103 | 15 | 31 |
| Added Vol: | 0 | 27 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 10 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 6 | 259 | 88 | 36 | 295 | 6 | 1 | 12 | 5 | 103 | 15 | 31 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 6 | 259 | 88 | 36 | 295 | 6 | 1 | 12 | 5 | 103 | 15 | 31 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 6 | 259 | 88 | 36 | 295 | 6 | 1 | 12 | 5 | 103 | 15 | 31 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 6 | 259 | 88 | 36 | 295 | 6 | 1 | 12 | 5 | 103 | 15 | 31 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.02 | 0.73 | 0.25 | 0.11 | 0.87 | 0.02 | 0.06 | 0.67 | 0.27 | 0.69 | 0.10 | 0.21 |
| Final Sat.: | 13 | 557 | 189 | 78 | 642 | 13 | 37 | 374 | 150 | 417 | 60 | 126 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.47 | 0.47 | 0.47 | 0.46 | 0.46 | 0.46 | 0.03 | 0.03 | 0.03 | 0.25 | 0.25 | 0.25 |
| Crit Moves: | | **** | | | **** | | | **** | | | | **** |
| Delay/Veh: | 11.4 | 11.4 | 11.4 | 11.6 | 11.6 | 11.6 | 8.7 | 8.7 | 8.7 | 10.0 | 10.0 | 10.0 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 11.4 | 11.4 | 11.4 | 11.6 | 11.6 | 11.6 | 8.7 | 8.7 | 8.7 | 10.0 | 10.0 | 10.0 |
| LOS by Move: | B | B | B | B | B | B | A | A | A | B | B | B |
| ApproachDel: | | 11.4 | | | 11.6 | | | 8.7 | | | 10.0 | |
| Delay Adj: | | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | |
| ApprAdjDel: | | 11.4 | | | 11.6 | | | 8.7 | | | 10.0 | |
| LOS by Appr: | | B | | | B | | | A | | | B | |

Marine Science Center

November 2003

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline AM

## Intersection #19: High/Western [N/S: Western E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 169 | 0 | 52 | 0 | 0 | 0 | 0 | 432 | 128 | 53 | 546 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 210 | 0 | 64 | 0 | 0 | 0 | 0 | 536 | 159 | 66 | 677 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 12 | 0 | 5 | 0 | 0 | 0 | 0 | 24 | 4 | 1 | 65 | 0 |
| Initial Fut: | 222 | 0 | 69 | 0 | 0 | 0 | 0 | 560 | 163 | 67 | 742 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 222 | 0 | 69 | 0 | 0 | 0 | 0 | 560 | 163 | 67 | 742 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 222 | 0 | 69 | 0 | 0 | 0 | 0 | 560 | 163 | 67 | 742 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 4.1 | xxxx | xxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 2.2 | xxxx | xxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1517 | xxxx | 641 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 722 | xxxx | xxxx |
| Potent Cap.: | 133 | xxxx | 478 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 889 | xxxx | xxxx |
| Move Cap.: | 125 | xxxx | 478 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 889 | xxxx | xxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 439.6 | xxxx | 13.8 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 9.4 | xxxx | xxxx |
| LOS by Move: | F | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Shrd StpDel: | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 9.4 | xxxx | xxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 338.0 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | F | | | * | | | * | | | * | | |





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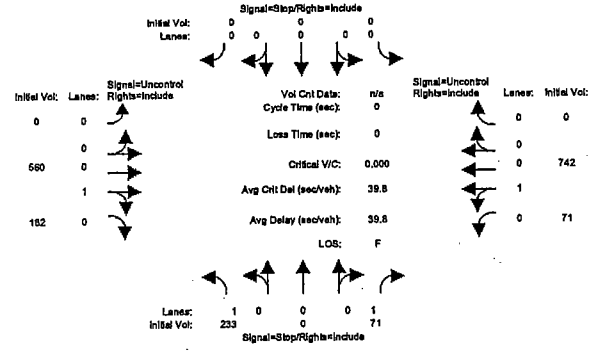
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

## Intersection #19: High/Western [N/S: Western E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 169 | 0 | 52 | 0 | 0 | 0 | 0 | 432 | 128 | 53 | 546 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 210 | 0 | 64 | 0 | 0 | 0 | 0 | 536 | 159 | 66 | 677 | 0 |
| Added Vol: | 11 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 19 | 4 | 0 | 0 |
| Campus Incr: | 12 | 0 | 5 | 0 | 0 | 0 | 0 | 24 | 4 | 1 | 65 | 0 |
| Initial Fut: | 233 | 0 | 71 | 0 | 0 | 0 | 0 | 560 | 182 | 71 | 742 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 233 | 0 | 71 | 0 | 0 | 0 | 0 | 560 | 182 | 71 | 742 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 233 | 0 | 71 | 0 | 0 | 0 | 0 | 560 | 182 | 71 | 742 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 4.1 | xxxx | xxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 2.2 | xxxx | xxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1534 | xxxx | 651 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 741 | xxxx | xxxx |
| Potent Cap.: | 129 | xxxx | 472 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 875 | xxxx | xxxx |
| Move Cap.: | 121 | xxxx | 472 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 875 | xxxx | xxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 503.4 | xxxx | 14.0 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 9.5 | xxxx | xxxx |
| LOS by Move: | F | * | B | * | * | * | * | * | * | A | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Shrd StpDel: | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 9.5 | xxxx | xxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | A | * | * |
| ApproachDel: | 388.4 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | F | | | * | | | * | | | * | | |

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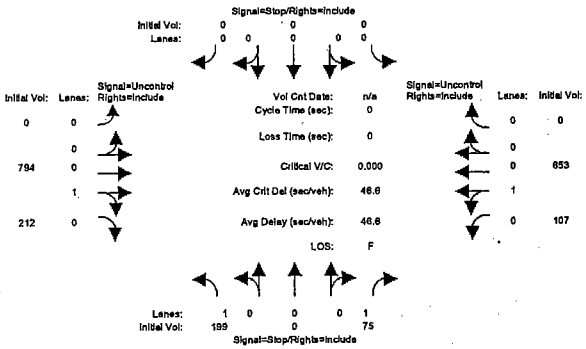
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline PM

## Intersection #19: High/Western [N/S: Western E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 155 | 0 | 58 | 0 | 0 | 0 | 0 | 590 | 162 | 82 | 492 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 192 | 0 | 72 | 0 | 0 | 0 | 0 | 732 | 201 | 102 | 610 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 7 | 0 | 3 | 0 | 0 | 0 | 0 | 62 | 11 | 5 | 43 | 0 |
| Initial Fut: | 199 | 0 | 75 | 0 | 0 | 0 | 0 | 794 | 212 | 107 | 653 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 199 | 0 | 75 | 0 | 0 | 0 | 0 | 794 | 212 | 107 | 653 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 199 | 0 | 75 | 0 | 0 | 0 | 0 | 794 | 212 | 107 | 653 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1766 | xxxx | 900 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1005 | xxxx | xxxxx |
| Potent Cap.: | 93 | xxxx | 340 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 697 | xxxx | xxxxx |
| Move Cap.: | 82 | xxxx | 340 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 697 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 765.8 | xxxx | 18.5 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 11.1 | xxxx | xxxxx |
| LOS by Move: | F | * | C | * | * | * | * | * | * | B | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 11.1 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | B | * | * |
| ApproachDel: | 561.5 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | F | | | * | | | * | | | * | | |





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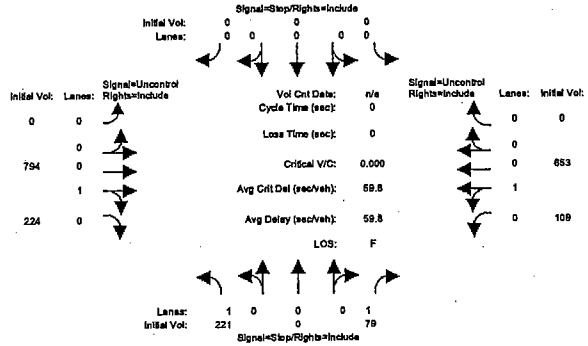
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

## Intersection #19: High/Western [N/S: Western E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 155 | 0 | 58 | 0 | 0 | 0 | 0 | 590 | 162 | 82 | 492 | 0 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 192 | 0 | 72 | 0 | 0 | 0 | 0 | 732 | 201 | 102 | 610 | 0 |
| Added Vol: | 22 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 12 | 2 | 0 | 0 |
| Campus Incr: | 7 | 0 | 3 | 0 | 0 | 0 | 0 | 62 | 11 | 5 | 43 | 0 |
| Initial Fut: | 221 | 0 | 79 | 0 | 0 | 0 | 0 | 794 | 224 | 109 | 653 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 221 | 0 | 79 | 0 | 0 | 0 | 0 | 794 | 224 | 109 | 653 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 221 | 0 | 79 | 0 | 0 | 0 | 0 | 794 | 224 | 109 | 653 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 6.4 | xxxx | 6.2 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1776 | xxxx | 906 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1017 | xxxx | xxxxx |
| Potent Cap.: | 92 | xxxx | 338 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 690 | xxxx | xxxxx |
| Move Cap.: | 80 | xxxx | 338 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 690 | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 908.4 | xxxx | 18.9 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 11.2 | xxxx | xxxxx |
| LOS by Move: | F | * | C | * | * | * | * | * | * | B | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 11.2 | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | B | * | * |
| ApproachDel: | 674.5 | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | F | | | * | | | * | | | * | | |

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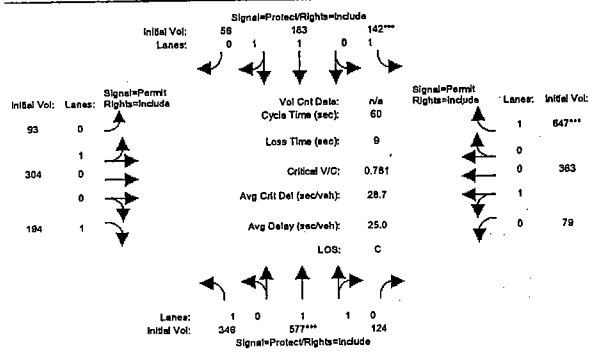
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 241 | 405 | 100 | 97 | 131 | 43 | 66 | 241 | 146 | 64 | 279 | 458 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 299 | 502 | 124 | 120 | 162 | 53 | 82 | 299 | 181 | 79 | 346 | 568 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 47 | 75 | 0 | 22 | 21 | 3 | 11 | 5 | 13 | 0 | 17 | 79 |
| Initial Fut: | 346 | 577 | 124 | 142 | 183 | 56 | 93 | 304 | 194 | 79 | 363 | 647 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 346 | 577 | 124 | 142 | 183 | 56 | 93 | 304 | 194 | 79 | 363 | 647 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 346 | 577 | 124 | 142 | 183 | 56 | 93 | 304 | 194 | 79 | 363 | 647 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 346 | 577 | 124 | 142 | 183 | 56 | 93 | 304 | 194 | 79 | 363 | 647 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.91 | 0.91 | 0.93 | 0.90 | 0.90 | 0.74 | 0.74 | 0.83 | 0.85 | 0.85 | 0.83 |
| Lanes: | 1.00 | 1.65 | 0.35 | 1.00 | 1.53 | 0.47 | 0.23 | 0.77 | 1.00 | 0.18 | 0.82 | 1.00 |
| Final Sat.: | 1769 | 2834 | 609 | 1769 | 2612 | 802 | 331 | 1082 | 1583 | 289 | 1323 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.20 | 0.20 | 0.20 | 0.08 | 0.07 | 0.07 | 0.28 | 0.28 | 0.12 | 0.27 | 0.27 | 0.41 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.27 | 0.26 | 0.26 | 0.10 | 0.10 | 0.10 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Volume/Cap: | 0.73 | 0.78 | 0.78 | 0.78 | 0.73 | 0.73 | 0.54 | 0.54 | 0.23 | 0.52 | 0.52 | 0.78 |
| Delay/Veh: | 32.4 | 31.9 | 31.9 | 54.2 | 43.2 | 43.2 | 13.4 | 13.4 | 10.5 | 13.1 | 13.1 | 20.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 32.4 | 31.9 | 31.9 | 54.2 | 43.2 | 43.2 | 13.4 | 13.4 | 10.5 | 13.1 | 13.1 | 20.2 |
| DesignQueue: | 12 | 20 | 4 | 6 | 7 | 2 | 2 | 7 | 4 | 2 | 8 | 15 |





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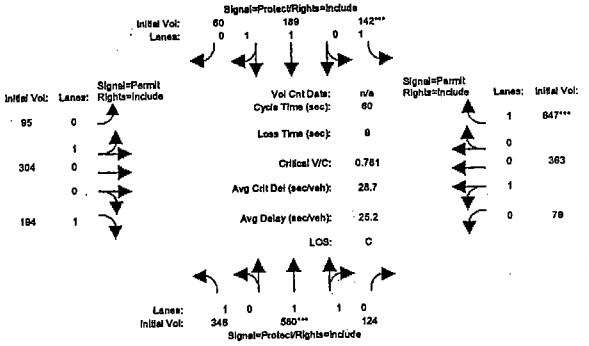
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 241 | 405 | 100 | 97 | 131 | 43 | 66 | 241 | 146 | 64 | 279 | 458 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 299 | 502 | 124 | 120 | 162 | 53 | 82 | 299 | 181 | 79 | 346 | 568 |
| Added Vol: | 0 | 3 | 0 | 0 | 6 | 4 | 2 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 47 | 75 | 0 | 22 | 21 | 3 | 11 | 5 | 13 | 0 | 17 | 79 |
| Initial Fut: | 346 | 580 | 124 | 142 | 189 | 60 | 95 | 304 | 194 | 79 | 363 | 647 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 346 | 580 | 124 | 142 | 189 | 60 | 95 | 304 | 194 | 79 | 363 | 647 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 346 | 580 | 124 | 142 | 189 | 60 | 95 | 304 | 194 | 79 | 363 | 647 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 346 | 580 | 124 | 142 | 189 | 60 | 95 | 304 | 194 | 79 | 363 | 647 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.91 | 0.91 | 0.93 | 0.90 | 0.90 | 0.73 | 0.73 | 0.83 | 0.85 | 0.85 | 0.83 |
| Lanes: | 1.00 | 1.65 | 0.35 | 1.00 | 1.52 | 0.48 | 0.24 | 0.76 | 1.00 | 0.18 | 0.82 | 1.00 |
| Final Sat.: | 1769 | 2839 | 607 | 1769 | 2587 | 824 | 331 | 1061 | 1583 | 289 | 1323 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.20 | 0.20 | 0.20 | 0.08 | 0.07 | 0.07 | 0.29 | 0.29 | 0.12 | 0.27 | 0.27 | 0.41 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.27 | 0.26 | 0.26 | 0.10 | 0.10 | 0.10 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Volume/Cap: | 0.74 | 0.78 | 0.78 | 0.78 | 0.74 | 0.74 | 0.55 | 0.55 | 0.23 | 0.52 | 0.52 | 0.78 |
| Delay/Veh: | 32.9 | 31.9 | 31.9 | 54.3 | 43.3 | 43.3 | 13.6 | 13.6 | 10.5 | 13.1 | 13.1 | 20.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 32.9 | 31.9 | 31.9 | 54.3 | 43.3 | 43.3 | 13.6 | 13.6 | 10.5 | 13.1 | 13.1 | 20.2 |
| DesignQueue: | 12 | 20 | 4 | 6 | 8 | 2 | 2 | 7 | 4 | 2 | 8 | 15 |

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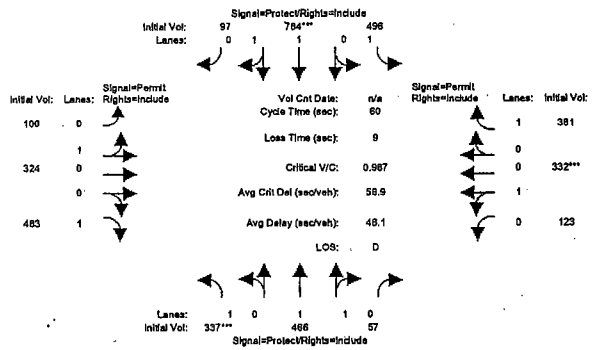
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 249 | 340 | 46 | 341 | 577 | 70 | 75 | 249 | 355 | 99 | 260 | 254 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 309 | 422 | 57 | 423 | 715 | 87 | 93 | 309 | 440 | 123 | 322 | 315 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 28 | 44 | 0 | 73 | 69 | 10 | 7 | 15 | 43 | 0 | 10 | 46 |
| Initial Fut: | 337 | 466 | 57 | 496 | 784 | 97 | 100 | 324 | 483 | 123 | 332 | 361 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 337 | 466 | 57 | 496 | 784 | 97 | 100 | 324 | 483 | 123 | 332 | 361 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 337 | 466 | 57 | 496 | 784 | 97 | 100 | 324 | 483 | 123 | 332 | 361 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 337 | 466 | 57 | 496 | 784 | 97 | 100 | 324 | 483 | 123 | 332 | 361 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.93 | 0.92 | 0.92 | 0.60 | 0.60 | 0.83 | 0.58 | 0.58 | 0.83 |
| Lanes: | 1.00 | 1.78 | 0.22 | 1.00 | 1.78 | 0.22 | 0.24 | 0.76 | 1.00 | 0.27 | 0.73 | 1.00 |
| Final Sat.: | 1769 | 3101 | 380 | 1769 | 3099 | 382 | 268 | 868 | 1583 | 296 | 801 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.19 | 0.15 | 0.15 | 0.28 | 0.25 | 0.25 | 0.37 | 0.37 | 0.31 | 0.42 | 0.42 | 0.23 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.20 | 0.16 | 0.16 | 0.30 | 0.26 | 0.26 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 |
| Volume/Cap: | 0.97 | 0.94 | 0.94 | 0.94 | 0.97 | 0.97 | 0.87 | 0.87 | 0.71 | 0.97 | 0.97 | 0.53 |
| Delay/Veh: | 71.3 | 57.2 | 57.2 | 52.2 | 51.3 | 51.3 | 36.2 | 36.2 | 22.3 | 55.4 | 55.4 | 17.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 71.3 | 57.2 | 57.2 | 52.2 | 51.3 | 51.3 | 36.2 | 36.2 | 22.3 | 55.4 | 55.4 | 17.7 |
| DesignQueue: | 13 | 18 | 2 | 17 | 27 | 3 | 3 | 9 | 13 | 3 | 9 | 10 |





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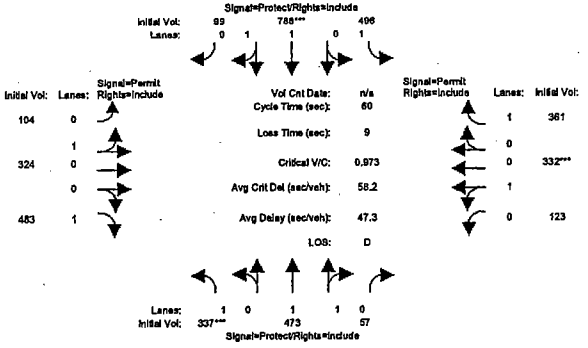
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

Intersection #20: High/Bay [N/S: Bay E/w: High]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 249 | 340 | 46 | 341 | 577 | 70 | 75 | 249 | 355 | 99 | 260 | 254 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 309 | 422 | 57 | 423 | 715 | 87 | 93 | 309 | 440 | 123 | 322 | 315 |
| Added Vol: | 0 | 7 | 0 | 0 | 4 | 2 | 4 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 28 | 44 | 0 | 73 | 69 | 10 | 7 | 15 | 43 | 0 | 10 | 46 |
| Initial Fut: | 337 | 473 | 57 | 496 | 788 | 99 | 104 | 324 | 483 | 123 | 332 | 361 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 337 | 473 | 57 | 496 | 788 | 99 | 104 | 324 | 483 | 123 | 332 | 361 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 337 | 473 | 57 | 496 | 788 | 99 | 104 | 324 | 483 | 123 | 332 | 361 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 337 | 473 | 57 | 496 | 788 | 99 | 104 | 324 | 483 | 123 | 332 | 361 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.92 | 0.92 | 0.93 | 0.92 | 0.92 | 0.59 | 0.59 | 0.83 | 0.57 | 0.57 | 0.83 |
| Lanes: | 1.00 | 1.78 | 0.22 | 1.00 | 1.78 | 0.22 | 0.24 | 0.76 | 1.00 | 0.27 | 0.73 | 1.00 |
| Final Sat.: | 1769 | 3106 | 375 | 1769 | 3090 | 387 | 273 | 848 | 1583 | 294 | 795 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.19 | 0.15 | 0.15 | 0.28 | 0.26 | 0.26 | 0.38 | 0.38 | 0.31 | 0.42 | 0.42 | 0.23 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.20 | 0.16 | 0.16 | 0.30 | 0.26 | 0.26 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 |
| Volume/Cap: | 0.97 | 0.94 | 0.94 | 0.94 | 0.97 | 0.97 | 0.89 | 0.89 | 0.71 | 0.97 | 0.97 | 0.53 |
| Delay/Veh: | 72.9 | 58.1 | 58.1 | 53.5 | 52.5 | 52.5 | 39.1 | 39.1 | 22.3 | 56.8 | 56.8 | 17.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 72.9 | 58.1 | 58.1 | 53.5 | 52.5 | 52.5 | 39.1 | 39.1 | 22.3 | 56.8 | 56.8 | 17.7 |
| DesignQueue: | 13 | 18 | 2 | 17 | 28 | 3 | 3 | 9 | 13 | 3 | 9 | 10 |

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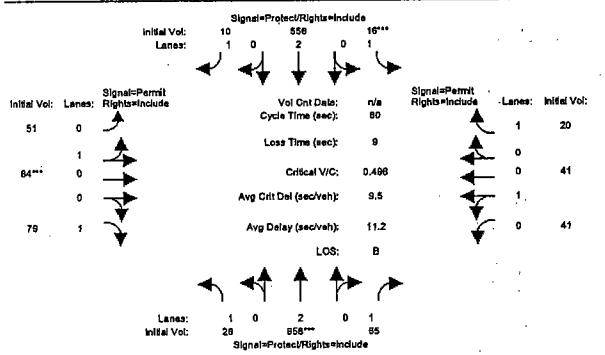
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

## Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 21 | 674 | 44 | 13 | 421 | 8 | 41 | 68 | 64 | 33 | 33 | 16 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 26 | 836 | 55 | 16 | 522 | 10 | 51 | 84 | 79 | 41 | 41 | 20 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 122 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 26 | 958 | 55 | 16 | 556 | 10 | 51 | 84 | 79 | 41 | 41 | 20 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| PHF Volume: | 31 | 1154 | 66 | 19 | 670 | 12 | 61 | 102 | 96 | 49 | 49 | 24 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 31 | 1154 | 66 | 19 | 670 | 12 | 61 | 102 | 96 | 49 | 49 | 24 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 31 | 1154 | 66 | 19 | 670 | 12 | 61 | 102 | 96 | 49 | 49 | 24 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.83 | 0.83 | 0.83 | 0.78 | 0.78 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.38 | 0.62 | 1.00 | 0.50 | 0.50 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 595 | 987 | 1583 | 736 | 736 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.33 | 0.04 | 0.01 | 0.19 | 0.01 | 0.10 | 0.10 | 0.06 | 0.07 | 0.07 | 0.02 |
| Crit Moves: | | **** | | **** | | | | **** | | | | |
| Green/Cycle: | 0.06 | 0.66 | 0.66 | 0.02 | 0.62 | 0.62 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 |
| Volume/Cap: | 0.30 | 0.50 | 0.06 | 0.50 | 0.30 | 0.01 | 0.50 | 0.50 | 0.29 | 0.32 | 0.32 | 0.07 |
| Delay/Veh: | 37.8 | 7.1 | 4.9 | 48.2 | 7.1 | 5.8 | 29.2 | 29.2 | 27.2 | 27.5 | 27.5 | 25.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.8 | 7.1 | 4.9 | 48.2 | 7.1 | 5.8 | 29.2 | 29.2 | 27.2 | 27.5 | 27.5 | 25.6 |
| DesignQueue: | 1 | 19 | 1 | 1 | 12 | 0 | 2 | 4 | 3 | 2 | 2 | 1 |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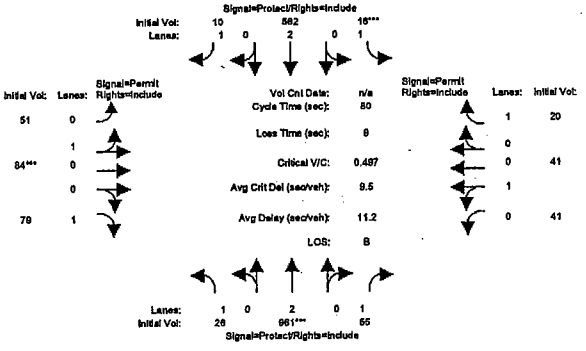
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

## Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 21 | 674 | 44 | 13 | 421 | 8 | 41 | 68 | 64 | 33 | 33 | 16 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 26 | 836 | 55 | 16 | 522 | 10 | 51 | 84 | 79 | 41 | 41 | 20 |
| Added Vol: | 0 | 3 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 122 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 26 | 961 | 55 | 16 | 562 | 10 | 51 | 84 | 79 | 41 | 41 | 20 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| PHF Volume: | 31 | 1158 | 66 | 19 | 677 | 12 | 61 | 102 | 96 | 49 | 49 | 24 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 31 | 1158 | 66 | 19 | 677 | 12 | 61 | 102 | 96 | 49 | 49 | 24 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 31 | 1158 | 66 | 19 | 677 | 12 | 61 | 102 | 96 | 49 | 49 | 24 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.83 | 0.83 | 0.83 | 0.77 | 0.77 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.38 | 0.62 | 1.00 | 0.50 | 0.50 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 595 | 987 | 1583 | 735 | 735 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.33 | 0.04 | 0.01 | 0.19 | 0.01 | 0.10 | 0.10 | 0.06 | 0.07 | 0.07 | 0.02 |
| Crit Moves: | | **** | | **** | | | | **** | | | | |
| Green/Cycle: | 0.06 | 0.66 | 0.66 | 0.02 | 0.62 | 0.62 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 |
| Volume/Cap: | 0.31 | 0.50 | 0.06 | 0.50 | 0.31 | 0.01 | 0.50 | 0.50 | 0.29 | 0.32 | 0.32 | 0.07 |
| Delay/Veh: | 37.9 | 7.1 | 4.9 | 48.3 | 7.1 | 5.7 | 29.2 | 29.2 | 27.3 | 27.6 | 27.6 | 25.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 37.9 | 7.1 | 4.9 | 48.3 | 7.1 | 5.7 | 29.2 | 29.2 | 27.3 | 27.6 | 27.6 | 25.6 |
| DesignQueue: | 1 | 19 | 1 | 1 | 12 | 0 | 2 | 4 | 3 | 2 | 2 | 1 |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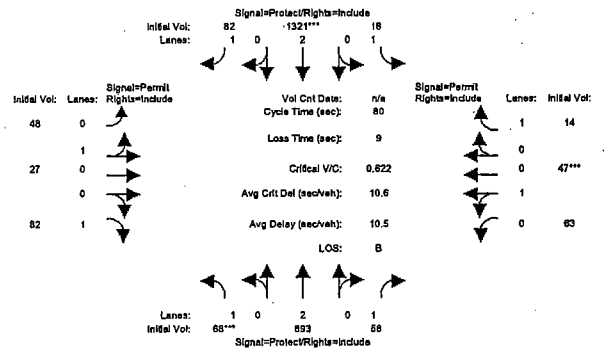
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 663 | 47 | 13 | 975 | 66 | 39 | 22 | 66 | 51 | 38 | 11 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 68 | 822 | 58 | 16 | 1209 | 82 | 48 | 27 | 82 | 63 | 47 | 14 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 71 | 0 | 0 | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 68 | 893 | 58 | 16 | 1321 | 82 | 48 | 27 | 82 | 63 | 47 | 14 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| PHF Volume: | 77 | 1004 | 65 | 18 | 1484 | 92 | 54 | 31 | 92 | 71 | 53 | 15 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 77 | 1004 | 65 | 18 | 1484 | 92 | 54 | 31 | 92 | 71 | 53 | 15 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 77 | 1004 | 65 | 18 | 1484 | 92 | 54 | 31 | 92 | 71 | 53 | 15 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.65 | 0.65 | 0.83 | 0.73 | 0.73 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.64 | 0.36 | 1.00 | 0.57 | 0.43 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 794 | 448 | 1583 | 798 | 595 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.28 | 0.04 | 0.01 | 0.42 | 0.06 | 0.07 | 0.07 | 0.06 | 0.09 | 0.09 | 0.01 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.07 | 0.72 | 0.72 | 0.03 | 0.67 | 0.67 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 |
| Volume/Cap: | 0.62 | 0.39 | 0.06 | 0.39 | 0.62 | 0.09 | 0.48 | 0.48 | 0.41 | 0.62 | 0.62 | 0.07 |
| Delay/Veh: | 45.6 | 4.5 | 3.3 | 43.9 | 7.8 | 4.5 | 33.5 | 33.5 | 32.4 | 38.2 | 38.2 | 29.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 45.6 | 4.5 | 3.3 | 43.9 | 7.8 | 4.5 | 33.5 | 33.5 | 32.4 | 38.2 | 38.2 | 29.8 |
| DesignQueue: | 3 | 14 | 1 | 1 | 24 | 1 | 2 | 1 | 4 | 3 | 2 | 1 |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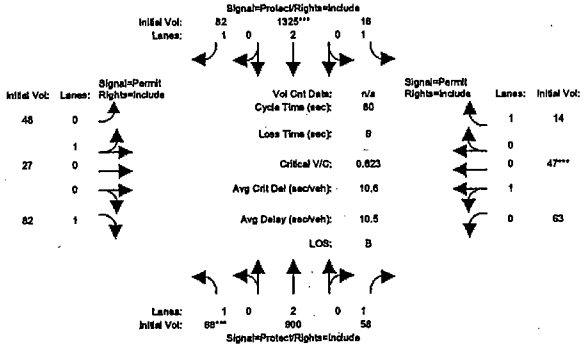
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

Intersection #21: Bay/Iowa [N/S: Bay E/w: Iowa]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 663 | 47 | 13 | 975 | 66 | 39 | 22 | 66 | 51 | 38 | 11 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 68 | 822 | 58 | 16 | 1209 | 82 | 48 | 27 | 82 | 63 | 47 | 14 |
| Added Vol: | 0 | 7 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 71 | 0 | 0 | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 68 | 900 | 58 | 16 | 1325 | 82 | 48 | 27 | 82 | 63 | 47 | 14 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| PHF Volume: | 77 | 1011 | 65 | 18 | 1489 | 92 | 54 | 31 | 92 | 71 | 53 | 15 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 77 | 1011 | 65 | 18 | 1489 | 92 | 54 | 31 | 92 | 71 | 53 | 15 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 77 | 1011 | 65 | 18 | 1489 | 92 | 54 | 31 | 92 | 71 | 53 | 15 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.93 | 0.83 | 0.93 | 0.93 | 0.83 | 0.65 | 0.65 | 0.83 | 0.73 | 0.73 | 0.83 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.64 | 0.36 | 1.00 | 0.57 | 0.43 | 1.00 |
| Final Sat.: | 1769 | 3538 | 1583 | 1769 | 3538 | 1583 | 793 | 447 | 1583 | 798 | 595 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.29 | 0.04 | 0.01 | 0.42 | 0.06 | 0.07 | 0.07 | 0.06 | 0.09 | 0.09 | 0.01 |
| Crit Moves: | **** | | | | **** | | | | | | **** | |
| Green/Cycle: | 0.07 | 0.72 | 0.72 | 0.03 | 0.68 | 0.68 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 |
| Volume/Cap: | 0.62 | 0.40 | 0.06 | 0.40 | 0.62 | 0.09 | 0.48 | 0.48 | 0.41 | 0.62 | 0.62 | 0.07 |
| Delay/Veh: | 45.8 | 4.5 | 3.3 | 44.0 | 7.8 | 4.5 | 33.6 | 33.6 | 32.4 | 38.3 | 38.3 | 29.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 45.8 | 4.5 | 3.3 | 44.0 | 7.8 | 4.5 | 33.6 | 33.6 | 32.4 | 38.3 | 38.3 | 29.8 |
| DesignQueue: | 3 | 14 | 1 | 1 | 24 | 1 | 2 | 1 | 4 | 3 | 2 | 1 |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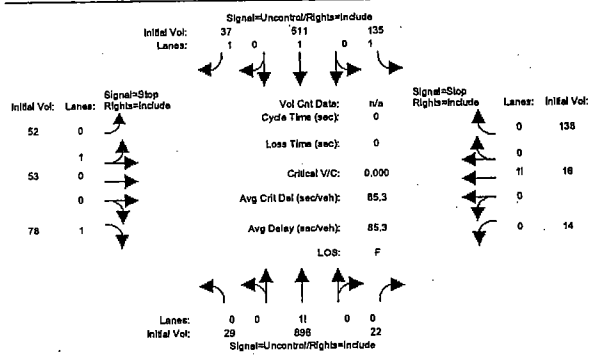
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline AM

## Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 23 | 640 | 18 | 108 | 389 | 27 | 30 | 43 | 63 | 11 | 13 | 107 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 29 | 794 | 22 | 134 | 482 | 33 | 37 | 53 | 78 | 14 | 16 | 133 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 102 | 0 | 1 | 29 | 4 | 15 | 0 | 0 | 0 | 0 | 5 |
| Initial Fut: | 29 | 896 | 22 | 135 | 511 | 37 | 52 | 53 | 78 | 14 | 16 | 138 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 29 | 896 | 22 | 135 | 511 | 37 | 52 | 53 | 78 | 14 | 16 | 138 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 29 | 896 | 22 | 135 | 511 | 37 | 52 | 53 | 78 | 14 | 16 | 138 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 549 | xxxx | xxxxx | 918 | xxxx | xxxxx | 1822 | 1756 | 511 | 1829 | 1782 | 907 |
| Potent Cap.: | 1031 | xxxx | xxxxx | 752 | xxxx | xxxxx | 60 | 86 | 566 | 60 | 83 | 337 |
| Move Cap.: | 1031 | xxxx | xxxxx | 752 | xxxx | xxxxx | 25 | 69 | 566 | 16 | 66 | 337 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 8.6 | xxxx | xxxxx | 10.8 | xxxx | xxxxx | xxxxx | xxxx | 12.4 | xxxxx | xxxx | xxxxx |
| LOS by Move: | A | * | * | B | * | * | * | * | B | * | * | * |
| Movement: | LT | - LTR | - RT | LT | - LTR | - RT | LT | - LTR | - RT | LT | - LTR | - RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 36 | xxxx | xxxxx | xxxx | 111 | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 1088 | xxxx | xxxxx | xxxxx | 337 | xxxxx |
| Shared LOS: | * | * | * | * | * | * | F | * | * | * | F | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 630.2 | | | 337.2 | | |
| ApproachLOS: | * | | | * | | | F | | | F | | |





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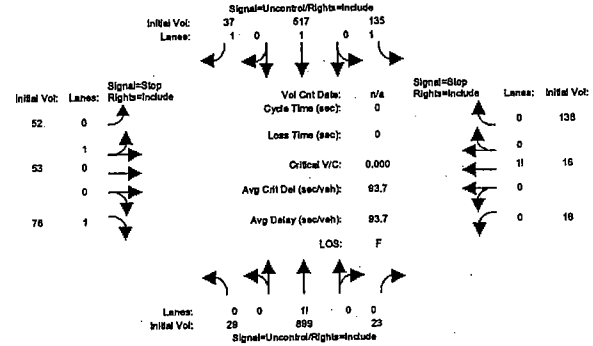
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

## Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 23 | 640 | 18 | 108 | 389 | 27 | 30 | 43 | 63 | 11 | 13 | 107 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 29 | 794 | 22 | 134 | 482 | 33 | 37 | 53 | 78 | 14 | 16 | 133 |
| Added Vol: | 0 | 3 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Campus Incr: | 0 | 102 | 0 | 1 | 29 | 4 | 15 | 0 | 0 | 0 | 0 | 5 |
| Initial Fut: | 29 | 899 | 23 | 135 | 517 | 37 | 52 | 53 | 78 | 16 | 16 | 138 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 29 | 899 | 23 | 135 | 517 | 37 | 52 | 53 | 78 | 16 | 16 | 138 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 29 | 899 | 23 | 135 | 517 | 37 | 52 | 53 | 78 | 16 | 16 | 138 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 555 | xxxx | xxxxx | 922 | xxxx | xxxxx | 1831 | 1766 | 517 | 1839 | 1792 | 910 |
| Potent Cap.: | 1026 | xxxx | xxxxx | 749 | xxxx | xxxxx | 59 | 85 | 562 | 59 | 82 | 335 |
| Move Cap.: | 1026 | xxxx | xxxxx | 749 | xxxx | xxxxx | 24 | 67 | 562 | 15 | 65 | 335 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 8.6 | xxxx | xxxxx | 10.9 | xxxx | xxxxx | xxxxx | xxxx | 12.4 | xxxxx | xxxx | xxxxx |
| LOS by Move: | A | * | * | B | * | * | * | * | B | * | * | * |
| Movement: | LT | - LTR | - RT | LT | - LTR | - RT | LT | - LTR | - RT | LT | - LTR | - RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 36 | xxxx | xxxxx | xxxx | 101 | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 1118 | xxxx | xxxxx | xxxxx | 420 | xxxxx |
| Shared LOS: | * | * | * | * | * | * | F | * | * | * | F | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 647.9 | | | 420.5 | | |
| ApproachLOS: | * | | | * | | | F | | | F | | |

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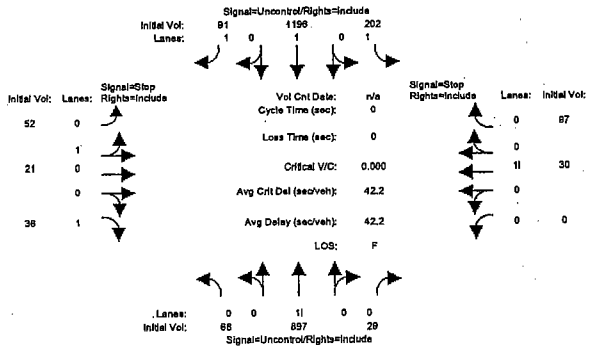
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline PM

## Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 675 | 23 | 159 | 889 | 62 | 35 | 17 | 29 | 0 | 24 | 76 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 68 | 837 | 29 | 197 | 1102 | 77 | 43 | 21 | 36 | 0 | 30 | 94 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 60 | 0 | 5 | 94 | 14 | 9 | 0 | 0 | 0 | 0 | 3 |
| Initial Fut: | 68 | 897 | 29 | 202 | 1196 | 91 | 52 | 21 | 36 | 0 | 30 | 97 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 68 | 897 | 29 | 202 | 1196 | 91 | 52 | 21 | 36 | 0 | 30 | 97 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 68 | 897 | 29 | 202 | 1196 | 91 | 52 | 21 | 36 | 0 | 30 | 97 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | xxxxx | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | xxxxx | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1287 | xxxx | xxxxx | 926 | xxxx | xxxxx | 2712 | 2663 | 1196 | xxxx | 2739 | 911 |
| Potent Cap.: | 546 | xxxx | xxxxx | 747 | xxxx | xxxxx | 14 | 23 | 229 | xxxx | 20 | 335 |
| Move Cap.: | 546 | xxxx | xxxxx | 747 | xxxx | xxxxx | 0 | 15 | 229 | xxxx | 13 | 335 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 12.5 | xxxx | xxxxx | 11.6 | xxxx | xxxxx | xxxxx | xxxx | 23.6 | xxxxx | xxxx | xxxxx |
| LOS by Move: | B | * | * | B | * | * | * | * | C | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | xxxx | xxxx | 49 |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 894.6 |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | F |
| ApproachDel: | xxxxxx | | | xxxxxx | | | xxxxxx | | | 894.6 | | |
| ApproachLOS: | * | | | * | | | F | | | F | | |





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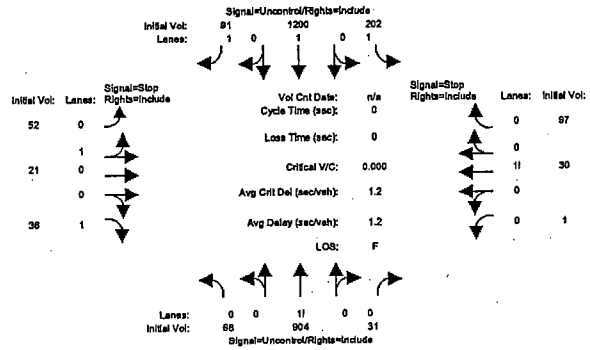
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

## Intersection #22: Bay/Escalona [N/S: Bay E/w: Escalana]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 55 | 675 | 23 | 159 | 889 | 62 | 35 | 17 | 29 | 0 | 24 | 76 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 68 | 837 | 29 | 197 | 1102 | 77 | 43 | 21 | 36 | 0 | 30 | 94 |
| Added Vol: | 0 | 7 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Campus Incr: | 0 | 60 | 0 | 5 | 94 | 14 | 9 | 0 | 0 | 0 | 0 | 3 |
| Initial Fut: | 68 | 904 | 31 | 202 | 1200 | 91 | 52 | 21 | 36 | 1 | 30 | 97 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 68 | 904 | 31 | 202 | 1200 | 91 | 52 | 21 | 36 | 1 | 30 | 97 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 68 | 904 | 31 | 202 | 1200 | 91 | 52 | 21 | 36 | 1 | 30 | 97 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 1291 | xxxx | xxxxx | 935 | xxxx | xxxxx | 2724 | 2676 | 1200 | 2734 | 2751 | 919 |
| Potent Cap.: | 544 | xxxx | xxxxx | 741 | xxxx | xxxxx | 14 | 22 | 228 | 13 | 20 | 331 |
| Move Cap.: | 544 | xxxx | xxxxx | 741 | xxxx | xxxxx | 0 | 14 | 228 | 0 | 13 | 331 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | 12.6 | xxxx | xxxxx | 11.7 | xxxx | xxxxx | xxxxx | xxxx | 23.8 | xxxxx | xxxx | xxxxx |
| LOS by Move: | B | * | * | B | * | * | * | * | C | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | xxxx | 0 | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | * | | | F | | | F | | |

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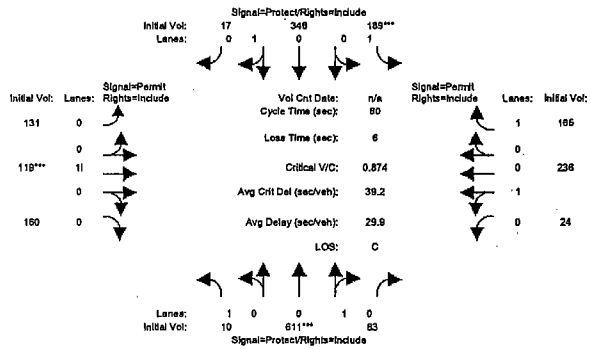
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline AM

Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 452 | 67 | 140 | 268 | 14 | 106 | 96 | 129 | 19 | 190 | 92 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 10 | 560 | 83 | 174 | 332 | 17 | 131 | 119 | 160 | 24 | 236 | 114 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 51 | 0 | 15 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |
| Initial Fut: | 10 | 611 | 83 | 189 | 346 | 17 | 131 | 119 | 160 | 24 | 236 | 165 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 10 | 611 | 83 | 189 | 346 | 17 | 131 | 119 | 160 | 24 | 236 | 165 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 10 | 611 | 83 | 189 | 346 | 17 | 131 | 119 | 160 | 24 | 236 | 165 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 10 | 611 | 83 | 189 | 346 | 17 | 131 | 119 | 160 | 24 | 236 | 165 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.96 | 0.96 | 0.93 | 0.97 | 0.97 | 0.67 | 0.67 | 0.67 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 0.88 | 0.12 | 1.00 | 0.95 | 0.05 | 0.32 | 0.29 | 0.39 | 0.09 | 0.91 | 1.00 |
| Final Sat.: | 1769 | 1610 | 219 | 1769 | 1761 | 88 | 408 | 370 | 497 | 161 | 1613 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.38 | 0.38 | 0.11 | 0.20 | 0.20 | 0.32 | 0.32 | 0.32 | 0.15 | 0.15 | 0.10 |
| Crit Moves: | | **** | | | **** | | | **** | | | | |
| Green/Cycle: | 0.02 | 0.43 | 0.43 | 0.12 | 0.54 | 0.54 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 |
| Volume/Cap: | 0.36 | 0.87 | 0.87 | 0.87 | 0.36 | 0.36 | 0.87 | 0.87 | 0.87 | 0.40 | 0.40 | 0.28 |
| Delay/Veh: | 47.1 | 31.2 | 31.2 | 64.7 | 10.7 | 10.7 | 40.0 | 40.0 | 40.0 | 19.1 | 19.1 | 18.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 47.1 | 31.2 | 31.2 | 64.7 | 10.7 | 10.7 | 40.0 | 40.0 | 40.0 | 19.1 | 19.1 | 18.1 |
| DesignQueue: | 0 | 17 | 2 | 8 | 7 | 0 | 4 | 4 | 5 | 1 | 7 | 5 |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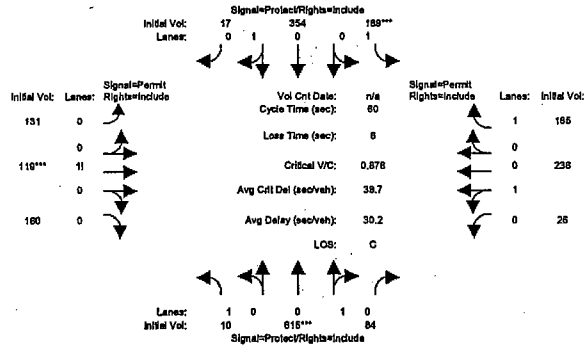
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 8 | 452 | 67 | 140 | 268 | 14 | 106 | 96 | 129 | 19 | 190 | 92 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 10 | 560 | 83 | 174 | 332 | 17 | 131 | 119 | 160 | 24 | 236 | 114 |
| Added Vol: | 0 | 4 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Campus Incr: | 0 | 51 | 0 | 15 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |
| Initial Fut: | 10 | 615 | 84 | 189 | 354 | 17 | 131 | 119 | 160 | 26 | 236 | 165 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 10 | 615 | 84 | 189 | 354 | 17 | 131 | 119 | 160 | 26 | 236 | 165 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 10 | 615 | 84 | 189 | 354 | 17 | 131 | 119 | 160 | 26 | 236 | 165 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 10 | 615 | 84 | 189 | 354 | 17 | 131 | 119 | 160 | 26 | 236 | 165 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.96 | 0.96 | 0.93 | 0.97 | 0.97 | 0.67 | 0.67 | 0.67 | 0.93 | 0.93 | 0.83 |
| Lanes: | 1.00 | 0.88 | 0.12 | 1.00 | 0.95 | 0.05 | 0.32 | 0.29 | 0.39 | 0.10 | 0.90 | 1.00 |
| Final Sat.: | 1769 | 1609 | 220 | 1769 | 1763 | 86 | 407 | 368 | 495 | 173 | 1592 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.38 | 0.38 | 0.11 | 0.20 | 0.20 | 0.32 | 0.32 | 0.32 | 0.15 | 0.15 | 0.10 |
| Crit Moves: | | **** | | | **** | | | **** | | | | |
| Green/Cycle: | 0.02 | 0.44 | 0.44 | 0.12 | 0.54 | 0.54 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 |
| Volume/Cap: | 0.37 | 0.88 | 0.88 | 0.88 | 0.37 | 0.37 | 0.88 | 0.88 | 0.88 | 0.40 | 0.40 | 0.28 |
| Delay/Veh: | 47.5 | 31.6 | 31.6 | 65.7 | 10.7 | 10.7 | 40.7 | 40.7 | 40.7 | 19.2 | 19.2 | 18.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 47.5 | 31.6 | 31.6 | 65.7 | 10.7 | 10.7 | 40.7 | 40.7 | 40.7 | 19.2 | 19.2 | 18.1 |
| DesignQueue: | 0 | 17 | 2 | 8 | 8 | 0 | 4 | 4 | 5 | 1 | 7 | 5 |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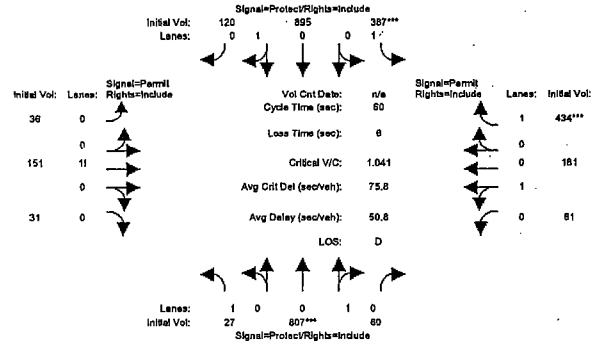
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Baseline PM

Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 22 | 627 | 48 | 274 | 684 | 97 | 29 | 122 | 25 | 49 | 146 | 326 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 27 | 777 | 60 | 340 | 848 | 120 | 36 | 151 | 31 | 61 | 181 | 404 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 30 | 0 | 47 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| Initial Fut: | 27 | 807 | 60 | 387 | 895 | 120 | 36 | 151 | 31 | 61 | 181 | 434 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 27 | 807 | 60 | 387 | 895 | 120 | 36 | 151 | 31 | 61 | 181 | 434 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 27 | 807 | 60 | 387 | 895 | 120 | 36 | 151 | 31 | 61 | 181 | 434 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 27 | 807 | 60 | 387 | 895 | 120 | 36 | 151 | 31 | 61 | 181 | 434 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.97 | 0.97 | 0.93 | 0.96 | 0.96 | 0.88 | 0.88 | 0.88 | 0.83 | 0.83 | 0.83 |
| Lanes: | 1.00 | 0.93 | 0.07 | 1.00 | 0.88 | 0.12 | 0.16 | 0.70 | 0.14 | 0.25 | 0.75 | 1.00 |
| Final Sat.: | 1769 | 1717 | 127 | 1769 | 1612 | 217 | 276 | 1161 | 238 | 398 | 1186 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.47 | 0.47 | 0.22 | 0.56 | 0.56 | 0.13 | 0.13 | 0.13 | 0.15 | 0.15 | 0.27 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.02 | 0.45 | 0.45 | 0.21 | 0.64 | 0.64 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Volume/Cap: | 0.86 | 1.04 | 1.04 | 1.04 | 0.86 | 0.86 | 0.49 | 0.49 | 0.49 | 0.58 | 0.58 | 1.04 |
| Delay/Veh: | 143.2 | 64.4 | 64.4 | 89.5 | 18.2 | 18.2 | 25.8 | 25.8 | 25.8 | 27.6 | 27.6 | 84.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 143.2 | 64.4 | 64.4 | 89.5 | 18.2 | 18.2 | 25.8 | 25.8 | 25.8 | 27.6 | 27.6 | 84.7 |
| DesignQueue: | 1 | 22 | 2 | 14 | 17 | 2 | 1 | 5 | 1 | 2 | 6 | 15 |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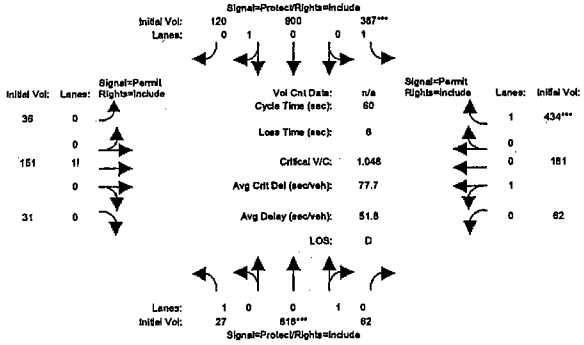
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

Intersection #23: Bay/King [N/S: Bay E/w: King]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 22 | 627 | 48 | 274 | 684 | 97 | 29 | 122 | 25 | 49 | 146 | 326 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 27 | 777 | 60 | 340 | 848 | 120 | 36 | 151 | 31 | 61 | 181 | 404 |
| Added Vol: | 0 | 9 | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Campus Incr: | 0 | 30 | 0 | 47 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| Initial Fut: | 27 | 816 | 62 | 387 | 900 | 120 | 36 | 151 | 31 | 62 | 181 | 434 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 27 | 816 | 62 | 387 | 900 | 120 | 36 | 151 | 31 | 62 | 181 | 434 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 27 | 816 | 62 | 387 | 900 | 120 | 36 | 151 | 31 | 62 | 181 | 434 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 27 | 816 | 62 | 387 | 900 | 120 | 36 | 151 | 31 | 62 | 181 | 434 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adjustment: | 0.93 | 0.97 | 0.97 | 0.93 | 0.96 | 0.96 | 0.88 | 0.88 | 0.88 | 0.83 | 0.83 | 0.83 |
| Lanes: | 1.00 | 0.93 | 0.07 | 1.00 | 0.88 | 0.12 | 0.16 | 0.70 | 0.14 | 0.25 | 0.75 | 1.00 |
| Final Sat.: | 1769 | 1714 | 129 | 1769 | 1613 | 216 | 274 | 1153 | 236 | 401 | 1176 | 1583 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.48 | 0.48 | 0.22 | 0.56 | 0.56 | 0.13 | 0.13 | 0.13 | 0.15 | 0.15 | 0.27 |
| Crit Moves: | | **** | | **** | | | | | | | | **** |
| Green/Cycle: | 0.02 | 0.45 | 0.45 | 0.21 | 0.65 | 0.65 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Volume/Cap: | 0.86 | 1.05 | 1.05 | 1.05 | 0.86 | 0.86 | 0.50 | 0.50 | 0.50 | 0.59 | 0.59 | 1.05 |
| Delay/Veh: | 144.1 | 66.2 | 66.2 | 91.6 | 18.3 | 18.3 | 26.0 | 26.0 | 26.0 | 28.0 | 28.0 | 86.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 144.1 | 66.2 | 66.2 | 91.6 | 18.3 | 18.3 | 26.0 | 26.0 | 26.0 | 28.0 | 28.0 | 86.8 |
| DesignQueue: | 1 | 23 | 2 | 14 | 17 | 2 | 1 | 5 | 1 | 2 | 6 | 15 |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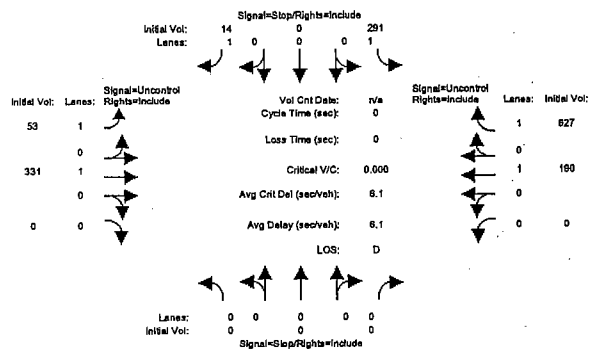
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline AM

Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 217 | 0 | 10 | 38 | 262 | 0 | 0 | 152 | 444 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 0 | 0 | 0 | 269 | 0 | 12 | 47 | 325 | 0 | 0 | 188 | 551 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 22 | 0 | 2 | 6 | 6 | 0 | 0 | 2 | 76 |
| Initial Fut: | 0 | 0 | 0 | 291 | 0 | 14 | 53 | 331 | 0 | 0 | 190 | 627 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 291 | 0 | 14 | 53 | 331 | 0 | 0 | 190 | 627 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 291 | 0 | 14 | 53 | 331 | 0 | 0 | 190 | 627 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 628 | xxxx | 190 | 817 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 450 | xxxx | 856 | 820 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 428 | xxxx | 856 | 820 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 29.5 | xxxx | 9.3 | 9.7 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | D | * | A | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 28.5 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | D | | | * | | | * | | |





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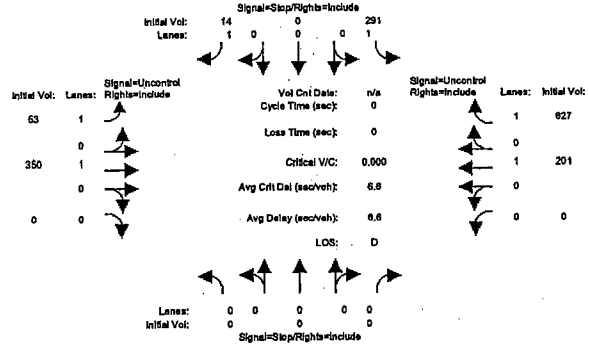
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Plus Phase 1 and 2 AM

Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 217 | 0 | 10 | 38 | 262 | 0 | 0 | 152 | 444 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 0 | 0 | 0 | 269 | 0 | 12 | 47 | 325 | 0 | 0 | 188 | 551 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 11 | 0 |
| Campus Incr: | 0 | 0 | 0 | 22 | 0 | 2 | 6 | 6 | 0 | 0 | 2 | 76 |
| Initial Fut: | 0 | 0 | 0 | 291 | 0 | 14 | 53 | 350 | 0 | 0 | 201 | 627 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 291 | 0 | 14 | 53 | 350 | 0 | 0 | 201 | 627 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 291 | 0 | 14 | 53 | 350 | 0 | 0 | 201 | 627 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 658 | xxxx | 201 | 828 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 432 | xxxx | 844 | 812 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 411 | xxxx | 844 | 812 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 32.4 | xxxx | 9.3 | 9.7 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | D | * | A | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 31.3 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | D | | | * | | | * | | |

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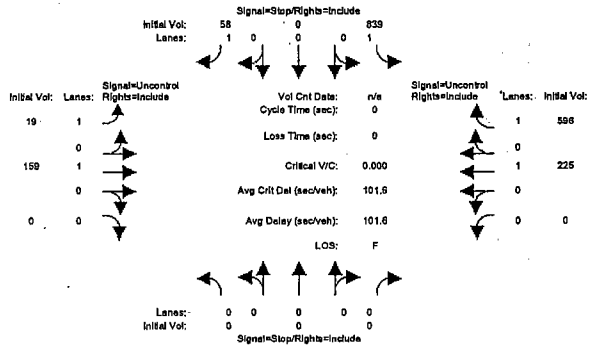
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Baseline PM

## Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 620 | 0 | 42 | 12 | 125 | 0 | 0 | 177 | 444 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 0 | 0 | 0 | 769 | 0 | 52 | 15 | 155 | 0 | 0 | 219 | 551 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Campus Incr: | 0 | 0 | 0 | 70 | 0 | 6 | 4 | 4 | 0 | 0 | 6 | 45 |
| Initial Fut: | 0 | 0 | 0 | 839 | 0 | 58 | 19 | 159 | 0 | 0 | 225 | 596 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 839 | 0 | 58 | 19 | 159 | 0 | 0 | 225 | 596 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 839 | 0 | 58 | 19 | 159 | 0 | 0 | 225 | 596 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 422 | xxxx | 225 | 821 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 592 | xxxx | 819 | 817 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 582 | xxxx | 819 | 817 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 228.7 | xxxx | 9.7 | 9.5 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | F | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 214.5 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | F | | | * | | | * | | |





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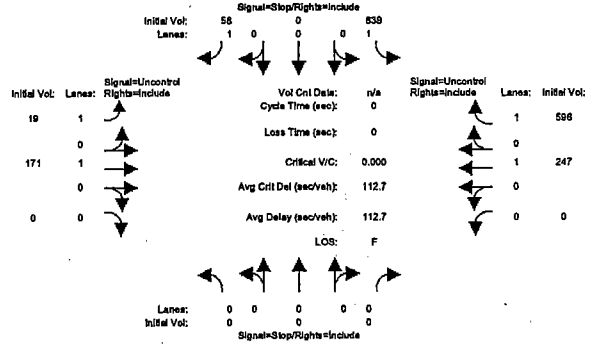
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
2020 Plus Phase 1 and 2 PM

## Intersection #24: Empire Grade/Heller [N/S: Heller E/w: Empire Grade]




| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 620 | 0 | 42 | 12 | 125 | 0 | 0 | 177 | 444 |
| Growth Adj: | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| Initial Bse: | 0 | 0 | 0 | 769 | 0 | 52 | 15 | 155 | 0 | 0 | 219 | 551 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 22 | 0 |
| Campus Incr: | 0 | 0 | 0 | 70 | 0 | 6 | 4 | 4 | 0 | 0 | 6 | 45 |
| Initial Fut: | 0 | 0 | 0 | 839 | 0 | 58 | 19 | 171 | 0 | 0 | 247 | 596 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 839 | 0 | 58 | 19 | 171 | 0 | 0 | 247 | 596 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 839 | 0 | 58 | 19 | 171 | 0 | 0 | 247 | 596 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.4 | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 456 | xxxx | 247 | 843 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 566 | xxxx | 796 | 802 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 556 | xxxx | 796 | 802 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | 258.5 | xxxx | 9.9 | 9.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | F | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 242.4 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | F | | | * | | | * | | |

# APPENDIX D-4

## PROJECT TRIP GENERATION

**Trip Generation Estimates**
**Marine Science Center CLRDP**
**November 25, 2002**

**ESTIMATE OF TRIPS (USING SURVEYED TRIP DATA FROM COASTPLANS)**

| | | Trip Rates | | | | | | | Number of Trips | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | | PM Peak Hour | | | | AM Peak Hour | | | PM Peak Hour | | | Off-Peak |
| Land Use | Size | Daily | In | Out | Total | In | Out | Total | Daily | In | Out | Total | In | Out | Total | Trips |
| ***Existing*** | | | | | | | | | | | | | | | | |
| Peak Hour of Adjacent Traffic | 263 emp+stu | 3.80 | 0.24 | 0.06 | 0.30 | 0.12 | 0.22 | 0.33 | 1,000 | 63 | 15 | 78 | 31 | 57 | 88 | 834 |
| ***Project Near-Term*** | | | | | | | | | | | | | | | | |
| New Employees and Students | 255 emp+stu | 3.80 | 0.24 | 0.06 | 0.30 | 0.12 | 0.22 | 0.33 | 968 | 61 | 14 | 76 | 30 | 55 | 85 | 807 |
| Auditorium | 13 visitors | | | See notes below* | | | | | 22 | 8 | 2 | 10 | 2 | 8 | 10 | 2 |
| Meeting Rooms | 11 visitors | | | See notes below* | | | | | 20 | 7 | 2 | 9 | 2 | 7 | 9 | 2 |
| Increased use of Seymour Center | 48 visitors | 0.62 | 0.11 | 0.01 | 0.12 | 0.01 | 0.11 | 0.12 | 30 | 5 | 1 | 6 | 1 | 5 | 6 | 18 |
| Increased Public Access Use | 20 visitors | | | See notes below* | | | | | 40 | 4 | 4 | 8 | 4 | 4 | 8 | 24 |
| Overnight Accommodations (Est. Rates) | 5 beds | 4.00 | 0.20 | 1.05 | 1.25 | 0.84 | 0.41 | 1.25 | 20 | 1 | 5 | 6 | 4 | 2 | 6 | 8 |
| On-Site Housing (60% of ITE Apt Rate) | 42 du | 5.51 | 0.06 | 0.29 | 0.34 | 0.10 | 0.49 | 0.59 | 232 | 2 | 12 | 14 | 4 | 21 | 25 | 192 |
| | | | | | | Near-Term Subtotal | | | 1,331 | 89 | 40 | 129 | 47 | 103 | 149 | 1,053 |
| ***Project Long-Term*** | | | | | | | | | | | | | | | | |
| New Employees and Students | 366 emp+stu | 3.80 | 0.24 | 0.06 | 0.30 | 0.12 | 0.22 | 0.33 | 1,390 | 88 | 21 | 108 | 43 | 80 | 122 | 1,159 |
| Increased use of Seymour Center | 48 visitors | 0.62 | 0.11 | 0.01 | 0.12 | 0.01 | 0.11 | 0.12 | 30 | 5 | 1 | 6 | 1 | 5 | 6 | 18 |
| Increased Public Access Use | 20 visitors | | | See notes below* | | | | | 40 | 4 | 4 | 8 | 4 | 4 | 8 | 24 |
| Dorm Rooms (Estimated Rate) | 30 beds | 4.00 | 0.20 | 1.05 | 1.25 | 0.84 | 0.41 | 1.25 | 120 | 6 | 32 | 38 | 25 | 12 | 38 | 45 |
| On-Site Housing (60% of ITE Apt Rate) | 38 du | 5.71 | 0.06 | 0.29 | 0.35 | 0.11 | 0.52 | 0.62 | 217 | 2 | 11 | 13 | 4 | 20 | 24 | 180 |
| | | | | | | Long-Term Subtotal | | | 1,797 | 105 | 68 | 173 | 76 | 121 | 197 | 1,426 |
| | | | | | | | | | | | | | | | | 0 |
| | | | | | | Average Day Project Total | | | 3,128 | 195 | 108 | 303 | 123 | 224 | 347 | 2,479 |

Notes:
Trip rates for employees+students based on traffic counts of existing site uses provided by Coastplans. Daily trips (over 24-hour period) were estimated based on 7 am to 5 pm volumes.
Currently, students represent 23% of employee+student population average daily occupancy. Under Near-Term and Long-Term conditions, they represent 16% and 19%, respectively.
The number of employees and students for Near-Term Conditions includes a net loss of 2 employees+students from Changed Use of Existing Facilities.
For auditorium/meeting room use, average daily attendance is based on annual attendance projection divided by 312 days/yr. Assumptions for trip generation include:
Average of 1.25 persons/car during peak hour and everyone travels during the peak hour.
Daily trip estimate includes both peak hours plus 2 additional trips each for preparation, tear-down and other activities outside the peak periods.
Increased use of Seymour Center under each scenario assumes 2 persons per car resulting in 24 vehicle trips, of which 50% are assumed to occur during the peak periods.
An additional 6 trips is added under each scenario to account for new staff trips during the day.
Overnight accommodations and dorm beds are assumed to have an average daily occupancy of 50% per population projections.
Source: Fehr & Peers Associates based on population projections and information from Estimated Occupancy of Trip-Generating Space table (Ann Bertken, UCSC, 9/27/2002).

Trip Generation for simultaneous average attendance at auditorium and meeting rooms on a specific day plus peak attendance at Seymour Center:
With an average auditorium attendance of 225 persons and 1.25 persons/car and 75% of visitors from off-site, resulting trip generation is 135 vehicles.
With an average meeting room attendance of 95 persons and 1.25 persons/car and 50% of visitors from off-site, resulting trip generation is 38 vehicles.
Daily trip estimate includes both peak hours plus 40 additional trips each to auditorium and meeting rooms for preparation, tear-down and other activities outside the peak periods.
Conservative assumption is that everyone travels in during the morning peak hour and out during the evening peak hour.
With an increase in peak attendance of 300 visitors on "Free Tuesdays" and 2.5 persons/car, the resulting trip generation is 120 vehicles. Of this total, approximately 20 percent are assumed to travel during each of the peak hours.

| | | Trip Rates | | | | | | | Number of Trips | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Off-Site | | AM Peak Hour | | | PM Peak Hour | | | | AM Peak Hour | | | PM Peak Hour | | | Off-Peak |
| | Visitors | Daily | In | Out | Total | In | Out | Total | Daily | In | Out | Total | In | Out | Total | Trips |
| Auditorium | 169 | 1.84 | 0.80 | 0.06 | 0.86 | 0.06 | 0.80 | 0.86 | 310 | 135 | 10 | 145 | 10 | 135 | 145 | 20 |
| Meeting Rooms | 48 | 2.42 | 0.80 | 0.21 | 1.01 | 0.21 | 0.80 | 1.01 | 116 | 38 | 10 | 48 | 10 | 38 | 48 | 20 |
| Peak Seymour Center Attendance | 300 | 0.40 | 0.07 | 0.01 | 0.08 | 0.07 | 0.01 | 0.08 | 120 | 22 | 2 | 24 | 22 | 2 | 24 | 72 |
| | | | | | | Peak Day Additional Trip Total | | | 547 | 195 | 22 | 218 | 42 | 176 | 218 | 112 |
| | | | | | | Average Day Project Total | | | 3,128 | 195 | 108 | 303 | 123 | 224 | 347 | 2,479 |
| | | | | | | Peak Day Grand Total (Simultaneous Events) | | | 3,675 | 390 | 130 | 520 | 165 | 400 | 564 | 2,591 |

# APPENDIX D-5

## ROADWAY SEGMENT LOS THRESHOLD

APPENDIX C -

LEVEL OF SERVICE THRESHOLD VOLUMES
FOR VARIOUS ROADWAY TYPES
TOTAL PEAK HOUR VOLUME IN BOTH DIRECTIONS (PHV)

| ROADWAY TYPE (with Abbreviation) | Level of Service A | Level of Service B | Level of Service C | Level of Service D | Level of Service E |
|---|---|---|---|---|---|
| 8-Lane Freeway (8F) | 5,100 | 7,900 | 11,200 | 13,600 | 14,600 |
| 6-Lane Freeway (6F) | 3,900 | 5,900 | 8,500 | 10,200 | 11,000 |
| 8-Lane Expressway (8E) | 3,500 | 5,400 | 7,500 | 9,000 | 9,800 |
| 6-Lane Expressway (6E) | 2,800 | 4,200 | 5,600 | 6,700 | 7,400 |
| 4-Lane Freeway (4F) | 2,600 | 3,900 | 5,700 | 6,800 | 7,300 |
| 8-Lane Divided Arterial (w/left turn lane) (9) | 4,000 | 4,700 | 5,400 | 6,100 | 6,800 |
| 6-Lane Divided Arterial (w/left turn lane) (7) | 3,200 | 3,800 | 4,300 | 4,900 | 5,400 |
| 4-Lane Expressway (4E) | 1,800 | 2,700 | 3,600 | 4,500 | 5,000 |
| 4-Lane Divided Arterial (w/left turn lane) (5) | 2,200 | 2,500 | 2,900 | 3,250 | 3,600 |
| 4-Lane Undivided Arterial (no left turn lane) (4) | 1,600 | 1,900 | 2,200 | 2,400 | 2,700 |
| 2-Lane Rural Highway | 400 | 800 | 1,200 | 1,700 | 2,500 |
| 2-Lane Arterial (w/left turn lane) (3) | 1,100 | 1,250 | 1,450 | 1,600 | 1,800 |
| 2-Lane Collector (2) | 600 | 750 | 900 | 1,050 | 1,200 |
| 2-Lane Local* (1) | 120 | 140 | 160 | 180 | 200 |
| 1-Lane Freeway Ramp** (1) | 500 | 750 | 1,050 | 1,300 | 1,500 |
| 2-Lane Freeway Ramp** | 1,000 | 1,500 | 2,100 | 2,600 | 2,800 |

Note:

1. Non-directional peak hour volume (PHV) is normally about 10 percent of the daily volume. Directional split is assumed 60/40.
2. Based on "Highway Capacity Manual", Transportation Research Board, 1994.
3. *The capacity limitation is related to neighborhood quality-of-life rather than the physical carrying capacity of the road. This assumes a standard suburban neighborhood, 40 foot roadway width and 25 mile per hour speed limit with normal speed violation rates.
4. **Capacities given for each service level assume the same level of service for the adjoining merging roadway as well as level of service being determined by volume to capacity and not attainable speed. Level of service will be controlled by freeway level of service if worse than ramp.
5. All volumes are approximate and assume ideal roadway characteristics.