ENVIRONMENTAL IMPACT REPORT

APPENDICES

SALINAS
GENERAL PLAN

JUNE 2002

COTTON/BRIDGES/ASSOCIATES
A Division of P&D Consultants

LIST OF APPENDICES

Appendix A:
Notice of Preparation (NOP) and Responses to the NOP

Gray Davis
GOVERNOR

Steve Nissen
DIRECTOR

Notice of Preparation

November 27, 2001

To: Reviewing Agencies

Re: City of Salinas General Plan Update
SCH# 1987012703

Attached for your review and comment is the Notice of Preparation (NOP) for the City of Salinas General Plan Update draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Jenny Mahoney
City of Salinas
200 Lincoln Avenue
Salinas, CA 93901

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Brian Grattidge
Project Analyst, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH# 1987012703
Project Title City of Salinas General Plan Update
Lead Agency Salinas, City of

Type **NOP** Notice of Preparation

Description The project is the adoption and implementation of a comprehensive update to the Salinas General Plan, originally adopted in 1988. The general plan is the long-range planning document guiding growth and development in the community.

Lead Agency Contact

Name Jenny Mahoney
Agency City of Salinas
Phone 831 758-7206 *Fax*
email
Address 200 Lincoln Avenue
City Salinas *State* CA *Zip* 93901

Project Location

County Monterey
City Salinas
Region
Cross Streets
Parcel No.
Township *Range* *Section* *Base*

Proximity to:

Highways 101, 68
Airports Salinas Municipal
Railways Southern Pacific
Waterways
Schools
Land Use Various

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Forest Land/Fire Hazard; Flood Plain/Flooding; Geologic/Seismic; Minerals; Noise; Public Services; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects; Drainage/Absorption

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Reviewing Agencies Resources Agency; Department of Conservation; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Food and Agriculture; Department of Fish and Game, Region 3; Native American Heritage Commission; State Lands Commission; State Clearinghouse; Caltrans, District 5; Department of Housing and Community Development; Caltrans, Division of Aeronautics; California Highway Patrol; Regional Water Quality Control Board, Region 3

Date Received 11/26/2001 *Start of Review* 11/26/2001 *End of Review* 12/26/2001

Note: Blanks in data fields result from insufficient information provided by lead agency.

NOP Distribution List

County: Monterey

SCH# 1987 - 12703

Resources Agency

- ■ **Resources Agency**
  Nadell Gayou
- ☐ **Dept. of Boating & Waterways**
  Bill Curry
- ☐ **California Coastal Commission**
  Elizabeth A. Fuchs
- ☒ **Dept. of Conservation**
  ~~Ken Trott~~
- ☐ **Dept. of Forestry & Fire Protection**
  Allen Robertson
- ☒ **Office of Historic Preservation**
  Hans Kreutzberg
- ■ **Dept of Parks & Recreation**
  Resource Mgmt. Division
- ☐ **Reclamation Board**
  Pam Bruner
- ☐ **S.F. Bay Conservation & Dev't. Comm.**
  Steve McAdam
- ☒ **Resources Agency**
  Nadell Gayou
  Dept. of Water Resources

Health & Welfare

- ☐ **Health & Welfare**
  Wayne Hubbard
  Dept. of Health/Drinking Water

Food & Agriculture

- ☒ **Food & Agriculture**
  Tad Bell
  Dept. of Food and Agriculture

Fish and Game

- ☐ **Dept. of Fish & Game**
  Scott Flint
  Environmental Services Division
- ☐ **Dept. of Fish & Game 1**
  Donald Koch
  Region 1
- ☐ **Dept. of Fish & Game 2**
  Banky Curtis
  Region 2
- ☒ **Dept. of Fish & Game 3**
  Robert Floerke
  Region 3
- ☐ **Dept. of Fish & Game 4**
  William Laudermilk
  Region 4
- ☐ **Dept. of Fish & Game 5**
  Don Chadwick
  Region 5, Habitat Conservation Program
- ☐ **Dept. of Fish & Game 6**
  Gabrina Gatchel
  Region 6, Habitat Conservation Program
- ☐ **Dept. of Fish & Game 6 I/M**
  Tammy Allen
  Region 6, Inyo/Mono, Habitat Conservation Program
- ☐ **Dept. of Fish & Game M**
  Tom Napoli
  Marine Region

Independent Commissions

- ☐ **California Energy Commission**
  Environmental Office
- ■ **Native American Heritage Comm.**
  Debbie Treadway
- ☐ **Public Utilities Commission**
  Andrew Barnsdale
- ■ **State Lands Commission**
  Betty Silva
- ☒ **Governor's Office of Planning & Research**
  State Clearinghouse Planner

(County)

- ☐ **Colorado River Board**
  Gerald R. Zimmerman
- ☐ **Tahoe Regional Planning Agency (TRPA)**
  Lyn Barnett
- ☐ **Office of Emergency Services**
  John Rowden, Manager
- ☐ **Delta Protection Commission**
  Debby Eddy
- ☐ **Santa Monica Mountains Conservancy**
  Paul Edelman

Dept. of Transportation

- ☐ **Dept. of Transportation 1**
  IGR/Planning
  District 1
- ☐ **Dept. of Transportation 2**
  Vicki Roe
  Local, Development Review, District 2
- ☐ **Dept. of Transportation 3**
  Jeff Pulverman
  District 3
- ☐ **Dept. of Transportation 4**
  Jean Finney
  District 4
- ☒ **Dept. of Transportation 5**
  Lawrence Newland
  District 5
- ☐ **Dept. of Transportation 6**
  Marc Birnbaum
  District 6
- ☐ **Dept. of Transportation 7**
  Stephen J. Buswell
  District 7
- ☐ **Dept. of Transportation 8**
  Mike Sim
  District 8
- ☐ **Dept. of Transportation 9**
  Caroline Yee for Kate Walton
  District 9
- ☐ **Dept. of Transportation 10**
  Chris Sayre
  District 10
- ☐ **Dept. of Transportation 11**
  Lou Salazar
  District 11
- ☐ **Dept. of Transportation 12**
  Aileen Kennedy
  District 12

Business, Trans & Housing

- ☒ **Housing & Community Development**
  Cathy Creswell
  Housing Policy Division
- ☒ **Caltrans - Division of Aeronautics**
  Sandy Hesnard
- ☒ **California Highway Patrol**
  Lt. Julie Page
  Office of Special Projects
- ☐ **Dept. of Transportation**
  Ron Helgeson
  Caltrans - Planning
- ☐ **Dept. of General Services**
  Robert Sleppy
  Environmental Services Section

Air Resources Board

- ☐ Airport Projects
  Jim Lerner
- ☐ Transportation Projects
  Ann Geraghty
- ☐ Industrial Projects
  Mike Tollstrup

- ☐ **California Integrated Waste Management Board**
  Sue O'Leary
- ☐ **State Water Resources Control Board**
  Diane Edwards
  Division of Clean Water Programs
- ☐ **State Water Resources Control Board**
  Greg Frantz
  Division of Water Quality
- ☐ **State Water Resouces Control Board**
  Mike Falkenstein
  Division of Water Rights
- ☐ **Dept. of Toxic Substances Control**
  CEQA Tracking Center

Regional Water Quality Control Board (RWQCB)

- ☐ **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- ☐ **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- ☒ **RWQCB 3**
  Central Coast Region (3)
- ☐ **RWQCB 4**
  Jonathan Bishop
  Los Angeles Region (4)
- ☐ **RWQCB 5S**
  Central Valley Region (5)
  - ☐ **RWQCB 5F**
    Central Valley Region (5)
    Fresno Branch Office
  - ☐ **RWQCB 5R**
    Central Valley Region (5)
    Redding Branch Office
- ☐ **RWQCB 6**
  Lahontan Region (6)
  - ☐ **RWQCB 6V**
    Lahontan Region (6)
    Victorville Branch Office
- ☐ **RWQCB 7**
  Colorado River Basin Region (7)
- ☐ **RWQCB 8**
  Santa Ana Region (8)
- ☐ **RWQCB 9**
  San Diego Region (9)

California Regional Water Quality Control Board
Central Coast Region

Winston H. Hickox
Secretary for
Environmental
Protection

Internet Address: http://www.swrcb.ca.gov/rwqcb3
81 Higuera Street, Suite 200, San Luis Obispo, California 93401-5427
Phone (805) 549-3147 • FAX (805) 543-0397

Gray Davis
Governor

December 19, 2001

Jenny Mahoney
City of Salinas
Department of Community Development
200 Lincoln Ave.
Salinas, CA 93901

Dear Ms. Mahoney:

CITY OF SALINAS GENERAL PLAN UPDATE; NOTICE OF PREPARATION; MONTEREY COUNTY

We appreciate the opportunity to review and comment on the Notice of Preparation (NOP) of the City of Salinas General Plan Update (GPU). We understand that the General Plan will establish overall development of the city, which includes an estimated net population increase of 62,800 persons, approximately 17,200 additional dwelling units, and an increase of 26.8 million square feet of non-residential building floor area. The GPU will consist of seven planning and design elements, with the most important being Land Use, Community Design, and Circulation Elements. We provide the following comments and voice some concerns regarding water quality.

Background
The Central Coast Regional Water Quality Control Board (Regional Board) protects California's Waters of the State in Monterey County. These waters include ocean waters, surface waters, ground waters, and wetlands. The Regional Board is responsible for administering regulations established by the Federal Clean Water Act and the California Water Code (Porter-Cologne Water Quality Control Act), which includes protecting "beneficial uses" of the waters.

Comments on "Hydrology and Water Quality" section of NOP
Much of the growth and improvements included in the GPU will involve constructing buildings, roads, parking lots, and other alterations to the land that typically result in decreased storm water infiltration, and increased storm water runoff volumes and velocities. Typically, Project Environmental Impact Reports (EIR's) and General Plans address flood hazards and increased flooding due to increased storm water runoff, but do not link increased runoff with water quality issues. Studies have shown that building roadways and other impervious structures over previously vegetated areas impact water quality in several ways. One is the loss of natural pollutant treatment provided as storm water infiltrates through soil and plants. Second, storm water flowing off of roads and other impervious areas tends to pick up urban pollutants (documented in Section 6217(g) of the Coastal Zone Act Reauthorization Amendment of 1990). Third, increasing the volume and velocity of base flow and peak flow, and altering the timing of peak flow runoff into water bodies (time of concentration) affects the receiving water body channels. Left unchecked, the hydrologic changes often cause increased erosion and subsequent sediment deposition downstream. Increased sediment and urban pollutants degrade water quality and beneficial uses, and must be mitigated. We require that the Program EIR reflect and address this concern, and that the General Plan include requirements for mitigation as outlined in this letter (see below).

Mitigation should address increases in the volume and velocity of base flow and peak flows, altered timing of peak flow runoff into water bodies (time of concentration), and increases in sediment, erosion and urban pollutants regardless of whether flooding is an issue. The GPU should implement development agreements that require post construction off-site runoff to be equal to pre-construction runoff for all projects.

To help meet this condition, pervious areas should be required in plan designs wherever possible. This may include requiring on-site retention and infiltration, and using permeable materials and vegetated areas in lieu of concrete or asphalt paving. Meeting pre-construction runoff values would address a multitude of water quality concerns, and would greatly aid the City in addressing storm water runoff issues. These issues include maintaining and improving storm water quality, and managing potential flood-waters. The City is currently required to monitor and manage storm water quality under the Phase 1 NPDES Storm Water Permit held with the State Water Resources Control Board. Permit requirements will continue into the foreseeable future. Without site-based infiltration, the increasing population and consequent City growth will result in increased sources of pollution and runoff volume, which the City will have to address. The Regional Board staff requires the Final EIR to address the issues of erosion, sedimentation, and urban pollutants entering into the water bodies that results from increased runoff regardless of flooding potential, and we suggest the best way to address the issue is in General Plan development requirements.

<u>General comments regarding Resource Management Plans, Open Space, and Carr Lake</u>

Carr Lake is actively used for agriculture, and also functions passively as a sedimentation and flood control basin. The importance of a sediment trap and flood basin cannot be underestimated in terms of water quality preservation and enhancement. The Regional Board staff urges City planners to include preservation of these functions in the GPU for Carr Lake and the tributary creeks feeding the lake. Preservation of the lake and adjacent riparian areas will also provide mitigation for the Biological and Cultural Resource Impacts described in the NOP. To have full effectiveness, preservation measures must dictate that the lake be a designated flood area, and as such be protected from all development. Furthermore, because much of the lake has been modified by agricultural practices, this would be a prime area for mitigation and restoration projects. It is also an area that the GPU and Program EIR should consider listing under the "Acquisition of property by purchase or eminent domain" implementation activities. Staff is aware that there are plans to use some of this area as a recreational park. Although this plan may help meet the need for flood control (depending on site design and management practices), it will not enhance or preserve existing biological and water quality resources. Parks typically have limited habitat types, and park management usually includes the use of pesticides and herbicides that have a detrimental effect on water quality. Park lawns, soccer fields and the like are not as effective as natural vegetation in catching and holding sediment, or slowing flood waters and allowing for infiltration. For these reasons, the Regional Board staff would not consider manicured parkland ideal for water quality or flood control in the Carr Lake or other riparian areas.

<u>General comments regarding floodplain development and creek setbacks</u>

One of the major factors in protecting water quality is preservation of floodplains, wetlands, creeks, and riparian corridors. When allowed to function naturally, floodplains, wetlands and riparian areas slow down floodwaters, decrease volumes of runoff (through infiltration), and improve water quality by filtering sediments and other pollutants. We strongly urge the development of a policy restricting filling (even in the 100 year flood plain), cutting, building and other changes that impact the function of these areas. Preserving these areas will improve storm water runoff, and minimize flooding and water pollution mitigation costs.

General comments regarding roadway layout

Roadway layout should be well planned with regard to not increasing storm water runoff velocities, channeling storm water runoff, and causing or aggravating erosion. We request that the paving and roadway layout require Urban Runoff Best Management Practices that increase local rainwater infiltration, decrease runoff velocities, and minimize inadvertent washing of roadway pollutants into storm drains.

Regional Board staff would be happy to provide project proponents with additional information regarding urban best management practices that address the concerns outlined in this letter. If you have any questions, please contact **Donette Dunaway at (805) 549-3698.**

Sincerely,

For Roger W. Briggs
Executive Officer

File: CEQA\Monterey County
Electronic file: S:\WB\Central Watershed\CEQA Docs\Mont. County\Saliinas General Plan update, NOP 12-5-01.doc

HOUSING
AUTHORITY
COUNTY OF MONTEREY

CENTRAL OFFICE:
123 RICO ST.
SALINAS, CA 93907
831-424-2892
831-649-1541
FAX 831-424-9153
TDD 831-754-2951

Jenny Mahoney
Senior Planner
City of Salinas
Department of Community Development
200 Lincoln Avenue
Salinas, Ca 93901

Re: Scope and Content of the Environmental Impact Report for the General Plan Update

Dear Ms. Mahoney:

This letter is in response to the City of Salinas November 20,2001 Notice of Preparation of Draft Program Environmental Impact Report for the City of Salinas General Plan Update. Within the Vision for the Future framework developed for guiding the General Plan, the Housing Authority of the County of Monterey requests the City of Salinas to consider an analysis and mitigation policies for the following potential impacts on housing and resources:

- Discussion of the impacts of concentration of low- income and minority households in the City and introduction of policies that will facilitate the integration of mixed income developments into the proposed new development within the City of Salinas.
- Analysis of water use and recommendation of polices and procedures to reduce water use in new development.
- Analysis of the need for additional open space and recreational resources when high density mixed use development is integrated into the City.
- Discussion of traffic and noise impacts, and recommendation of policies which further the use of alternative forms of transportation other than the automobile.
- Discussion of impacts on police and fire resources and policies that foster crime control through environmental design and community policing.

The Housing Authority of the County of Monterey has a long history of partnership with the City of Salinas and other communities in the County of Monterey. The agency is interested in General Plan policies which facilitate the development of a community and housing developments that have reduced concentrations of lower income households within a single census tract, and that provide mixed income housing opportunities, economic opportunities, recreational opportunities, in crime free environments, where people can live and work.

Sincerely,

James S. Nakashima
Executive Director
Housing Authority of the County of Monterey

ALISAL WATER CORPORATION

A California Corporation
dba ALCO WATER SERVICE

ͻert T. Adcock
ƚresident
(831) 424 - 0441 Phone

249 Williams Road
Salinas, CA 93905
(831) 424 - 0611 Fax

December 14, 2001

Jenny Mahoney, Senior Planner
City of Salinas Department of Community Development
200 Lincoln Avenue
Salinas, CA 93901

RE: Water Demand and Water Supply for New General Plan

Dear Ms. Mahoney,

I am in receipt of the enclosed letter from Cotton Bridges Associates regarding the Salinas General Plan Update and General Plan Program EIR. This letter requested our company to respond to two specific questions: To 1) indicate whether the projected water demand associated with the proposed project was included in our last Urban Water Management Plan; and 2) assess whether our total projected water supplies available during normal, single-dry, and multiple-dry water years as included in the 20-year projection contained in the Urban Water Management Plan will meet the projected water demand associated with the proposed project, in addition to the other existing and planned future uses under the jurisdiction of our agency.

The answer to the first question is yes. In our last Urban Water Management Plan, Alco Water Service projected water demand for approximately 20,000 additional service connections through the Year 2020. This demand by the Year 2020 was calculated to be approximately 3,379 MG per year. Our review of Table 1 in the Cotton Bridges letter shows that this proposed project has the potential for approximately 19,000 service connections. Therefore, our projected demand in our Urban Water Management Plan is even greater than what would be necessary to provide for this project through the Year 2020.

The answer to the second question is, again, yes. The utility's projected water supplies through the Year 2020 based on production capacity will be approximately 12,887 MG per year. The projected water demand by the Year 2020 will be 3,379 MG per year. This production capacity is nearly four times the projected water demand for the Year 2020. We have enclosed a copy of two Tables from our Urban Water Management Plan demonstrating projected supply and projected demand through the Year 2020.

If you have any questions or require additional information, please do not hesitate to contact me at (831) 424-0441.

Sincerely,

Thomas R. Adcock
Vice President

TRA/ams
enclosures

TABLE D
Alco Water Service
Annual Metered Water Demand 1993 to 2020
Customer Sectors in Million Gallons (MG)

Customer Sectors	1995	1996	1997	1998	1999	2000	2001*	2002*	2005*	2010*	2015*	2020*
Single Family Residential			789.7	834.3	919.8	937.9	1008.5	1035.5	1247.3	1644.1	1997.3	2350.2
Multi Family Residential**			369.9	369.9	412.6	414.3	436.4	455.3	511.9	606.3	700.7	795.1
Commercial/ Institutional			82.5	90.6	95.5	106.7	110.7	114.7	123.1	139.2	155.3	171.4
Irrigation			23	26.3	30.4	41.1	41.1	41.1	44.6	50.5	56.4	62.4
Totals	**1206.2**	**1210.1**	**1265.1**	**1321.1**	**1458.3**	**1500**	**1596.7**	**1646.6**	**1926.9**	**2440.1**	**2909.7**	**3379.1**

Please note: Prior to 1997, there was no separation of customer sectors.
* These are projected numbers for Years 2001 through 2020.
** Multi-family residential connections have historically been master-metered. All new connections in multi-family residential dwellings are now individually metered.

November 20, 2001

Tom Adcock
Alco Water Service
249 Williams Road
Salinas, CA 93905-2842

Subject: Water Agency Consultation for Salinas General Plan Update and General Plan Program EIR

Dear Mr. Adcock:

The City of Salinas is in the process of updating its General Plan and preparing a Program EIR for the General Plan update. The City of Salinas is notifying your agency of the proposed General Plan amendment with the attached materials: 1) a Notice of Preparation (NOP) for preparation of a Draft Environmental Impact Report for the proposed General Plan Update; 2) a copy of the Initial Study prepared for the project; and 3) a detailed Project Description.

Per CEQA Guidelines Section 15083.5 and Water Code Section 10910, we ask that your agency review the attached materials and: 1) indicate whether the projected water demand associated with the proposed project was included in your agency's last urban water management plan; and 2) assess whether your agency's total projected water supplies available during normal, single-dry, and multiple-dry water years as included in the 20-year projection contained in the urban water management plan will meet the projected water demand associated with the proposed project, in addition to the other existing and planned future uses under the jurisdiction of your agency.

As mandated by Water Code Section 10910 and CEQA Guidelines Section 15083.5, we ask that you submit your assessment to: Jenny Mahoney, Senior Planner, City of Salinas Department of Community Development, 200 Lincoln Avenue, Salinas, California 93901 *no later than 30 days after the date on which you receive this request.*

Should you have any questions regarding the attached materials please contact: Yara Fisher, Cotton/Bridges/Associates, at 858.625.0056, extension 13.

Sincerely,

Yara Fisher for

Jenny Mahoney, Senior Planner
City of Salinas

MONTEREY BAY
Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

AIR POLLUTION CONTROL OFFICER
Douglas Quetin

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

NOV 2001
Received
Com. Dev. Dept.

November 27, 2001

Jenny Mahoney
Senior Planner
City of Salinas
Department of Community Development
200 Lincoln Avenue
Salinas, CA 93901

SUBJECT: NOP FOR EIR FOR CITY OF SALINAS GENERAL PLAN UPDATE

Dear Ms. Mahoney:

Staff has reviewed the referenced document and has the following recommendations for the scope of work for the air quality analysis:

1. The District uses consistency with the Air Quality Management Plan for the Monterey Bay Region (AQMP) to determine a general plan's impact on regional air quality (ozone levels). The project level impact should be assessed by comparing the project's population with forecasts in the 2000 AQMP. The cumulative impact should be assessed by comparing population for all general plans within Monterey County with the population forecasts. The following data are needed to prepare this assessment: population at buildout of the general plan, estimate for time of buildout, and population forecasts in five year increments. AMBAG should be contacted to prepare the consistency determination.

2. If project <u>or</u> cumulative traffic would cause LOS to decline from D or better to E or F, dispersion modeling should be undertaken to determine if carbon monoxide concentrations would violate ambient air quality standards at sensitive receptor locations.

3. If the project might expose sensitive receptors in adjacent land uses to air quality problems such as odors or toxic air contaminants (e.g., diesel exhaust), the DEIR should include an assessment of these impacts.

4. Mitigation measures should be identified for any significant impacts on air quality. The EIR should quantify the emission reduction effectiveness of each measure, identify agencies responsible for implementation and monitoring, and conclude whether mitigation measures would reduce impacts below significance levels.

5. The DEIR should indicate that projects constructed pursuant to the General Plan could have impacts on air quality which will be addressed when projects are proposed. The District has established the following thresholds of significance for individual projects: 137 lb/day of VOC or NO_x, 82 lb/day of PM_{10}, 150 lb/day of SO_x, a significant decline in LOS, and a cancer risk greater than 10 incident per one million population.

The District's CEQA Air Quality Guidelines can be used to help prepare the air quality analysis. The Guidelines were recently amended, and an updated copy is available at the District's website - www.mbuapcd.org. Please do not hesitate to call if you have any questions.

Sincerely,

Janet Brennan

Janet Brennan
Supervising Planner
Planning and Air Monitoring Division

c: Nicolas Papadakis

LAFCO *of Monterey County*

LOCAL AGENCY FORMATION COMMISSION
P.O. BOX 1369
SALINAS, CA 93902
TELEPHONE (831) 754-5838
132 GABILAN STREET, SUITE 102
SALINAS, CA 93901
FAX (831) 754-5831

CATHERINE S. WEST
EXECUTIVE OFFICER

DEC 2001
Received
Com. Dev. Dept.

December 26, 2001

Ms. Jenny Mahoney, Senior Planner
City of Salinas
Department of Community Development
200 Lincoln Avenue
Salinas, CA 93901

Subject: Notice of Preparation for Draft Program Environmental Impact Report for the City of Salinas General Plan Update

Dear Ms. Mahoney:

Thank you for the opportunity to review and comment on the Notice of Preparation for the Draft Program Environmental Impact Report for the City of Salinas General Plan Update. Staff comments on the document are provided below. Any additional comments received from the Commission at their next meeting on January 28, 2002 will be forwarded to you.

The purpose of LAFCO is to encourage the orderly development and expansion of local agencies, the preservation of prime agricultural lands, and the efficient delivery of governmental services. LAFCO recognizes that providing housing for persons of all incomes is an important factor in promoting orderly development. LAFCO must also consider the timely availability of water supplies in the review of proposals. To accomplish its purpose, LAFCO is charged with completing municipal service reviews, updating spheres of influence, and considering boundary changes for cities and districts.

LAFCO would like to use the proposed Program EIR for the service review and sphere of influence update for the City of Salinas. It's possible that LAFCO, acting as a responsible agency, could use a tiered or supplemental EIR based on the Program EIR. By addressing the following items in the proposed EIR, the need for additional environmental review could be minimized.

1. The impacts from the loss of agricultural land: The soil types and productivity of agricultural lands should be identified and evaluated in the northeast area, the area

between Williams and Alisal Roads, and areas planned for exterior circulation routes. The EIR should identify and rate the soils in the planning area that are more valuable than others for agricultural production. The use of buffers and agricultural easements should be included as mitigation measures. LAFCO will use this information in its decision-making process to balance loss of farmland with the need for housing.

2. Growth impacts: The EIR should include the expected rate of growth in the planning area. This will determine the pace that services, roadways and utilities will be extended, and may affect how mitigation will be proposed. The EIR should evaluate the jobs/housing balance that would result from the proposed general plan update, as this would affect traffic, circulation and air quality impacts. The EIR should indicate how the infill development will be encouraged, and how affordable housing will be addressed as part of the housing element portion of the general plan.

3. Circulation impacts: The EIR should include a circulation system that will be adequate for planned growth and for transporting people from north to south around or through the City. Such a system may need the cooperation of other affected cities, the County, CalTrans and others, since it would attempt to solve regional problems as well as serve the needs of planned development. The EIR should analyze the potential growth-inducing impacts created by the circulation system, especially when routes may affect agricultural lands.

4. Water availability: The EIR should describe and evaluate the impacts on the groundwater basin caused by the planned development, including seawater intrusion, nitrate contamination and water availability. LAFCO policy encourages proposals that have minimal impact on the groundwater system.

5. The advantages and disadvantages of including adjacent developing areas to the planning area: The residential portion of Boronda and Bolsa Knolls were previously included in the City's sphere of influence. It may be advisable to retain these areas in the sphere since annexation could be successful within the next 20 years, or an extension of services from the City may be required. The Rancho San Juan area has not been included within the planning area. Although the County has been planning the development in this area, by agreement it is anticipated that the City would eventually annex the area.

6. Add LAFCO to the list of responsible agencies: It is likely that LAFCO will use this Program EIR as it reviews and completes a municipal services review and the sphere of influence update for the City. The EIR should describe the program EIR approach and discuss how it might be subsequently be used by responsible agencies.

7. City-County growth agreements: The EIR should include a description of the process that is required by law when spheres of influence are amended. The process essentially requires that a City and the County attempt to reach an agreement on future growth areas before an amendment or update to the sphere can be considered by LAFCO. This information would facilitate the use of this Program EIR by LAFCO for the City's sphere of influence update. A copy of this process is enclosed for your use.

Thank you for the opportunity to participate in this process. We look forward to reviewing the draft EIR. A copy of LAFCO's policies is enclosed for your information. Should you have any questions, please contact me at our new number 831-754-5838.

Sincerely,

Catherine S. West

Catherine S. West
Executive Officer

Enclosures

Cc: LAFCO Commissioners
Nick Chiulos, County of Monterey

LAFCO *of Monterey County*

LOCAL AGENCY FORMATION COMMISSION
P.O. Box 1369
Salinas, CA 93902
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CATHERINE S. WEST
Executive Officer

FEB 2002
Received
Com. Dev. Dept

January 30, 2002

Ms. Jenny Mahoney, Senior Planner
City of Salinas
Department of Community Development
200 Lincoln Avenue
Salinas, CA 93901

Subject: Notice of Preparation for Draft Program Environmental Impact Report (EIR) for City of Salinas General Plan Update

Dear Ms. Mahoney:

On January 28, 2002, the Local Agency Formation Commission approved the letter sent to you on the General Plan EIR.

The Commission had an additional clarification on the first item in our letter regarding agricultural land and circulation patterns: options for realigning proposed by-pass or other transportation routes on prime farmland should be evaluated in the EIR as a way to minimize potential impacts and loss of agricultural land.

Any consideration for including this information in the EIR will be appreciated. Thank you.

Sincerely,

Catherine S West

Catherine S. West
LAFCO Executive Officer

LAFCO of Monterey County

LOCAL AGENCY FORMATION COMMISSION
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CATHERINE S. WEST
EXECUTIVE OFFICER

December 26, 2001

Ms. Jenny Mahoney, Senior Planner
City of Salinas
Department of Community Development
200 Lincoln Avenue
Salinas, CA 93901

Subject: Notice of Preparation for Draft Program Environmental Impact Report for the City of Salinas General Plan Update

Dear Ms. Mahoney:

Thank you for the opportunity to review and comment on the Notice of Preparation for the Draft Program Environmental Impact Report for the City of Salinas General Plan Update. Staff comments on the document are provided below. Any additional comments received from the Commission at their next meeting on January 28, 2002 will be forwarded to you.

The purpose of LAFCO is to encourage the orderly development and expansion of local agencies, the preservation of prime agricultural lands, and the efficient delivery of governmental services. LAFCO recognizes that providing housing for persons of all incomes is an important factor in promoting orderly development. LAFCO must also consider the timely availability of water supplies in the review of proposals. To accomplish its purpose, LAFCO is charged with completing municipal service reviews, updating spheres of influence, and considering boundary changes for cities and districts.

LAFCO would like to use the proposed Program EIR for the service review and sphere of influence update for the City of Salinas. It's possible that LAFCO, acting as a responsible agency, could use a tiered or supplemental EIR based on the Program EIR. By addressing the following items in the proposed EIR, the need for additional environmental review could be minimized.

1. The impacts from the loss of agricultural land: The soil types and productivity of agricultural lands should be identified and evaluated in the northeast area, the area

between Williams and Alisal Roads, and areas planned for exterior circulation routes. The EIR should identify and rate the soils in the planning area that are more valuable than others for agricultural production. The use of buffers and agricultural easements should be included as mitigation measures. LAFCO will use this information in its decision-making process to balance loss of farmland with the need for housing.

2. Growth impacts: The EIR should include the expected rate of growth in the planning area. This will determine the pace that services, roadways and utilities will be extended, and may affect how mitigation will be proposed. The EIR should evaluate the jobs/housing balance that would result from the proposed general plan update, as this would affect traffic, circulation and air quality impacts. The EIR should indicate how the infill development will be encouraged, and how affordable housing will be addressed as part of the housing element portion of the general plan.

3. Circulation impacts: The EIR should include a circulation system that will be adequate for planned growth and for transporting people from north to south around or through the City. Such a system may need the cooperation of other affected cities, the County, CalTrans and others, since it would attempt to solve regional problems as well as serve the needs of planned development. The EIR should analyze the potential growth-inducing impacts created by the circulation system, especially when routes may affect agricultural lands.

4. Water availability: The EIR should describe and evaluate the impacts on the groundwater basin caused by the planned development, including seawater intrusion, nitrate contamination and water availability. LAFCO policy encourages proposals that have minimal impact on the groundwater system.

5. The advantages and disadvantages of including adjacent developing areas to the planning area: The residential portion of Boronda and Bolsa Knolls were previously included in the City's sphere of influence. It may be advisable to retain these areas in the sphere since annexation could be successful within the next 20 years, or an extension of services from the City may be required. The Rancho San Juan area has not been included within the planning area. Although the County has been planning the development in this area, by agreement it is anticipated that the City would eventually annex the area.

6. Add LAFCO to the list of responsible agencies: It is likely that LAFCO will use this Program EIR as it reviews and completes a municipal services review and the sphere of influence update for the City. The EIR should describe the program EIR approach and discuss how it might be subsequently be used by responsible agencies.

7. City-County growth agreements: The EIR should include a description of the process that is required by law when spheres of influence are amended. The process essentially requires that a City and the County attempt to reach an agreement on future growth areas before an amendment or update to the sphere can be considered by LAFCO. This information would facilitate the use of this Program EIR by LAFCO for the City's sphere of influence update. A copy of this process is enclosed for your use.

Thank you for the opportunity to participate in this process. We look forward to reviewing the draft EIR. A copy of LAFCO's policies is enclosed for your information. Should you have any questions, please contact me at our new number 831-754-5838.

Sincerely,

Catherine S. West

Catherine S. West
Executive Officer

Enclosures

Cc: LAFCO Commissioners
Nick Chiulos, County of Monterey

LAFCO *of Monterey County*

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CATHERINE S. WEST
EXECUTIVE OFFICER

STANDARDS FOR THE EVALUATION OF PROPOSALS

Introduction

The Monterey County Local Agency Formation Commission (LAFCO) operates pursuant to the Cortese-Knox Local Government Reorganization Act of 1985 (California Government Code, Section 56000 et seq.). Among the purposes of the Commission are the discouragement of urban sprawl and the encouragement of the orderly formation and development of local agencies based upon local circumstances and conditions.

State law provides that the Commission may adopt standards for the evaluation of proposals. The primary purpose of standards is to identify issues and requirements associated with boundary change proposals to promote achievement of LAFCO goals and objectives. Standards also promote a rational and consistent process of review, which can be applied to all proposals. It should be noted that no one standard is of paramount importance nor is universally absolute. Because local circumstances and conditions vary, the Commission must consider the facts in evidence as they relate to all standards.

California Government Code Section 56375 provides that standards may be based on any of the factors enumerated in Section 56841 as follows:

a. Population, population density; land area and land use; per capita assessed valuation; topography, natural boundaries, and drainage basins; proximity to other populated areas; the likelihood of significant growth in the area and in adjacent incorporated and unincorporated areas during the next ten years.

b. Need for organized community services; the present cost and adequacy of governmental services and controls in the area; probable future needs for those services and controls; probable effect of the proposed incorporation, formation, annexation, or exclusion and of alternative courses of action on the cost and adequacy of services and controls in the area and adjacent areas. "Services," as used in this subdivision, refers to governmental services whether or not the services are services which would be provided by local agencies subject to this division and includes the public facilities necessary to provide those services.

c. The effect of the proposed action and of alternative actions on adjacent areas, on mutual social and economic interest, and on the local governmental structure of the County.

d. The conformity of both the proposal and its anticipated effects with both the adopted Commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities set forth in Section 56377.

e. The effect of the proposal on maintaining the physical and economic integrity of agricultural land, as defined by Section 56016.

f. The definiteness and certainty of the boundaries of the territory, the non-conformance of proposed boundaries with lines of assessment or ownership, the creation of islands or corridors of unincorporated territory, and other similar matters affecting the proposed boundaries.

g. Consistency with city or county general and specific plans.

h. The sphere of influence of any local agency which may be applicable to the proposal being reviewed.

i. The comments of any affected local agency.

The following report lists the Monterey County Local Agency Formation Commission's Standards for the Evaluation of Proposals. The standards have been organized to correspond to the major policies of the Commission including Boundaries, Duplication of Service Functions, Conformity with Planning Documents, Spheres of Influence, Environmental Impacts, Economics, Services, Phasing, Open Space, and Agricultural Land. The citation following each standard references the related State factor.

Determination of Boundaries

1. Definite and certain maps and legal descriptions must be filed as part of an application for a boundary change proposal. All maps and legal descriptions must comply with the following LAFCO and State Board of Equalization requirements (Section 56841f).

   Map:

   a. Every map shall bear a north point, graphic scale, date, title, or short term designation and the name(s) of the affected agency or agencies.

   b. Every map must clearly indicate all existing streets, roads, and highways within and adjacent to the subject territory, together with the current names of the thoroughfares.

   c. Maps must not be drawn on paper less than 8 1/2" by 11" or larger than 24" by 36." One map, 8 1/2" by 11" must be submitted.

   d. Every map shall include a regional location vicinity map showing its relationship to the local agency to which annexation to or detachment from is proposed. The boundaries of the existing district or city (if applicable) and the proposed boundary must be distinctively shown without obliterating any essential geographic or political features.

   e. The point of beginning of the legal description must be shown on the map. The boundaries of the subject territory must be distinctively shown on the map without obliterating any essential geographic or political features. The use of yellow lines to highlight the boundaries is urged, as the color photographs a light gray.

   f. All maps must be prepared by a registered civil engineer or licensed land surveyor. Rough sketches of maps or plans will not be accepted.

   g. The computed or estimated acreage shall be set forth in the legal description or on the map.

h. Bearings and distances must be shown on all lines. If the scale of the map is such that it is impractical to letter adjacent to or near the line, then a table may be used and the course designated by a number or a series of inclusive numbers. The table should appear on the same sheet as the map.

Legal Description

a. The description must be headed with the date, title or short-term designation of the proposal, and the name of the affected agency or agencies.

b. Every description must be self-sufficient within itself and without the necessity of reference to any extraneous document. When a description refers to a deed of record, the deed should be used only as a secondary call.

c. When writing a metes and bounds description of a contiguous annexation, all details or the contiguous portion(s) of the boundary should be omitted. The junction points between the proposed boundary and the existing boundary must be clearly established.

d. A description making reference only to a subdivision or a lot within a subdivision or similar references without actually describing the perimeter boundary of the subject area is not acceptable.

e. The description must describe only the subject area. Descriptions of larger areas with exceptions are not acceptable unless the exception is an "island" totally surrounded by land proposed for annexation.

f. A specific parcel description in sectionalized land (e.g. the SW1/4 of Section 22, T1N, R1W) is permissible without a metes and bounds description of the perimeter boundary.

2. To the greatest possible extent, boundaries should follow existing political boundaries and natural or man-made features such as rivers, lakes, railroad tracks, and freeways. Where boundaries do not meet this standard, the proponent shall justify the reasons for non-conformance (Section 56841 a, f).

3. Boundaries should not be drawn so as to create an island, corridor, or strip either within the proposed territory or immediately adjacent to it. Where such an island, corridor, or strip is created , the proponent shall justify the reasons for non-conformance with this standard (Section 56841 d).

4. Whenever practicable, boundary lines of areas proposed to be annexed to cities and/or districts shall be located so that all streets and rights-of-way will be placed within the same jurisdiction as the properties which abut thereon and/or for the benefit of which such streets and rights-of-way are intended (Section 56841 d).

5. The creation of boundaries that divide assessment parcels should be avoided whenever possible. Where such division occurs, the proponents shall justify to the Commission the necessity for such division (Section 56841 d).

6. Boundaries should avoid dividing an existing identifiable community, commercial district, or any other area having social or economic homogeneity. Where such division occurs, the proponents shall justify the reasons for non-conformance to this standard (Section 56841 c).

7. The following guidelines related to road right-of-way apply to all proposals submitted to the Commission (Section 56841 f).

   a. The following should not be allowed:

      (1) City limits which include a portion of the road right-of-way.

      (2) Road islands of County maintained roads.

      (3) Islands of road caused by annexation on both sides.

      (4) Strip annexation of roads.

   *b. In the following cases where the road is the boundary and is a major County arterial, the street or road should be retained by the County. These roads would not have direct access from the property:

      (1) Roads which carry through traffic.

      (2) Planned development by developer or city which provides limited access and protects the capacity of the road.

   *Note: Each case should be considered on its own merit.

   c. The following should be annexed to the city. These roads would have direct access to the annexing property and would serve the residents of the property:

      (1) Minor or local roads.

      (2) When the street will be used for the city sewer lines, water lines, or storm drains.

      (3) Piece-meal development by developer causing difficult coordination between two or more agencies.

      (4) Where the annexation will complicate drainage or traffic control.

8. Where feasible, city and related district boundary changes should occur concurrently to avoid an irregular pattern of boundaries (Section 56841 b).

9. Should the Commission modify the boundaries of a proposal, LAFCO may condition the proposal on the proponent preparing a new boundary description which conforms with LAFCO and State Board of Equalization requirements (Section 56841 f).

10. Boundaries should reasonably include all territory which would reasonably benefit from agency services (Section 56841 b).

Duplication of Authority to Perform Similar Functions

1. Proposals, where feasible, should minimize the number of local agencies and promote the use of multi-purpose agencies (Section 56841 b, c).

2. The effect of the approval of a proposal which would result in two or more districts or a city and a district possessing any common territory, the authority to perform the same or similar functions shall be considered by the Commission. The views of the governing body of the city or special district possessing authority to perform the same or similar function in the subject territory should be made known to the Commission. Proponents must justify the need for boundary change proposals which result in duplication of authority to perform similar functions (Section 56841 b, c).

Conformance with City or County General and Specific Plans

1. Each proposal should be consistent with the appropriate city or county general and specific plans. Where the proposal does not abide by these plans, the proponent shall specify the reasons for plan non-conformance. (Section 56841 g).

2. Pursuant to Section 56375 of the Government Code, for proposals involving city annexations, the LAFCO Executive Officer shall not file a Certificate of Filing, which acknowledges that an application is complete, until the city has completed a prezoning process for the subject property in a manner consistent with the city's general or specific plan (Section 56841 g).

Spheres of Influence

1. Proposals shall be consistent with the spheres of influence for the local agencies affected by those determinations (Section 56377.5 and 56841 h).

2. In the case of agency formations, the Commission shall determine a sphere of influence within one year from the effective date of the proposal (Section 56841 h).

3. With the exception of agency formations, the Commission shall adopt a sphere for affected agencies prior to consideration of related boundary change proposals (Section 56841 h).

4. When a proposal is inconsistent with the adopted sphere of influence, the applicant shall justify reasons for amending the sphere of influence. An annexation application for land outside an adopted sphere of influence may be considered concurrently with a request for amendment to the sphere of influence (Section 56841 h).

5. Proposals involving changes of organization or reorganization affecting city boundaries shall comply with the Urban Service Area and Urban Transition Area designations. An Urban Service Area consists of existing developed and undeveloped land within an agency's sphere of influence,

which is now served by existing urban facilities, utilities, and services or is proposed to be served within five years. An Urban Transition Area is an area within the sphere of influence boundaries of a city which is not programmed for urban facilities or utility extensions within the next five years. The Urban Transition Area will most likely be used for urban expansion within 5 to 20 years (Section 56841 h).

6. Pursuant to Government Code Section 56375 (a) (2), the Commission shall not have the power to disapprove an annexation to a city, initiated by resolution, of contiguous territory which the Commission finds is locate within an Urban Service Area delineated and adopted by the Commission, which is not prime agricultural land, as defined by Section 56064, and is designated for urban growth by the general plan of the annexing city (Section 56841 h).

Environmental Impact Assessment

1. In January 1975, in the Bozung Case, the California Supreme Court held that LAFCOs are subject to the terms of the California Environmental Quality Act (CEQA) and the regulations of the California Resource Agency, which establishes the guidelines for its implementation. All environmental factors introduced by the proposal shall be considered as outlined in the "Monterey County Local Agency Formation Commission Guidelines for Implementation of the California Environmental Quality Act" and CEQA.

2. The potential environmental impacts of proposals involving changes of organization or reorganization shall be reviewed by LAFCO environmental staff and the appropriate environmental determination shall be considered by the Commission in accordance with the LAFCO Regulations and Procedures for the Implementation of the California Environmental Quality Act of 1970.

Economics, Service Delivery, and Development Patterns

1. If a proposal is for the formation of a new agency, the application shall include a service plan demonstrating the economic feasibility of the proposed formation (Section 56841 a, b, c).

2. The Commission shall discourage proposals that would have adverse financial impacts on the provision of governmental services or would create a relatively low revenue base in relationship to the cost of affected services. Applications shall describe related service and financial impacts (including revenues and expenditures) on the County, cities, and/or special districts and provide feasible measures which would mitigate such adverse impacts (Section 56841 a, b, c).

3. Applications must address current and ultimate service needs as established by the appropriate land use plans and prezoning. Proposals shall not be approved unless a demonstrated need for additional service exists or will soon exist. In reviewing boundary change proposals, the Commission shall consider alternative government structure options which may be more appropriate in light of the demonstrated need for service. The formation of or annexation to a single governmental agency, rather than several limited purpose agencies, shall be encouraged when possible (Section 56841 a, b).

4. Applications must indicate that the affected agencies have the capability to provide service. Territory shall be annexed to a city or special district only if such agency has or soon will have the capability to provide service (Section 56841 b).

5. Whenever a local agency submits a resolution of application for a change of organization or reorganization, the local agency shall submit with the resolution of application a plan for providing services within the affected territory. The plan for providing services shall include all of the following information (Section 56653):

   a. An enumeration and description of the services to be extended to the affected territory.

   b. The level and range of those services.

   c. An indication of when those services can feasibly be extended to the affected territory.

   d. An indication of any improvement or upgrading of structures, roads, sewer or water facilities, or other conditions the local agency would impose or require within the affected territory if the change of organization or reorganization is completed.

   e. Any conditions which would be imposed or required within the affected territory such as, but not limited to, improvement or upgrading of structures, roads, and sewer or water facilities.

   f. A description of how such services and improvements will be financed (Section 56653).

   A plan for providing services may consist of:

   a. A master plan for providing services throughout all or a portion of a city sphere of influence for use in evaluating all proposals affecting the area covered in the master plan.

   b. A proposal-specific supplement which updates and/or provides a higher level of detail than is contained within the master plan for services. Such supplement may include by reference or in summary form those pertinent sections of the master plan for services which remain valid. The supplement need discuss in detail only that information which is not current or discussed in sufficient detail in the master plan for services.

6. The Commission discourages proposals which will facilitate development that is not in the public interest due to topography, isolation from existing developments, premature intrusion of urban-type developments into a predominantly agricultural area, or other pertinent economic or social reason (Section 56841 a).

7. The Commission shall consider the testimony from all potentially affected agencies or individuals in reviewing boundary change proposals. Proposals submitted by resolution of application shall include information indicating that landowners in the affected area support the proposal (Section 56841 i).

8. An application for incorporation of a new city shall be supplemented by sufficient information to enable the Commission to determine (Section 56841 a,b,c):

    a. The long-term fiscal feasibility of the new city. A five-year service plan including revenue projections shall be required of all incorporation proposals.

    b. The existing and projected population base in the affected area warrants urban-type services.

    c. The service and financial impacts on all potentially affected agencies, including existing cities, districts, and the County.

    d. The proposal territory includes the entire area that would reasonably benefit from city services and would not logically be more appropriate for annexation to an existing city.

9. A city application for annexation of an unincorporated island without an election shall, in addition to the plan for providing services, be supplemented by sufficient information to enable the Commission to determine within the affected territory:

    a. The total acreage of the unincorporated island and the boundaries of all cities and/or counties and, if applicable, the Pacific Ocean, which border thereon.

    b. The presence or absence of prime agricultural land as defined in Sections 56064 of the Cortese-Knox Local Government Reorganization Act.

    c. The availability of public utility services.

    d. The presence of public improvements.

    e. The presence or absence of physical improvements upon each parcel.

    f. The benefits from such annexation or the benefits now being received from the annexing city.

<u>Phasing</u>

1. The Commission, in furtherance of its objectives of preserving prime agricultural land, containing urban sprawl, and in providing a reasonable assurance of a city/district's ability to provide services shall consider the appropriateness of phasing annexation proposals which include territory that is not within a city/district's urban service area and has an expected build-out over a period longer than five to seven years (Section 56841 a, b, e).

2. Change of organization and reorganization proposals which are totally within a city or district's adopted urban service area shall not be considered appropriate for phasing. Urban service areas are, by definition, territory expected to be developed/serviced in the next five years (Section 56841 a, b, c).

3. Proposals which contain territory which is not within a city or district's adopted urban service area and have an expected build-out extending beyond a five- to seven-year period may be considered appropriate for phasing. For the purpose of this policy, "phasing" shall be defined as a planned incremental approval of a project and "building-out" shall be interpreted as 70 to 80 percent developed. When an exception from this policy is desired, the proponent shall justify to the Commission the reasons why phasing is not appropriate. Included within the justification for exception, the proponent shall demonstrate the jurisdiction's ability to provide necessary public services (Section 56841 a, b, e).

Open Space and Agricultural Land

1. This Commission, through its actions, desires to maintain the physical and economic integrity of land in an agricultural preserve as may be established by either the Board of Supervisors of Monterey County or a city council within the County (Section 56841 e).

2. This Commission will attempt to guide the provision of governmental services and development to areas other than those classified as prime agricultural land as defined in Section 56064 of the Government Code, except where such development would promote the planned, orderly, and efficient development of that area (Sections 56377 a and 56841 e).

3. This Commission encourages and will assist to implement the development of existing vacant or non-prime agricultural land for urban uses within an agency's existing jurisdiction or within an agency's sphere of influence before it will consider with favor or will approve any proposal which would allow for or lead to the development of existing open space land for non-open space uses which are outside of the agency's existing jurisdiction or outside of an agency's existing sphere of influence (Section 56377 b and 56841 e).

4. It is the policy of this Commission to encourage and to seek to provide for planned, well-ordered, efficient urban development patterns while at the same time remaining cognizant of the need to give appropriate consideration to the preservation of open space land within such patterns (Section 56300).

5. In determining whether a boundary change proposal may affect prime land, the Commission shall apply the definition of "prime agricultural land" established under the Cortese-Knox Local Government Reorganization Act Section 56064.

6. Boundary change proposals which would allow or likely lead to the conversion of prime agricultural land or other open space land to other than open space uses shall be discouraged by the Commission unless such an action would promote the planned, orderly, efficient development of an area, or the affected land use planning jurisdiction has accomplished the following:

a. Identified within its sphere of influence all "prime agricultural land" as defined under Government Code Section 56064.

b. Demonstrated to LAFCO that effective measures have been adopted to preserve for agricultural use prime agricultural land identified in (a). Such measures may include, but not be limited to, establishing agricultural preserves pursuant to the California Land Conservation Act; designating land for agricultural or other open space uses on that jurisdiction's general plan, adopted growth management plan, or applicable specific plan; adopting an agricultural element to its general plan; and undertaking public acquisition of prime agricultural land for the purpose of leasing back such land for agricultural use.

c. Prezoned pursuant to Government Code Section 56375 (a) (2), both territory within the agency's general planning area to be maintained for agricultural use and also territory within the annexation area to indicate anticipated level of development.

7. In reviewing a proposal which will lead to the conversion of agricultural or open space land to urban uses, the Commission will consider the following criteria to determine whether the proposed action would (a) adversely affect the agricultural resources of the community, or (b) not promote the planned, orderly, efficient development of an area:

   a. The agricultural significance of the proposal area relative to other agricultural land in the region (soil, climate, and water factors).

   b. The use value of the proposal area and surrounding parcels.

   c. Determination as to whether any of the proposal area is designated for agricultural preservation by adopted local plans, including Local Coastal Plans, the County General Plan, Land Use and Open Space Element, and Growth Management Policies.

   d. Determination of:

      (1) Whether pubic facilities would be extended through or adjacent to any other agricultural land to provide services to the development anticipated on the proposal property.

      (2) Whether the proposal area is adjacent to or surrounded by existing urban or residential development.

      (3) Whether surrounding parcels may be expected to develop to urban uses within the next five years.

      (4) Whether natural or man-made barriers would serve to buffer the proposal area from existing urban uses.

8. Government Code Section 51243.5 provides that the Clerk of the Board of Supervisors shall give written notice to any city within the County of its intention to consider adoption of a Williamson Act contract which includes land within one mile of the exterior boundaries of that city. Such notice shall be given at least 30 days prior to the time the Board of Supervisors intends to consider the execution of such a contract. If

such city files with the Local Agency Formation Commission a resolution protesting the execution of a contract which includes land within one mile of the exterior boundaries of the city, and the Commission, following a hearing, upholds the protest upon a finding that the contract is inconsistent with the publicly desirable future use and control of the land in question, then should the Board of Supervisors execute such a contract, the city shall have the option provided in subdivision (b) of Section 51243 of not succeeding to the contract upon annexation of the land to the city.

9. Applications of protest to the establishment of a Williamson Act contract shall include the following information which is necessary for the Commission to determine that the contract is inconsistent with the publicly desirable future use and control of the land in question:

   a. A map showing the location of the contract in relation to the adopted sphere of influence of the protesting city.

   b. A summary of the County and protesting city general or specific land use plan designations and policies for the proposed contract area and surrounding territory.

   c. An analysis of the economic feasibility of the current and future agricultural operations in the proposed contract area and surrounding territory.

<u>Groundwater Standards</u>

<u>Informational Requirements</u>

1. The Commission shall encourage the Monterey County Water Resources Agency, the Pajaro Valley Water Management Agency, and the Monterey Peninsula Water Management District to complete water management plans, develop or revise allocation of water supply as necessary, and promote County-wide standards. The LAFCO standards shall be reviewed periodically to reflect changes in information and current water management policy.

2. In considering a proposal which may significantly impact the groundwater basin, as documented by the Lead Agency pursuant to the California Environmental Quality Act (CEQA), the Commission shall review the following information. This information can be submitted to the Commission in an environmental document or as a part of the LAFCO application.

   a) The projected water demand of the proposed project based on guidelines provided by the appropriate water resources agency.

   b) The existing water use and historical water use over the past five years.

   c) A description of the existing water system including system capacity serving the site.

   d) A description of proposed water system improvements.

e) A description of water conservation or reclamation improvements that are to be incorporated into the project.

f) An analysis of the impact that proposed water usage will have on the groundwater basin with respect to water quantity and quality, including cumulative impacts.

g) Evidence of consultation with the appropriate water agency. The agency shall be consulted at the earliest stage of the process, so that applicable recommendations can be included in the environmental document.

h) A description of water conservation measures currently in use and planned for use on the site such as drought tolerant landscaping, water-saving irrigation systems, installation of low-flow plumbing fixtures, retrofitting of plumbing fixtures with low-flow devices, and compliance with local ordinances.

i) A description of how the proposed project complies with adopted water allocation plans.

j) A description of those proposals where the agency has achieved water savings or where new water sources have been developed that will off-set increases in water use on the project site that would be caused by the proposal.

k) A description of how the proposal would contribute to any cumulative adverse impact on the groundwater basin.

l) A description of those boundary change proposals that, when considered individually and after taking into account all mitigation measures to be implemented with the project, still cause a significant adverse impact on the groundwater basin.

3. Any proposal considered by the Commission that uses water will be referred to the Monterey County Water Resources Agency, the Pajaro Valley Water Management Agency, Monterey Peninsula Water Management District, or any other affected water agency. Recommendations of the agencies will be considered by the Commission and, where appropriate, should be incorporated into the project design prior to approval of the boundary change proposal.

4. The Commission recognizes that water usage will vary due to soil type, location of aquifer, characteristics of aquifer, and type of project. Each project must be reviewed on a case-by-case basis.

5. Should an agency adopt similar or more restrictive informational requirements, the LAFCO informational Standard Nos. 1 through 5 will no longer apply.

Policy Statements

6. The Commission will encourage boundary change proposals involving projects that use reclaimed wastewater, minimize nitrate contamination, and provide beneficial use of storm waters.

7. The Commission will encourage proposals which have incorporated water conservation measures. Water conservation measures include drought tolerant landscaping, water-saving irrigation systems, installation of low-flow plumbing fixtures, retrofitting of plumbing fixtures with low-flow devices, and compliance with local ordinances.

8. The Commission will encourage those proposals which comply with adopted water allocation plans as established by applicable cities or water management agencies.

9. The Commission will encourage those proposals where the affected jurisdiction has achieved water savings or new water sources elsewhere that will off-set increases in water use in the project site that would be caused by the proposal.

10. The Commission will discourage those proposals which contribute to the cumulative adverse impact on the groundwater basin unless it can be found that the proposal promotes the planned and orderly development of the area.

11. The Commission will discourage those boundary change proposals which, when considered individually and after taking into account all mitigation measures to be implemented with the project, still cause a significant adverse impact on the groundwater basin.

LOCAL AGENCY FORMATION COMMISSION
(LAFCO)
MONTEREY COUNTY

SPHERE OF INFLUENCE POLICIES AND CRITERIA

JANUARY 1, 1989

I. LEGISLATIVE AUTHORITY

The State Legislature has provided Local Agency Formation Commissions (LAFCO's) with the following directions in the preparation of spheres of influence:

1. "Among the purposes of a Local Agency Formation Commission are the discouragement of urban sprawl and the encouragement of the orderly formation and development of local governmental agencies based upon local conditions and circumstances. One of the objects of the Local Agency Formation Commission is to make studies and to obtain and furnish information which will contribute to the logical and reasonable development of local governmental agencies so as to advantageously provide for the present and future needs of each County and its communities..."

2. "In order to carry out its purposes and responsibilities for planning and shaping the logical and orderly development and coordination of local governmental agencies so as to advantageously provide for the present and future needs of the County and its communities, the Local Agency Formation Commission shall develop and determine the sphere of influence of each governmental agency within the County. As used in this section, "sphere of influence" means a plan for the probable ultimate physical boundaries and service area of a local governmental agency. In determining the sphere of influence of each local governmental agency, the Commission shall consider and prepare a written statement of its determinations with respect to each of the following:

   a. The present and planned land uses in the area, including agricultural and open space lands.

   b. The present and probable need for public facilities and services in the area.

   c. The present capacity of public facilities and the adequacy of public services which the agency provides or is authorized to provide.

   d. The existence of any social or economic communities of interest in the area if the Commission determines that they are relevant to the agency."

3. Every determination made by a Commission involving proposals for changes of organization or reorganization shall be consistent with the spheres of influence of the local agencies affected by those determinations.

4. The Commission may recommend governmental reorganizations to particular agencies in the County, using spheres of influence as the basis for such recommendations."

II. DEFINITIONS

1. Agricultural Lands: Land currently used for the purpose of producing an agricultural commodity for commercial purposes, land left fallow under a crop rotational program, or land enrolled in an agricultural subsidy or set-aside program (Government Code Section 56016).

2. Agricultural Preserve: Lands subject to an existing land conservation agreement established pursuant to the California Land Conservation Act of 1965 (the Williamson Act, Government Code Section 51200 et seq.).

3. County: Monterey County.

4. Essential Services: Those basic services necessary to protect the health, safety, and general well-being of a community, including but not limited to police, fire, water, sanitation, etc.

5. General Purpose Government: A City or County government.

6. LAFCO: Monterey County Local Agency Formation Commission.

7. Local Agency: A City or special district.

8. Open Space Lands: Parcel or area of land or water which is substantially unimproved and devoted to open space use as defined in Government Code Section 65560.

9. Planning Concern Area: An area established by the Local Agency Formation Commission with the assistance of the appropriate cities and the County designating a general area of concern of a city for which planning decisions and other governmental actions of the County may have an impact on the city. A "Planning Concern Area" will usually be larger than the adopted sphere of influence boundary and may take into consideration the planning area of the city as identified within their local general plans.

10. Prime Agricultural Land: (A) Land which qualifies for rating as Class I or II in the United States Soil Conservation land-use capacity classification; (B) land which qualifies for rating 80-100 in the Storie Index Rating; (C) land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre; (D) land planted with fruit or nut-bearing trees, vines, bushes, or crops which have a non-bearing period of less than five years and which will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars ($200) per acre for three of the previous five calendar years; (F) land which is used to maintain livestock for commercial purposes. (Government Code Section 56064).

11. Regional Agencies: Association of Monterey Bay Area Governments (AMBAG), Regional Water Quality Control Board, Central Coast Regional Coastal Commission, Air Pollution Control Board, etc.

12. Sphere of Influence: A plan for the probable ultimate physical boundaries and service area of a local agency. The area around a local agency eligible for annexation and extension of urban service within a twenty year period.

13. Sphere of Influence Boundary: Boundary, adopted by the Monterey County Local Agency Formation Commission, which delineates the limits beyond which a local governmental agency will not annex territory.

14. Urban Services: Those services which are provided to an urban area including, but not limited to, police, structural fire protection, non-agricultural water, sewer, drainage, street lighting , streets and roads.

15. Urban Service Districts: Special districts which are authorized to provide public sanitary sewer services or domestic water distribution services.

16. Urban Service Area: Urban developed areas within an urban service district or city sphere of influence, which is now served by existing urban facilities, utilities, and services or is proposed to be served by urban facilities, utilities and services within the next five years.

17. Urban Transition Area: Area within the spheres of influence boundaries of a city or an urban service district which is not programmed for urban facilities or utility extensions within the next five years. This area will most likely be used for urban expansion within approximately five to twenty years.

18. Future Study Area: Territory outside of an adopted sphere of influence that may warrant inclusion in the sphere in future years. Further study would have to be completed prior to inclusion.

19. Principal County: Principal County has the meaning contained in any definition of principal county, as set forth in the principal act. If the principal act has no definition of principal county, or if there is any inconsistency between the definitions contained in two or more applicable principal acts, principal county means the county having all or the greater portion of the entire assessed value, as shown on the last equalized assessment roll of the county or counties, of all taxable property within a district or districts for which a change of organization or reorganization is proposed.

III. POLICY GUIDELINES FOR SPHERES OF INFLUENCE

The Commission will generally apply the following policy guidelines in the spheres of influence program, in addition to the local conditions and circumstances of each local agency. The Monterey County Local Agency Formation Commission will consider the particular local conditions and circumstances of each agency and community.

1. LAFCO intends that its sphere of influence determination will serve as a master plan for the future organization of local government within the County. The spheres shall be used to discourage urban sprawl; limit proliferation of local governmental agencies; encourage efficiency, economy and orderly changes in local government; promote compact, community centered urban development; and minimize adverse impacts on lands classified as prime agriculture.

2. The sphere of influence lines shall be a declaration of policy which shall be a primary guide to LAFCO in the decision on any proposal under its jurisdiction. Every determination made by the Commission shall be consistent with the spheres of influence of the agencies affected by those determinations.

3. Any proposal which is inconsistent with an agency's adopted sphere of influence shall not be approved until the Commission, at a noticed public hearing, has considered an amendment or revision to that agency's sphere of influence.

4. Inclusion within an agency's sphere of influence does not assure annexation to that agency. The Commission shall evaluate boundary change proposals as they relate to all of the relevant factors listed in the Cortese-Knox Local Government Reorganization Act of 1985 (Government Code Section 56841 et seq.).

5. When possible, a single larger general purpose agency, rather than a number of adjacent smaller ones, established for a given service in the same general area will be preferred. Where an area could be assigned to the sphere of influence of more than one agency providing a particular needed service, the following hierarchy shall apply dependent upon ability to serve.

   a. Inclusion within a City sphere of influence.

   b. Inclusion within a multi-purpose district sphere of influence.

   c. Inclusion within a single-purpose district sphere of influence.

   In deciding which of two or more equally ranked agencies shall include an area within its sphere of influence, LAFCO shall consider the agencies' service and financial capabilities, social and economic interdependence, topographic factors, and the effect that eventual service extension will have on adjacent agencies.

6. Duplication of authority to perform similar functions in the same territory will be avoided. Sphere of influence boundaries shall not create islands or corridors unless it can be demonstrated that the irregular boundaries represent the most logical and orderly service area of an agency.

7. The adopted sphere of influence shall reflect City and County General Plans, plans of regional agencies, growth management policies, annexation policies, resource management policies, and any other policies related to ultimate boundary or service area of an affected agency unless those plans or policies conflict with the legislative intent of the Cortese-Knox Act of 1985 (Government Code Section 56000 et seq.).

Where inconsistencies between plans exist, LAFCO shall rely upon that plan which most closely follows the Legislature's directive to discourage urban sprawl, direct development away from prime agricultural land and open-space lands, and encourage the orderly formation and development of local governmental agencies based upon local conditions and circumstances.

8. Extension of urban type services promotes urban development and such development belongs in cities or areas of development concentration in the unincorporated area of Monterey County. In evaluating proposals involving urban development requiring an urban level of governmental services, the Commission will discourage the formation of new special districts or premature annexation of territory within existing city spheres of influence or logical expansion area. The Commission will discourage boundary change proposals involving urban development outside adopted city spheres of influence that have the potential to negatively impact prime agriculture or open space lands, public service capacity, existing local governmental agencies, or generally represents illogical growth patterns.

9. This Commission, in recognition of the mandated requirements for considering impacts on open space lands and agricultural lands, will develop and determine spheres of influence for Cities and urban service districts in such a manner as to promote the long-term preservation and protection of this County's "Resources." The Commission believes the public interest will be best served by considering "Resources" in a broad sense to include open space, recreational opportunities, wildlife, and agricultural land. Sphere of influence determinations must conform with the Commission's Agricultural Preservation Policy adopted in November, 1979.

10. The Commission recognizes the many inter-relationships and impacts which one agency's land use, planning, and governmental decisions may have on other agencies even though they may be outside of the "sphere of influence" of the secondary agency. Consequently, this Commission, when necessary, will seek to establish and identify Areas of Planning Concern for each city within the County. The "Planning Concern Area" will seek to identify those areas which in a broad sense affect the city in terms of planning and land use decisions. Such "Planning Concern Areas" will be established with the assistance and guidance of the affected cities and the County. The "Planning Concern Area" normally will extend beyond the adopted "sphere of influence" of the city. Once established, the Commission will solicit the cooperation and involvement of the affected cities and the County to jointly involve one another in planning decisions for these areas.

IV. PROCEDURAL GUIDELINES

1. LAFCO will designate a sphere of influence for each local agency representing the agency's ultimate physical boundary within a zero to twenty year period.

2. LAFCO shall consider the following factors in determining or amending an agency's sphere of influence:

a. Present and future need for agency services and the service levels specified for the subject area in applicable general plans, growth management plans, annexation policies, resource management plans, and any other plans or policies related to an agency's ultimate boundary and service area.

b. Capability of the local agency to provide essential and urban services, taking into account evidence of resource capacity sufficient to provide for internal needs and urban expansion.

c. The existence of agricultural preserves, agricultural lands and open space lands in the area and the effect that inclusion within a sphere of influence shall have on the physical and economic integrity of maintaining the land in non-urban use.

d. Present and future cost and adequacy of services anticipated to be extended within the sphere of influence.

e. Present and projected population growth, population densities, land uses, land area, ownership patterns, assessed valuations, and proximity to other populated area.

f. The agency's capital improvement or other plans that delineate planned facility expansions and the timing of that expansion.

g. Social or economic communities of interest in the area.

3. The Commission may establish an urban service area within an adopted sphere of influence to discourage urban sprawl and to promote compact growth patterns. Urban service areas consist of territory now served by urban facilities, utilities and services or proposed to be served within the next five years, and may include the following:

   a. Urbanized Areas. This includes all existing areas, either incorporated or unincorporated, developed to urban densities.

   b. Urban Expansion Areas. This consists of vacant land, either incorporated or unincorporated, which is capable of holding urban growth expected within the next five years.

   The territory included within urban service areas will be considered by LAFCO to be eligible for annexation within five years. Consideration will be given to city and special district capability to provide needed services with related time schedules for planned expansion of services. Cities and special districts are encouraged to develop Capital Improvement Programs and other plans for the phased extension of services to assist LAFCO in determining logical urban service area boundaries.

4. The Commission may establish urban transition areas within adopted spheres of influence to discourage premature pressure for development. Transition areas consist of the residual lands between designated urban service areas and the ultimate sphere of influence boundary. This land will most likely be used for urban expansion within approximately five (5) to twenty (20) years. Territory included within urban transition areas, but not within urban service areas, generally will not be considered eligible for annexation to receive urban services within five years.

5. LAFCO may adopt a zero sphere of influence encompassing no territory for an agency. This occurs where LAFCO determines that the public service functions of the agency are either non-existent, no longer needed, or should be reallocated to some other agency of government.

   The local agency which has been assigned a zero sphere of influence should ultimately be dissolved. Special districts that lie substantially within the boundary or sphere of influence of a general purpose government which is capable of assuming the public service responsibilities and functions of that special district may be allocated a zero sphere of influence designation.

6. Territory not in need of urban services, including open space, agriculture, recreational, rural lands or residential rural areas, shall not be assigned to an agency's sphere of influence unless the area's exclusion would impede the planned, orderly and efficient development of an area.

7. LAFCO may adopt a sphere of influence that excludes territory currently within that agency's boundaries. This occurs where LAFCO determines that the territory consists of agricultural lands, open space lands or agricultural preserves whose preservation would be jeopardized by inclusion within the agency's sphere of influence. Exclusion of these areas from an agency's sphere of influence indicates that detachment is appropriate.

8. Two or more local agencies providing the same service(s) may be allocated a consolidated sphere of influence to include the areas served by both agencies. This would be the case where LAFCO believes that the particular service(s) should be provided to the entire area by a single local agency.

9. LAFCO may establish future study areas outside of adopted spheres of influence. These areas indicate territory which may ultimately be appropriate for inclusion within an agency's sphere upon future study or modified conditions.

10. LAFCO shall adopt, amend or revise sphere of influence determinations following the procedural steps set forth in the Cortese-Knox Act of 1985 (Government Code Section 56076 et seq.).

11. LAFCO shall review sphere of influence determinations every five years or when deemed necessary by the Commission. If a local agency or the County desires amendment or revision of an adopted sphere of influence, the local agency by resolution may file such a request with the Executive Officer. The request shall state the nature of the proposed amendment and the reasons for the request, include a map of the proposed amendment, and contain additional data and information as may be required by the Executive Officer.

12. The Commission encourages any private individual desiring a revision of an adopted sphere of influence to request that the affected local agency initiate sphere reconsideration by resolution to promote consultation between the parties.

13. Individuals desiring LAFCO to initiate revision or amendment of an existing sphere of influence shall file a written request with the Executive Officer. The request shall state the nature of the proposed amendment and the reasons for the request, include a map of the proposed amendment area, and contain additional data and information as may be required by the Executive Officer.

14. The Executive Officer shall review each request for amendment, prepare a report and recommendation, and place the request on the agenda of the next meeting of the Commission for which notice can be given after determining conformance with the California Environmental Quality Act. Copies of the Executive Officer report shall be provided to the person(s) making the request, each affected local agency, and each person who has filed a request for a report.

15. Any local agency, county, or private individual making such a request shall reimburse the Commission for the actual and direct costs incurred by the Commission. The Commission may waive such requirement if it finds that the request may be considered as part of its periodic review of spheres of influence.

16. The Monterey County Local Agency Formation Commission shall adopt, amend, or revise spheres of influence after a public hearing called and held for that purpose. At least 15 days prior to the date of any such hearing, the Executive Officer shall give mailed notice of the hearing to each affected local agency and the County, and to any interested party who has filed a written request for such notice with the Executive Officer. In addition, at least 15 days prior to the date of any such hearing, the Executive Officer shall cause notice of the hearing to be published in a newspaper of general circulation which is circulated within the territory affected by the sphere of influence proposed to be adopted or amended.

    LAFCO may continue from time to time any sphere of influence hearing. At any sphere of influence hearing, LAFCO shall hear and consider oral or written testimony presented by any affected local agency, the County, or any interested person who wishes to appear.

17. On the date and time set for hearing and provided in the notice, the Commission may, without further notice, consider the amendments to a sphere of influence or set a future date for the hearing on the request.

56385. The commission may contract for retirement benefits for the executive officer or staff personnel pursuant to the County Employees Retirement Law of 1937, Chapter 3 (commencing with Section 31450) of Part 3 of Division 4 of Title 3 or the Public Employees' Retirement Law, Part 3 (commencing with Section 20000) of Division 5 of Title 2. It may also provide for health and medical benefits. The commission shall preserve accrued vacation, sick leave, compensatory time, and retirement benefits of persons hired from within the employment of their respective county.

56386. (a) The officers and employees of a city, county, or special district, including any local agency, school district, community college district, and any regional agency, or state agency or department, as may be necessary, or any other public agency shall furnish the executive officer with any records or information in their possession which may be necessary to assist the commission and the executive officer in their duties, including, but not limited to, the preparation of reports pursuant to Sections 56665 and 56800.

(b) Upon request by the commission or the executive officer, the county surveyor, or any other county officer, county official, or employee as the board of supervisors may designate, shall examine and report to the commission or the executive officer upon any application or other document involving any of the matters specified in subdivision (j) of Section 56375.

56387. Except as otherwise provided in Section 56388, if any district is, or as a result of a proposed change of organization or reorganization would be, located in more than one county, the commission of the principal county shall have exclusive jurisdiction over the matters authorized and required by this part.

56388. If any proposal involves a district which is, or as a result of a proposed change of organization or reorganization would be, located in more than one county, exclusive jurisdiction for that proposal over the matters authorized and required by this part may be vested in the commission of a county, other than the principal county, in which territory of the district is located or is proposed to be located if all of the following occur:

(a) The commission of the principal county agrees to having the exclusive jurisdiction vested in the commission of another county.

(b) The commission of the principal county designates the commission of another county which shall assume exclusive jurisdiction.

(c) The commission of the county so designated agrees to assume exclusive jurisdiction.

CHAPTER 4. SPHERES OF INFLUENCE

56425. (a) In order to carry out its purposes and responsibilities for planning and shaping the logical and orderly development and coordination of local governmental agencies so as to advantageously provide for the present and future needs of the county and its communities, the commission shall develop and determine the sphere of influence of each local governmental agency within the county and enact policies designed to promote the logical and orderly development of areas within the sphere.

(b)At least 30 days prior to submitting an application to the commission for a determination of a new sphere of influence, or to update an existing sphere of influence for a city, representatives from the city shall meet with county representatives to discuss the proposed sphere, and its boundaries, and explore methods to reach agreement on the boundaries, development standards, and zoning requirements within the sphere to ensure that development within the sphere occurs in a manner that reflects the concerns of the affected city and is accomplished in a manner that promotes the logical and orderly development of areas within the sphere. If no agreement is reached between the city and county within 30 days, then the parties may, by mutual agreement, extend discussions for an additional period of 30 days. If an agreement is reached between the city and county regarding the boundaries, development standards, and zoning requirements within the proposed sphere, the agreement shall be forwarded to the commission, and the commission shall consider and adopt a sphere of influence for the city consistent with the policies adopted by the commission pursuant to this section, and the commission shall give great weight to the agreement in the commission's final determination of the city sphere.

(c) If the commission's final determination is consistent with the agreement reached between the city and county pursuant to subdivision (b), the agreement shall be adopted by the both the city and county after a public hearing. Once the agreement has been adopted by the affected local agencies and their respective general plans reflect that agreement, then any development approved by the county within the sphere shall be consistent with the terms of that agreement.

(d) If no agreement is reached pursuant to subdivision (b), the application may be submitted to the commission and the commission shall consider a sphere of influence for the city consistent with the policies adopted by the commission pursuant to this section.

(e) In determining the sphere of influence of each local agency, the commission shall consider and prepare a written statement of its determinations with respect to each of the following:

(1) The present and planned land uses in the area, including agricultural and open-space lands.

(2) The present and probable need for public facilities and services in the area.

(3) The present capacity of public facilities and adequacy of public services which the agency provides or is authorized to provide.

(4) The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

(f) Upon determination of a sphere of influence, the commission shall adopt that sphere, and shall review and update, as necessary, the adopted sphere not less than once every 5 years.

(g) The commission may recommend governmental reorganizations to particular agencies in the county, using the spheres of influence as the basis for those recommendations. Those recommendations shall be made available, upon request, to other agencies or to the public. The commission shall make all reasonable efforts to ensure wide dissemination of the recommendations.

(h) For any sphere of influence or a sphere of influence that includes a special district, the commission shall do all of the following:

(1) Require existing districts to file written statements with the commission specifying the functions or classes of service provided by those districts.

(2) Establish the nature, location, and extent of any functions or classes of service provided by existing districts.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Caltrans

District 5
50 Higuera Street
San Luis Obispo, CA 93401-5415

Facsimile Cover Sheet

DATE: December 26, 2001

TO: Jenny Mahoney
City of Salinas

FROM: Chris Shaeffer
Caltrans, District 5

Phone:

PH#:
FAX#: 831-758-7215

PH#: (805) 542-4751
FAX#: (805)549-3077

TOTAL PAGES :

MESSAGE: NOP comment for Gen Plan EIR.

STATE OF CALIFORNIA — BUSINESS, TRANSPORTATION AND HOUSING AGENCY GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93403-8114
TELEPHONE: (805) 549-3111
TDD (805) 549-3259

December 26, 2001

Salinas Gen Plan
SCH# 1987012703
NOP

Ms. Jenny Mahoney
City of Salinas
200 Lincoln Avenue
Salinas, CA 93901

Dear Ms. Mahoney:

Caltrans District 5 staff has reviewed the Notice of Preparation for the Salinas General Plan Update and Environmental Impact Report. The follow comments are offered for your consideration:

1. The General Plan and the Draft Environmental Impact Report should thoroughly discuss the City's vision for and relationship with the State Highway System. There are segments of three State Routes, each with different characteristics, contained within the City limits. Staff urges the City to consider these highways as a finite resource of the built environment; a resource that is vulnerable to diminishing availability without any certainty of expansion. The General Plan and EIR should thoroughly discuss the effects that the City's economic and social values, as translated by the plan's Vision and Policies, will have upon this resource. This should include a comprehensive discussion of existing conditions and anticipated conditions at plan build out. Levels of service should be expressed in terms of delay (as the measure of effectiveness).
   a) Staff anticipates that the final Transportation Concept Report for SR 101 will be released prior to June 2002. Essentially the TCR calls out a 6-lane concept through the city limits. The TCR looks forward approximately 20 years. Staff encourages the city to meld this concept into the Plan vision and policies, particularly in relationship to the City's development and growth adjacent to SR 101. This would include growth within the sphere of influence and annexation goals. The Plan and EIR should include rights of way dedication as appropriate mitigation for development adjacent to this corridor or, any other state highway within the City.
2. Because the Plan is a policy statement guiding implementation of development approvals, staff suggests that the land use element discuss the symbiotic relationship between development and transportation. This can include clear policies and priorities requiring development to analyze their transportation impacts and recommend mitigation to minimize traffic impacts. The Plan and EIR should also analyze the effects occurring due to the City's existing policy regarding conforming land use project proposals and impact analyses and mitigation. Staff suggests that traffic impacts upon the state highway facilities are both not analyzed nor mitigated within this current administrative framework. Although the current policy appears to preempt the California Environmental Quality Act (CEQA) review requirements, it does not reduce actual impacts upon local or state facilities.
3. The circulation element should identify and discuss existing and potential funding mechanisms, or the enabling legislation pointing to these tools, that can be used to implement the mitigation required as a result of impacts caused by development. The EIR should analyze the effects the current traffic impact fee program is having on mitigation for facilities in the state highway system and interchanges. The EIR should also discuss effects that development within the County has and will have upon shared Caltrans and City infrastructure and the mechanisms being used to mitigate the effects.
4. The Transportation Agency for Monterey County (TAMC) will be attempting to implement a regional traffic fee program. The Plan and EIR should clearly set forth the City's support or opposition for such a program.

5. The General Plan and EIR should reconcile development approval in the event of an overburdened state highway system. Discussion should include parameters as to when or even if approval should or should not occur, given poor traffic service levels.

6. The Draft EIR should discuss all transportation modes. The General Plan should contain policies encouraging multi-modal development.

Thank you for your consideration of our comments on this proposed project. If you have any questions, please contact me at (805) 542-4751.

Sincerely,

Chris Shaeffer
District 5
Development Review Coordinator

cc: D. Murray

MONTEREY COUNTY

Celebrating 150 Years

ENVIRONMENTAL RESOURCE POLICY
(831) 755-5065 P.O. BOX 180, SALINAS, CALIFORNIA 93902

JAMES J. COLANGELO
ASSISTANT COUNTY ADMINISTRATIVE OFFICER

Hand Delivered

December 26, 2001

Jenny Mahoney, Senior Planner
City of Salinas
Department of Community Development
200 Lincoln Ave.
Salinas, CA 93901

Dear Ms. Mahoney:

Thank you for the opportunity to comment on the Notice of Preparation (NOP) for the Salinas General Plan Update Draft Environmental Impact Report (EIR). In general, we believe that the Initial Study shows that the Draft EIR will address a broad range of environmental issues which are significant to the community, to the city and to the County of Monterey. The following comments are based on the input of several departments and describe subjects which the County believes warrant additional analysis in the Draft EIR.

Purpose and Objectives

The EIR should contain a discussion of the relationship between the County General Plan update and the City of Salinas General Plan update. Because the county and the city are both preparing major general plan updates, these efforts should be coordinated as closely as possible during the EIR process.

Potential City/County Growth Agreements

The draft EIR should discuss the preliminary growth concepts which have been developed by the Ad Hoc Committee on Salinas Valley City/County of Monterey Growth Agreements. A copy of the preliminary growth agreements is attached. If the cities and the county are successful in achieving growth agreements, certain follow up planning and implementation work is envisioned. Discussion of the growth agreements process and the preliminary growth concepts in the Salinas General Plan EIR would enable environmental review of the growth agreements to be "tiered" in part from the Salinas General Plan EIR.

General Traffic and Circulation

The EIR should include a detailed analysis of the circulation element of the Salinas General Plan and mitigation of potential impacts on the area's system of state and county roadways. The County Public Works Department expresses the following comments:

1) The Salinas General Plan should be consistent with regional planning documents and should be coordinated with the draft Monterey County General Plan Update.
2) Given that the Salinas General Plan anticipates a significant population increase by 2020, the EIR should analyze the effect that this growth will have on the state and county roadway system. Particular attention should be paid to those roads located north and east of the city.
3) Circulation requirements of possible future development at Rancho San Juan should be addressed and evaluated.

Boronda Area

The unincorporated area of Boronda is within the City's Growth Boundary Alternative C as shown on the Salinas General Plan Update Initial Study.

Over the past six months, the Monterey County Redevelopment Agency has been working with the Boronda community in the preparation of a Boronda Community Plan. As part of the planning process, the County is exploring a shift in land use from industrial to residential housing (minimum 10 units/acre) in the south Boronda area.

For your information, attached is a copy of the draft Boronda Vision Statement, prepared by the community and recommended for approval by the County of Monterey Planning Commission.

The Redevelopment Agency staff have commented that the following topics specific to the Boronda area need to be fully analyzed as part of the City's environmental review process:

1) Hydrology/Water Quality
   Analysis and delineation of wetland habitat located within Markley Swamp, and an analysis of flooding issues.
2) Land Use
   Analysis of land use alternatives related to the draft Boronda Vision Statement.
3) Noise
   Analysis of existing and proposed noise sources associated with proposed and alternative land uses.
4) Housing
   Analysis of housing issues relative to proposed and alternative land uses.
5) Public Services
   Analysis of public services capacity (sewer, water, fire protection and law enforcement) related to proposed and alternative land uses.
6) Transportation/Traffic
   Analysis of transportation impacts as mitigation measures for proposed and alternative land uses, particularly related to the West Side Bypass and Rossi Street Extension.

   Rossi Street, as envisioned in the draft Salinas General Plan, only connects with Boronda Road and does not connect with the City's Western Bypass. This does not take heavy truck traffic from Boronda Road and Calle del Adobe which is the goal for the community.

7) Historic Resources

Laurel Drive turns into Calle del Adobe at the entrance to the community of Boronda. Calle del Adobe is the main thoroughfare for the Boronda community and ends directly in front of the Historic Boronda Adobe. It appears that the Salinas General Plan shows Calle del Adobe (Laurel) extending through the Boronda Adobe. If this is accurate, such road alignment would destroy an important historic and community asset. The Boronda community sees the Historic Boronda Adobe as a local resource and has included mention of the Boronda Adobe in the Boronda Vision Statement.

8) Utilities/Services Systems

The EIR should contain an analysis of utility and service needs as they pertain to proposed and alternative land uses in the Boronda area.

In conclusion, we look forward to a continued close and productive working relationship between the city and county on a variety of land use planning issues which will be of concern to both jurisdictions and to the broader community. Please do not hesitate to call me at 755-5145 if you have any questions regarding this response letter.

Sincerely,

Nicholas E. Chiulos

Nicholas E. Chiulos
Principal Administrative Analyst

cc: Jim Colangelo, Assistant County Administrative Officer – Environmental Resource Policy
Annette Chaplin, Principal Administrative Analyst
Jared Ikeda, Senior Administrative Analyst
Jim Cook, Principal Administrative Analyst
Lew Bauman, Public Works Director
Nick Nichols, Deputy Public Works Director
Curtis Weeks, General Manager, Water Resources Agency
Rob Johnson, Chief of Water Resources Planning
Eric Lauritzen, Agricultural Commissioner
Bob Roach, Deputy Agricultural Commissioner
Cathy West, LAFCO Executive Officer

Attachments: Ad Hoc Committee on Salinas Valley cities/County of Monterey Growth Agreements – Preliminary Growth Concepts
Draft Boronda Vision Statement

Ad Hoc Committee on Salinas Valley City/County of Monterey Growth Agreements

Preliminary Growth Concepts

1. Initial work on growth concepts should be at a Valleywide level rather than city by city.

2. Our efforts should initially involve determining where the 5 Valley cities are willing to grow and with what phasing schedule.
   a. No overall growth timeframe yet; to be added later.

3. One concept that should be explored would look at utilizing the city boundary as a service boundary rather than a development boundary. Issues would include:
   a. Provision of services to areas within the boundary.
   b. Revenue sharing.
   c. Establish agricultural preservation areas within city boundaries.
   d. Joint review by the appropriate City and the County of land use issues and projects within the service boundary.

4. Growth directed at foothill areas will involve conversion of less valuable agricultural land but will result in higher infrastructure costs over time to serve foothill development.

5. We will need a long term economic development tie-in to the overall growth strategy.

6. We should work toward a united vision involving Salinas Valley City and County decisionmakers and staff before involving agricultural industry, other agencies (TAMC and AMBAG) and the Peninsula cities.

a. The Monterey Peninsula cities have an interest and responsibility to address the issue of provision of housing affordable to the workforce required by Monterey Peninsula employers.
   b. Salinas Valley/County of Monterey growth concepts need to be integrated with the Monterey Peninsula cities and with Fort Ord reuse. At a staff level, work should begin to coordinate growth concept issues with Peninsula city managers.
   c. The growth agreements should be focused solely on the jurisdictions within and including the County of Monterey.

7. Agriculture industry involvement should focus on the central question "What does agriculture need from local government in order to maintain the agricultural industry in the Salinas Valley?"

8. Growth agreements should proceed from the general to a specific level of detail through the preparation of community plans. Community plans would:
   a. be prepared at a regional level through the joint efforts of each city and the County.
   b. be initially prepared as a "plan without boundaries" that would locate future land uses and growth areas in the most appropriate locations without regard to jurisdictional boundaries.
   c. address fiscal issues which must be resolved to support sound regional level land use planning and decision making.
   d. integrate service provision as a key component of the creation of viable, sustainable communities.

e. create uniform development standards which would create a "level playing field" for land use decisionmaking throughout the Salinas Valley. Each individual jurisdiction's decision making process would implement and be based upon regional standards adopted in the community plans.
f. maximize low and moderate income housing opportunities for Monterey County residents and workforce.
g. link job creating land uses with housing.

9. A strong effort should be made to work with state and federal legislators to obtain necessary funding to prepare community plans as a pilot project to demonstrate a new model for a community based, regional approach to land use planning which ensures adequate service provision, provides for job creation and affordable housing, creates regional development standards which are regional in scope but locally implemented, protects important resources, and provides a plan to offset the fiscal impacts sometimes associated with sound regional land use planning.

10. Based upon direction from the ad hoc committee, staff will return in 45-60 days with a status report on efforts to address the points listed above.

Draft Boronda Vision Statement

Boronda

The unincorporated community of Boronda also has some potential for a small amount of growth. Currently, there are 24 vacant residentially zoned parcels in this area. These parcels could be further subdivided to provide additional housing. This area has much of the infrastructure necessary to accommodate needed housing units to accommodate the area's workforce. Planning coordination with the City of Salinas is a must. Traffic circulation, stormwater concerns, and improvements to enhance livability are critical for the success of this area.

Boronda's community vision includes preservation and enhancement of the established Boronda neighborhood, and compatible design and development of potential sites in the South Boronda area. Residents of the Boronda community envision a future that accommodates improvements and new development in a manner which maintains the rural character of the established neighborhood, and respects existing design and character elements. Public and private improvements are well-planned and well-designed, such that infill and new development serve to strengthen and unify the small town, village character of Boronda.

Boronda contains a mix of land uses. Currently, various types of housing co-exist with various types of commercial, light industrial, agricultural and other uses. This diversity of land use is a characteristic that makes Boronda unique. It is desirable to retain this diversity and also to make improvements so that the activities and impacts of residents and businesses are better accommodated and managed.

Residential Uses

Boronda should continue to be a place where housing is available at a price that is attainable for area residents. There should be enough housing provided to allow area workers to live within proximity to their jobs. Boronda recognizes that, for housing to be more affordable and attainable, new development needs to utilize land more efficiently, providing more housing units per acre, particularly on larger sites that are presently vacant. Citizens of Boronda support more compact development in the South Boronda area that is well-designed, reflects varied architecture, and integrates valued character elements from existing developments in the neighborhood. Design guidelines should be adopted and used to guide future residential development to ensure consistency with these principles. Public improvements serving residential development must meet city standards, and ensure achievement of a livable, walkable neighborhood with a village character. Neighborhood-serving retail uses must be located within walking distance of housing units. Attractive circulation improvements are needed, including not only curbs, gutters, sidewalks, street lights and street trees; but also bicycle routes, trails, pathways, and a pedestrian bridge over the open space area, in order to encourage walking and bicycling both within the community, and to link to destinations outside of Boronda. Housing rehabilitation and neighborhood services programs should reflect this philosophy.

Non-Residential Uses

Boronda residents respect and value the contributions of existing commercial and industrial activities within the Boronda community, as well as adjacent agricultural lands which define the edge of the community. These uses will continue to exist in the future, but in order to strengthen Boronda as a residential village, certain vacant lands presently designated for industrial use should be re-designated to provide for future residential development.

The Boronda community supports policies and actions which ensure that non-residential land uses are located and operated in ways that address and/or prevent significant and inappropriate impacts (e.g. traffic, noise and pollutants) on or within residential areas. The highest priority improvement for the Boronda community is the Rossi Street Extension, which will provide appropriate access and circulation for industrial and other non-residential traffic. Public and private improvements are also needed to ensure adequate non-residential parking and appropriate locations for trash, outdoor storage and other business activities.

Design guidelines should be adopted to address new non-residential development, to ensure that it is well-designed, reflects varied architecture, and integrates valued character elements from existing developments. Public improvements serving non-residential development must meet city standards.

Transportation and Public Facilities

The existing circulation and transportation system in Boronda is not adequate to meet the needs of residents and businesses, and results in conflicts between residential and non-residential uses. The need to make improvements offers a significant opportunity for the community, because it will be possible to design improvements and focus public and private investment on implementing the principles of "livable communities" and "new urbanism". The Boronda community desires attractive, neighborhood streets that promote walking and neighborhood interaction, and link nearby shops, schools and other destinations. The Rossi Street Extension is a key future public improvement that should be designed to segregate non-residential traffic from residential areas, in a manner which also strengthens community identity and accommodates pedestrians and bicyclists. Future circulation plans for Boronda should also consider the area's relationship to bus and rail routes, and provide appropriate access facilities.

Future public and private investment in the Boronda community must result in provision of high quality public infrastructure and services, including adequate sewer, water, storm drainage, circulation, parks, open space and recreation facilities and services. Future residential development in a more compact development pattern in the South Boronda area will allow for more efficient provision of infrastructure and services, and Boronda supports this approach, as such efficiency will make it more feasible to provide public amenities and to preserve open space and agricultural lands.

Parks, Open Space and Recreational Lands

The Boronda community is fortunate to contain and to be located near natural open space areas, agricultural lands, parks, and historic resources. These resources are assets which provide a strong identity and sense of place. Residents of Boronda envision enhancement and management of these resources to the benefit both the human and natural environments. Natural open spaces, including the floodplain and Markley Swamp wetland area, should be preserved and managed consistent with sound biotic and resource principles, while also allowing for appropriate trails, pathways, and a pedestrian/bicycle bridge. The Boronda School Park facilities need to be completed, and a gateway identity sign should be implemented. Adjacent agricultural lands should be preserved, and the community supports enhancement of the adjacent historic adobe site as a community asset for the Boronda neighborhood as well as the greater area population.

The Boronda community recognizes that the South Boronda area in particular offers an opportunity to implement the principles of "smart growth" and "new urbanism" rather than "urban sprawl", which will better enable preservation and enhancement of the parks, open space, agricultural and recreational areas that provide a unique identity for Boronda. The citizens of Boronda envision that these natural community assets will be retained and improved upon in the future, and will act as keys to the "sense of community" that connects residents and businesspersons to Boronda and to each other.

Santa Rita

Union School District

"Improving the World with Every Student"

Santa Rita
57 Russell Road
Salinas, CA 93906-4325

www.santaritaschools.org

(831) 443-7200
Fax 442-1729

DEC 2001
Received
Com. Dev. Dept.

December 12, 2001

City of Salinas
Department of Community Development
200 Lincoln Avenue
Salinas, CA 93901

REGARDING: **Notice of Preparation of Draft Program Environmental Impact Report for the City of Salinas General Plan Update**

I am responding to your request for comments about the City of Salinas General Plan Update and its environmental impact which is part of item XIII. Purclic Service of the Initial Study.

District Description

Santa Rita Union School serves approximately 3000 students in grades K-8. It serves the geographic area of northern Salinas City and a large unincorporated area of the county north of the city, including the new north of Boronda Road which is north of the Harden Ranch Community. There are currently three schools in the district. Santa Rita Elementary has approximately 1200 K-5 students. La Joya Elementary has approximately 850 K-5 students. And Gavilan View Middle School has approximately 1100 6-8 grade students. All schools were originally designed for 500-600 students. Therefore, they are all about 100% beyond capacity. A new K-5 elementary school is under construction and expected to open in the Fall of 2002.

District Enrollment Growth

Santa Rita Union School District has grown at the rate between 3% and 10% annual enrollment based on mid-October enrollment figures for the last three years. It is expected that the District will continue to grow at a 3-4% rate for at least the next three years. If the City annexes the Boronda area and development occurs, enrollment will grow dramatically.

Based upon a demographic study a couple of years ago, each 1,000 homes yeilds about 400 students in grades K-5 and another 200 students in middle school. That is the equivalent of 60% of an elementary school and 30% of a middle school, each of which house about 700 students.

District Financial Hardship

The 1995 election approved a $10 million general obligation bond for Santa Rita. This taxed the district to its maximum portion of its assessed evaluation. Another bond election to build elementary schools is not possible for the next decade.

The replacement of the 60 years old Santa Rita Elementary School, the construction of a middle school library, an elementary school multipurpose building, and a district kitchen and transportation center spent the bond money and all other available construction funds.

Projects still left to fund include construction of two elementary schools, one middle school, and modernization of La Joya Elementary School which is over 40 years old. The only way to fund these projects is by using state school construction grants. Normally those grants are for 50% of the costs of the construction wich the district using developer fees and other local sources to pay the other 50%. However, in cases where a district has obligated developer fees for interim housing (rent on portable classrooms) and has no capacity to bond, the state declares the district to be in "financial hardship." The state will pay up to the remaining 50% of construction; however, the rules are complex and very confining. The state funds never really cover the entire cost of the school.

Santa Rita School District has been so designated as "financial hardship."

Mitigation of New Development

Construction and planning of a new elementary school for 700 students costs approximately $10 million. A recent purchase agreement of land within the city for a 11.75 acre school site cost $9.88 million. That total about $20 million per elementary school. A middle school for 700 students on 20 acres in the city would cost a total of about $28 million. The weighted average cost to construct school facilities for K-8 students is about $32,000 per student [($20 mil. + $20 mil. + $28 mil.)/2100 students].

According to board policy and state guidelines, following is a list of land needed for each type of school site: elementary sites (700 students) need 11 (13-15 if part of a park) acres; middle school sites (700 students) need 20 acres; high school sites (1500 students) need 40 acres.

Assuming an average 0.6 student generation factor per residence, full mitigation needed to provide adequate school housing for students generated by new construction is equivalent to approximately $19,200 per residence. Given the state's present school building program rules, approximately 50% of that mitigation will be paid for by the state of California, leaving the other 50% to be paid supposedly by developer fees. However, an average house of 2.000 square feet only generates $5,460. This not enough to cover the interim housing much less the cost of construction of a new school.

Suggested Mitigation for the Salinas General Plan Update

Because of these facts, Santa Rita School District asks for the following mitigation for schools:

Salinas City government not to approve ANY developments which have not FULLY mitigated the impact of their new construction as agreed to by the school district. Such mitigation can take the form of the dedication of school property, excess fees, the construction of a school, the use of a Community Development District or a Mello-Roos District, or some combination of the above or other mitigations to provide funding for necessary schools.

If you have any questions or comments, please call me. Thank you for this opportunity to comment.

Sincerely,

Robert McLaughlin

Dr. Robert McLaughlin
Superintendent

Salinas Union High School District

Fernando R. Elizondo, Ed.D.
Superintendent

431 West Alisal Street
Salinas, CA 93901-1699
P.O. Box 80900, Salinas, CA 93912
(831) 796-7010
felizondo@salinas.k12.ca.us

November 27, 2001

City of Salinas
Department of Community Development
Attn: Jenny Mahoney – Senior Planner
200 Lincoln Avenue
Salinas, CA 93901

SUBJECT: NOTICE OF PREPERATION OF DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT CITY OF SALINAS GENERAL PLAN UPDATE

Dear Ms. Mahoney:

The Salinas Union High School District has received the Notice of Preparation for the above project.

After review of the NOP the District's responsibilities to provide adequate educational facilities to our students will require that 2 (two) high school sites and (2) middle school sites be identified in the General Plan Update.

The Salinas Union High School District's schools are currently overcapacity. Students are housed in 342 permanent classrooms and 159 portable classrooms. Related school buildings such as: gymnasiums, cafeterias, counseling offices, and other student services are overcrowded. The continual placement of portable classrooms on our current school grounds is diminishing the District's outdoor teaching stations.

Please contact me at 753-4107 with any questions or comments.

Sincerely,

Karen L. Luna

Karen L. Luna
Manager of Planning and Facilities

/kll

C: Dr. Elizondo, Superintendent

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Appendix B:
Traffic Report

CITY OF SALINAS
GENERAL PLAN

CIRCULATION ELEMENT
AND
ENVIRONMENTAL IMPACT REPORT
TRAFFIC STUDY

(DRAFT)

Prepared for

City of Salinas,
California
and
Cotton/Bridges/Associates
San Diego, California

June 11, 2002

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Executive Summary

The City of Salinas is in the process of adopting a General Plan Update that will update the previous General Plan, which was adopted in 1988. The plan will establish development objectives and the corresponding requirements for infrastructure. This report is the technical basis for the Circulation Element of the new General Plan. It describes the methodology, findings and recommendations of the analysis for several network alternatives to accommodate the proposed land use plan. The study analyzes long-range traffic and transportation needs and proposes alternative means of accommodating these needs. It is also the technical report pertaining to transportation for the General Plan Environmental Impact Report.

This study was performed under the direction of Cotton/Bridges Associates with direct guidance from the Salinas Public Works and Community Development Departments. In addition, consultation with other affected agencies including the County of Monterey, Caltrans, the Transportation Agency for Monterey County (TAMC), and the Association of Monterey Bay Area Governments (AMBAG) was obtained throughout the process of performing this analysis.

A land use based transportation model was developed by the Association of Monterey Bay Area Governments (AMBAG) and was updated to forecast traffic and evaluate traffic operations. The regional traffic model was used to estimate traffic patterns under alternative land use policies and road and highway improvements in the City of Salinas. As part of the City General Plan update, the AMBAG Traffic Model was updated to show existing conditions. Existing land uses, 2000 census data and traffic counts were used to update and validate the traffic model in the year 2000.

The model inputs were then modified to represent future conditions, making it possible to project traffic volumes. This gives transportation planners and engineers the ability to estimate the impact of different roadway or land use scenarios on the traffic network. This, in turn, allows policy makers to evaluate and make appropriate decisions on potential capital improvements. One such use of the model in this study was to test several transportation network alternatives in the City of Salinas with land use estimated at buildout for the city.

The first alternative is a "No-build" alternative assuming the existing transportation network with no road and highway improvements. It combined the land use forecasts from the County General Plan in 2020 with the City's estimate for land use in the build out horizon. A second alternative estimated a traffic pattern with the City's road and highway improvements, some operational and limited capacity improvements in the Highway 101 corridor (known as Alternative 210), and funded projects listed in the Regional Transportation Plan (RTP). A third alternative estimated a traffic pattern with the City's road and highway improvements, the Prunedale Bypass and other funded projects listed in the RTP. Ultimately, a fourth alternative estimated a traffic pattern with the following assumptions: City's road and highway improvements; the Prunedale Bypass; the Eastside Expressway system; and the RTP.

Traffic summaries and quality of service indicators are included in Figures and Tables. Included in the Appendix is an analysis of vehicle miles of travel, vehicle hours of travel and speed summaries for each alternative. Traffic and transit assumptions are summarized.

As part of the General Plan Update, the traffic modeling assumptions and the traffic analysis developed for the Circulation Element and the accompanying Environmental Impact Report (EIR) utilized current plans, roadway designs and route concepts made available by the cities, the county, state agencies and regional planning agencies. The land use forecasts developed by the Association of Monterey Bay Area Governments (AMBAG) and the Regional Transportation Plan (RTP) developed by the Transportation Agency for Monterey County (TAMC) were the benchmark plans from which to prepare the analyses and make comparisons. Design features for roads and interchanges reported in traffic studies, Project Study Reports or other technical documents were utilized wherever possible to reflect the most up to date features of transportation improvements. All alternatives are generated from the same base assumptions.

The three future scenarios resulted in very similar traffic operations on the arterial system within the City limits. The major difference is the Eastside Expressway alternative precludes the need to widen the existing Highway 101 to six-lanes between Boronda Road and Airport Boulevard, and also reduces traffic on the arterial system along the existing Highway 101 corridor through the City of Salinas.

I. INTRODUCTION

The City of Salinas is in the process of adopting a General Plan Update that will update the previous General Plan, which was adopted in 1988. The plan will establish development objectives and the corresponding requirements for infrastructure. This report is the technical basis for the Circulation Element of the new General Plan. It describes the methodology, findings and recommendations of the analysis for several network alternatives to accommodate the proposed land use plan. The study analyzes long range traffic and transportation needs and proposes a variety of alternative means of accommodating these needs. It is also the technical report pertaining to transportation for the General Plan Environmental Impact Report.

This study was performed under the direction of Cotton/Bridges Associates with direct guidance from the Salinas Public Works and Community Development Departments. In addition, consultation with other affected agencies including the County of Monterey, Caltrans, The Transportation Agency for Monterey County (TAMC), and the Association of Monterey Bay Area Governments (AMBAG) was obtained throughout the process of performing this analysis.

The scope of work was primarily focused on the development of a travel forecast model that was utilized to test a variety of network alternatives. It was also used in the early stages of the General Plan Update process to perform preliminary evaluations of a variety of land use alternatives. The main tasks included the following:

1. An evaluation of the existing transportation system was conducted. It was primarily based upon average daily traffic on selected road segments because an extensive evaluation of existing conditions was previously performed. That analysis was presented in the "Existing Conditions – Traffic and Circulation – City of Salinas General Plan Update," DKS Associates, May 2000. The existing conditions report analyzed 60 intersections throughout the city for am and pm peak hour Levels of Service and recommended a variety of improvements to mitigate existing deficiencies. For the General Plan Update, roadway segment Levels of Service were reported on more than 130 road segments. Some additional information regarding traffic characteristics on the road network as well as a discussion of alternative modes of transportation including public transit, bicycle and pedestrian facilities, provisions for truck traffic and a brief discussion of the Salinas Municipal Airport were also provided. The report is included in its entirety herein as Appendix A.

2. The modeling effort was performed in order to evaluate various land use and transportation network alternatives in the City and in the region. A detailed discussion of the methodology and results are provided in this report. The forecasting model utilized for this analysis is the AMBAG Three County Travel Demand forecasting model. It was essential to utilize this model because of the significant effect of regional transportation improvements located outside the city on network infrastructure within the city. In addition, the model has the ability to better replicate travel patterns that either only

begin or end in the City of Salinas or are through traffic that has both their origins and destinations external to the city.

3. Land use assumptions from the City and the county were used to generate traffic in all the future conditions. Three regional road networks were used to test the impacts on City streets and roads. Then the City network projects were analyzed with regard to their ability to accommodate traffic demand from the proposed General Plan Buildout land use under the regional alternatives. The four regional networks analyzed with the City network improvements include the following:

   a. No-Build –This is a baseline condition with the existing circulation network and no capacity improvements and no new streets in the region or the City. It is an "unmitigated" condition.

   b. Alternative 210 – Caltrans has been planning a freeway through Prunedale to either upgrade the existing Highway 101 or replace it with a new freeway to the east. The cost for the freeway upgrade or new freeway is estimated to be over $500,000,000. Due to current funding limits, Caltrans has developed an alternative to provide safety and operational improvement on the existing Highway 101 through Prunedale. This would utilize the limited amount of funding that has been allocated for Highway 101 through North Monterey County. This alternative is known as Alternative 210 because $210,000,000 is the preliminary budget limit for this improvement.

      The "210" is essentially incremental to Alternative 2, which is the upgrade of the existing Highway 101 to a full six-lane freeway. It primarily involves upgrading the existing alignment of Highway 101 to a freeway from Russell Road to the Highway 156 interchange. It includes a new interchange at the existing Highway 101/Crazy Horse Canyon Road intersection, a southerly interchange near White Road with a direct connection between Russell Road - Espinosa Road and the extension of North Main Street to Berta Canyon Road in Prunedale. The funded projects listed in the Regional Transportation Plan (RTP) are included in this analysis and are also maintained in the other alternatives.

   c. Prunedale Bypass – This alternative involves the implementation of Alternative 4E, which is the Highway 101 Prunedale Bypass through North Monterey County. The Bypass would depart from the existing Highway 101 at the Russell Road/Espinosa Road intersection, traverse undeveloped areas east of Prunedale, and connect with Highway 101 at the north end of Prunedale at Crazy Horse Canyon Road/Echo Valley Road. A new freeway to freeway interchange would be provided at both the northerly and southerly connections. The network for this alternative includes the funded projects listed in the RTP.

d. Prunedale Bypass and Eastside Expressway – This alternative includes the Prunedale Bypass as described above plus the construction of a new expressway connecting with a new interchange at Highway 101/Harris Road. The alignment would be just outside the existing city limits on the southeast side of Salinas. It also generally follows the existing Old Stage Road alignment on the east side of Salinas and connects at the mid-point of the Prunedale Bypass with a new interchange. The network for this alternative includes the funded projects listed in the RTP.

4. Level of service (LOS) analyses were performed on selected freeway segments, ramps and arterial segments within the City of Salinas, the sphere of influence, and surrounding areas. Analyses were performed for existing network conditions and all the network alternatives.

5. Recommendations are made for warranted improvements in all scenarios evaluated.

II. RECENT GROWTH TRENDS

A. Recent Growth Factors in Salinas

Travel patterns in and around Salinas show a significant growth trend since the last General Plan Update in 1988. Salinas' population has grown from 108,000 in 1990 to about 143,920 in 2000: an increase of 33% in ten years. Salinas is an attractive place to live and work. It has become a popular location to live for persons employed in Santa Clara Valley, especially in the "high tech" industry. Salinas has become an important destination for shopping trips for North Monterey County, San Benito County, and South Santa Clara residents and visitors. Salinas provides much of Monterey County with essential services such as government, schools, medical services and other public services. On the national level, increased demand for fresh and processed fruits and vegetables has increased use of motor freight carrier to and from Salinas. All together, these factors increase travel demand on roads and highways in and around Salinas.

B. Population Growth Trends in Nearby Communities

Nearby cities as well as rural areas adjacent to Salinas have experienced changing demographics between 1990 and 2000 that have resulted in changing travel patterns. From 1990 to 2000, the US Census estimates that a significant negative growth trend has occurred on the Monterey Peninsula with the closure of Fort Ord. Monterey City, Marina and Seaside have declined 7%, 20% and 18% respectively. However, AMBAG projections show that these areas will return to the 1990 level or greater by year 2005. Refurbished housing and university housing have accelerated growth on Fort Ord recently. Meanwhile, the cities in the Salinas Valley have grown significantly in ten years: Greenfield +69%, Gonzales +61% and Soledad +57%. Selected unincorporated areas nearby Salinas have also grown significantly including Prunedale, Castroville and Aromas. Overall, Monterey County has grown over 12% since the 1990 Census.

C. Traffic Growth Since the Last General Plan Update

Traffic growth has increased significantly since the last General Plan update in 1988. For example, Boronda Road east of Highway 101 carried only 18,200 vehicles per day (vpd) in 1988 compared with about 43,000 vehicles today; an increase of 135%. Davis Road, near West Acacia, has increased from 16,800 vehicles per day to about 27,430 per day, or about 62% since 1988. Similarly, Highway 68, south of Blanco Road at the Salinas City limit, has increased from 23,000 to 33,230 or about 44%. Abbott Street, south of Harris Road, has increased from about 4,900 ADT to about 13,000 ADT or about 160%. Traffic on State Highway 101 between the Main Street Interchange and the Laurel Interchange has increased from 43,000 ADT to about 55,300. Traffic on Highway 101 north of Russell Road has increased over 40% from about 36,000 in 1988 to about 58,000 vehicles per day in 2000.

In the past ten years, the average annual growth rate at the Caltrans count stations in the State of California has been about 2 % per year. In many cases, locations in Salinas exceed the state's average growth rate on State highways.

III. MODEL DESCRIPTION

This section describes the regional traffic model, its development and the general effects of each of the future development alternatives. The analysis of existing and General Plan Buildout traffic operations later in this report presents in more detail the LOS effects of the different alternatives on the freeways, road segments and intersections in the study area and the mitigations necessary for each of the future alternatives.

A. The Base Traffic Network

A traffic network and land use model for the year 2000 was created to analyze the impact of changing land use and travel behavior in Monterey County and the City of Salinas in particular. A regional model was selected for this study because of the interrelationship of other communities and sub-areas on the Salinas transportation network. The Regional Model Network is illustrated in Appendix B:

The study area for the AMBAG regional model includes Santa Cruz County, Monterey County and San Benito County. Each county is divided into traffic analysis zones which are used to represent origins and destinations in the model. A total of over 1,400 zones are included in the model. Over 700 are within Monterey County. Network and traffic analysis zones (TAZ) in Monterey County have recently been updated for the 2000 Monterey County General Plan. Similarly the network and TAZ have been updated in the 2000 City of Salinas General Plan as a simultaneous and concerted effort. The 2000 traffic network was updated in areas where there have been capacity enhancements since 1990. The recently completed Boronda Road connection at Williams Road and several collector roads were added in East Salinas to reflect current development. At the Boronda interchange, the northbound loop ramp from Boronda Road to Highway 101 was also added. Other existing roadways on Fort Ord, Carmel Valley, downtown Salinas and the Monterey Peninsula, previously unaccounted for in the traffic model, were added to the

2000 network. Traffic zone detail was added to reflect the 2000 Census. The 2000 network has become the basis of all traffic modeling and traffic analysis for all the build out alternatives. The City of Salinas Network is illustrated in a variety of figures introduced throughout the report.

B. The Transit Network

The forecast model's transit network consists of a description of bus lines that are superimposed on the road network. Transit lines were coded for the following services:

Santa Cruz METRO Transit
Monterey Salinas Transit
The Wave

Transit line characteristics include the locations of stops, the peak and mid-day headways and factors that relate the average travel speeds of buses to the average speed of all vehicles on each type of road.

No major transit improvements are assumed between 2000 and General Plan buildout, other than transit line extensions along new major arterials and expressways. Transit rider-ship represents less than 1% of total person trips in the region and do not significantly affect the forecast volumes and corresponding roadway improvements.

C. Land Use and Socioeconomic Data

The results of the 2000 U.S. Census were made available for use in the General Plan in the summer of 2001. Population and housing were organized by Census block group and by Traffic Analysis Zone. City staff has assisted in organizing these in GIS and also organized them in an accounting tool by jurisdiction for use in the traffic model's trip generation program. In addition, Traffic Analysis Zone (TAZ) maps were updated to show land use patterns in Salinas since the 1990 US Census. The employment data was made available by the State of California Employment Development Department to update the trip attractions. These data were organized by employment type and Traffic Analysis Zone for use by the model's trip generation program. The land use update the model's trip generation program. The land use update provides realistic trip generation in areas of the county and the cities that have experienced important changes since the 1990 US Census. Additional land use documentation is provided in the General Plan Land Use Element. The Traffic Analysis Zone Map is included as Figure 1.

Land use and socioeconomic data at the zonal level are used for determining trip generation. The AMBAG model uses the following variables for each TAZ:

Number of dwelling units
Total population
Commercial employment
Government employment and office employment
Total employment, and

Mean household income in 1990 dollars

Land use for the 2000 model and land use for the General Plan Buildout alternatives are described below for the City of Salinas: Please see the following summary control totals:

Year	Dwelling Units	Population	Commercial Jobs	Public/ Office Jobs	Total Jobs
2000	39,954	143,920	8,464	21,797	46,445
2020	58,540	214,843	21,456	31,128	73,514

Land use data for areas outside the City of Salinas are based on the assumptions reported in the Monterey County 21st century General Plan Preferred Alternative. In the County plan, land use assumptions have a horizon in 2020. In the rest of the model, areas outside of Monterey County, including Santa Cruz County and San Benito County, the demographic information is based on AMBAG's *"The 1997 Regional Population and Employment Forecast for Monterey, San Benito and Santa Cruz County" (Nov,1997).*

D. Trip Generation

The trip generation factors were based on the Caltrans Travel Survey in 1991. Trip generation rates at the household end of the trips were derived for each of the household size categories and each of the four income groups resulting in 16 rates for each trip purpose. Trip attractions are based on factors multiplied by the number of housing units, employees or population in each TAZ. The methodology is documented in the *Major Investment Study for the Highway 1 Corridor between Watsonville and Santa Cruz* (1997). However, the trip rates were adjusted slightly in 1998 to improve the validation in all three counties. In 1998, a special generation component was added to the model to reflect non-home based productions and attractions at commercial and retail locations which was believed to be under-reported in the Caltrans Travel Survey (1991) by 30% and thus under-reported in the model. An adjustment to non-home based trip generation was made that was consistent with methods adopted by other planning organizations in California. The non-home based trip rate was increased again in 2001, but not by more than the 30% threshold, for the Monterey County General Plan, the City of Salinas General Plan and the City of Monterey update to reflect increased numbers of trips at commercial and retail locations in urban areas. The model also accounts separately for trips to and from The University of California Santa Cruz and Cabrillo College. Trips between hotel rooms and visitor attractions as well as homes and visitor attractions are also accounted for separately. These trips are validated to numbers of students and average daily visitors, respectively.

Estimates of trip generation and mode choice are improved by providing additional information on the characteristics of households in each TAZ. The AMBAG model includes two sub-models that estimate households by size and income category. Households are organized into the following size categories: 1 person, 2 persons, 3 persons and 4 or more persons. Households are further organized into four income categories based on annual household income using 1990 dollars: low ($0–19,999); low to middle ($20,0000-34,999); upper-middle ($35,000-49,999) and high income ($50,000 or more). The stratifications are based on the average persons per house and the mean income in each TAZ. The relationship of these variables is the basis of the trip generation program in the regional model.

E. Methodology: Through Trips

Through trips (external-external trips) and trips in and out of the three-county study area (external-internal, internal-external trips) are based on a License Plate Survey performed in 1994 by Transportation Planning Partners in the Monterey Bay region. Minor adjustments were made to show increasing proportions of internal-external trips to and from selected areas including: North Monterey County, and selected areas of growth in Salinas. The gateway volumes generated by the model were validated to year 2000 traffic counts. The gateway volumes in the General Plan buildout model were expanded based on the average annual growth rate over thirty years of Caltrans traffic counts. Caltrans historical data were collected from 1970 to 2000 and the annualized rate of growth was calculated at each external gateway and applied to the job stream. Quarterly counts data were collected from Caltrans and used to update the Highway 101 gateways in the model. Fourteen gateways are accounted for in the model; they are validated to Caltrans quarterly counts at control stations on a typical work day. The table below describes gateway volumes and counts on selected corridors in the travel model for year 2000 and year 2020:

		Vehicles Per Day		
External Gateways		**2000 Count**	**2000 Model**	**2020 Model**
Highway 101, N of Leavesly Road in	NB	44,821	44,234	58,085
Gilroy (PM R7.53)	SB	45,122	44,923	56,450
Highway 101, at Camp Roberts at the	SB	10,800	11,066	13,926
Mon-San Luis County Line (PM RO.84)	NB	10,823	11,070	14,067
Highway 152/156 at the Santa Clara-Merced	WB	12,981	13,188	23,677
County Line, Casa De Fruta, (PMR35.16)	EB	12,271	12,762	19,626
Highway 152, West of Hwy 156	WB	8,349	8,349	11,575
(PM R21.98)	EB	7,780	8,344	11,388
Highway 17, at Santa Clara-Santa Cruz	NB	30,314	29,987	39,893
County Line, Summit Rd. (PM 12.55)	SB	26,968	29,653	39,529

Seasonal variation and daily variation occur at each gateway. The Highway 101 gateway in Gilroy may have the greatest impact on traffic growth in Salinas. The historical trend has been about 3.5 % per year since about 1970. However, between 1999 and year 2000 the growth rate was extraordinary; almost 7% during this one year time period. Recent count data also show important growth on Highway 152 and Highway 156 at the Santa Clara and Merced County Line. These gateways have shown almost a 5% average annual growth rate in the past ten years. The state's average growth rate in the same period was almost 2% in the same year. Such annual growth rates could have important implications for forecasting and the future capacity needs of the highways in and around Salinas, in particular, Highway 101 to and through Salinas. Future work may include a study about the numbers of vehicles, trucks, buses and commuters between Salinas and the Silicon Valley.

F. Trip Distribution

The process of trip distribution estimates how many trips may travel from one zone to another zone. The model uses a method known as a gravity model to estimate trips between zones based on productions and attractions in each zone. The likelihood of making a trip between zones decreases as travel time increases. Five sets of friction factors, which indicate the sensitivity to travel time, were used. The friction factors for the AMBAG regional model were adapted from friction factors developed by the Metropolitan Transportation Commission (MTC) for their model in the San Francisco Bay Area. The average trip lengths are comparable to the 1991 Caltrans Travel Survey for internal trips. The survey accounts for internal and external trips; however, the longer through trip lengths are not accounted for in the model data below:

Trip Purpose	Caltrans Friction Factor	The Regional Model Internal Trip Length
Home Based Work	17	15.56 Min
Home Based Shop	11.49	10.88 Min
Home Based Other	12.87	10.57 Min
Non-Home Based	11.45	10.66 Min
Home Based School	N/A	7.57 Min
Overall:	12.87	12.99 Min

G. Mode Choice

The regional model uses a nested logit model for each trip purpose. The nested logit function is commonly used in economics and finance for decision-making. A consumer is faced with a choice between competing modes of transportation. In the equation, the consumer will shift to an alternative mode of transportation relative to built in sensitivities such as volume to capacity ratio, parking costs, and travel time. The decision tree includes motorized travel and non-motorized travel. In addition, the tree includes automobile and transit. Furthermore, under automobile, there exist choices such as drive alone, shared ride and two passengers or more. Overall, there are eight mode choices that can be made in the model.

H. Traffic Assignment

The vehicle assignment program uses the equilibrium assignment to assign traffic. Initially, drivers are assigned to the road assuming the fastest route without regard to congestion as in an all or nothing type assignment. Then, travel time is recalculated based on a level of congestion and reassigned based on congested speed. The process is repeated 5-7 times or until all the trips are assigned in each period. After each iteration, some trips are shifted to an alternate route with a faster travel time. The AMBAG regional model assigns traffic for three time periods: AM peak hour, PM peak hour and the off peak (remaining 22 hours). The congested travel speeds are based on formulae in the traffic model known as BPR (Bureau of Public Roads) curves. In short, they are the relationship between speed to congestion in the traffic assignment. The curves in the model are based on the research performed by MTC and are slightly modified for the AMBAG regional model. The BPR curves are uniquely based on the capacity of the roadway coded in the network. The capacity table is shown below. The road classifications used for the model correlate to roadway capacity and not functional characteristics.

Vehicles Per Hour

Road Type	**Hourly Capacity Per Lane**
Freeway	2800
Highway	1800
Arterial	1470
Minor Arterial	1100
Collector	700
Off-Ramp	1000
Loop Ramp	1250

I. Model Validation

Traffic counts in 1999, 2000 and 2001 were received from the City of Salinas, Caltrans, Monterey County Public Works Department and the other cities in Monterey County. In addition, traffic counts were obtained from traffic studies that have occurred in the City and the County since 1993. The counts were compared to model volumes on selected roads and highways in Monterey County (please see Table 1: Traffic Model Validation in 2000). Over 136 focus segments including freeways, highways, arterials, and collectors were selected to be studied in the base year and validated for use in the buildout analyses. However, several hundred locations were validated in Monterey County altogether including interchanges and city streets. The validation results show that most locations have a deviation between model volume and traffic count of less than 10%. Moreover, the deviation on many links is less than 5%. Additional validation data are available in the Appendix: Vehicle Miles of Travel and Vehicle Hours of Travel in Monterey County: Year 2000. The validated model is consistent with criteria found in *The Calibration and Adjustment of System Planning Models*, by the Federal Highway Administration, 1990.

J. Travel Forecasts

During the early development of the City's travel forecasts, the AMBAG land use forecast for the region was used to test network alternatives with assumptions about the City's growth. However, by the Spring of 2002, the Monterey County General Plan completed the draft EIR for the County General Plan. Then, the County's demographic data were combined with assumptions about the City's growth at *buildout;* the AMBAG land use was maintained for Santa Cruz and San Benito counties in 2020. Subsequently, these land use assumptions for the future were used to generate travel in the buildout networks. Again, land use for the 2000 model and land use for the General Plan *Buildout* alternatives were described in the table in Section III. C, "Land Use and Socioeconomic Data", for the City of Salinas.

Trips to and from the gateways and trips in and out of the study area were manually factored based on their long-term growth rates from their 2000 base year levels for the forecast. (Please see Section III. E. Methodology: Through Trips). Additional traffic analysis zones were added to the network within the proposed boundaries of the City to represent the general plan land uses.

K. Future Network Alternatives

1. The Regional Network Alternatives

The uncertainty about the future highway network in the Highway 101 and Highway 156 corridors north of Salinas, led to an analysis of the proposed highway alternatives being studied by Caltrans and TAMC. The interdependence of the regional network and the city street network has implications for the City capital improvement program. Moreover, if regional and city network connections could be planned and coordinated in advance, then traffic mitigation caused by changing land use patterns could also occur at the regional and the city level. Thus, in the absence of a clearly defined regional alternative for Highway 156 and Highway 101 in particular, all the proposed regional alternatives were tested with the city's network improvements in the travel model, so their impact could be determined. In this manner, the regional alternative is an overriding consideration in the City's circulation. The regional alternatives modeled are characterized as follows: 1.) the "210" alternative, safety improvements with some capacity enhancements; 2.) the Prunedale Bypass alternative-significant capacity increases in the Highway 101 corridor and 3.) the Eastside Expressway alternative which includes a significant diversion of traffic around the east side and south side of Salinas between Highway 101 north of Salinas and Highway 101 south of Salinas. 4.) A no build was also tested with the increased land use described above. In addition, the funded network improvements listed in the Metropolitan Transportation Plan for the AMBAG study area were included in the modeling analyses. A comparative analysis is reported below to show the affect of regional traffic patterns under the proposed network alternatives for the Highway 101 corridor. A screen line drawn between northern Monterey County and the City of Salinas Street network illustrate the potential impacts of the four highway alternatives noted above.

2. The City Network Alternatives

The linkage between the City network and the regional highway network is an overriding consideration relative to changing land use patterns. The traffic model was used to determine whether or not regional network improvements could benefit the City's circulation under the three regional alternatives described above. City network enhancements were tested and evaluated for their ability to accommodate travel demand relative to the cost. Network enhancements were dropped from the analysis or modified to optimize traffic flow and minimize traffic problems. In this manner, the adverse effect of traffic caused by the growth proposed in the City of Salinas General Plan is mitigated. The network enhancements that maintained their significance through the modeling process are described below. The results of the network alternatives, as characterized by the regional alternatives, are summarized below. Also see Tables 1-8, Traffic Volumes and LOS on selected City streets and roads.

3. The Regional Highway Network and the Salinas Street Network: A Screen line

The interdependence of the regional network and the city street network has important implications for decision makers who want to accommodate travel demand and minimize capital costs. A screen line on Appendix C shown as line **A-B** extending between northern Monterey County and the City of Salinas Street network illustrates locations where trips move between Salinas and the Highway 101 corridor north of Salinas. The table below shows the numbers of trips at selected locations based on four regional alternatives:

Vehicles Per Day Under Four Highway 101 Alternatives at Buildout

Screenline Location	2000 Count	2000 Model	The No-Build	The 210	Prunedale Bypass	The Eastside Expressway
Hwy. 183 North of Espinosa	25,993	25,600	33,037	36,201	36,381	36,360
Hwy. 101 North of Russell	59,381	57,093	65,823	73,003	77,536	57,511
Harrison Road North of Russell	5,476	4,635	35,615	19,606	27,388	26,319
San Juan Grade North of Russell	11,905	13,000	22,934	17,775	16,945	17,352
Natividad Drive North of Boronda	7,246	7,299	19,715	14,844	14,203	14,907
Old Stage Road South of Old Natividad Road	1,155	1,225	7,749	9,725	6,924	x
Flyover to Espinosa on Southerly I/C of Hwy 101	x	x	x	6,348	x	x
Eastside Expressway	x	x	x	x	x	27,111
Total Vehicle Trips	**111,156**	**108,852**	**184,873**	**177,481**	**179,560**	**179,373**

In the "No Build" network, there are no road and highway capacity enhancements anywhere in the study area. The "No Build" network alternative shows that more total vehicle trips could be diverted to Salinas relative to the other alternatives. This may be due to the capacity limitations of Highway 156 in the No Build network that in turn may cause trips to travel through Salinas enroute to and from the Monterey Peninsula. The data also show that more trips are diverted to regional arterials and Salinas streets because the Highway 101 corridor has limited capacity and cannot accommodate the forecasted travel demand.

In the "210" network, some capacity improvements decrease circuitous trip making. Capacity improvements in the Highway 101 corridor, even though they are limited, allow additional trips into the City and relieve arterial roads and streets. However, the trip reductions are limited. Many trips will continue to use Old Stage Road and Crazy Horse Canyon Road rather than use Highway 101. Traffic on Harrison Road north of Russell Road declines compared to the No Build. However, the flyover on the Southerly Interchange proposed in the 210 Alternative provides a conduit for trips to avoid the congested intersection at Russell Road /North Main Street under this alternative.

The Prunedale Bypass provides the capacity required to get vehicle trips between locations to the north and the City of Salinas. Vehicle trips would decrease on Old Stage Road, Natividad Road and San Juan Grade Road, which would otherwise experience spillover traffic from the congested Highway 101 corridor if no capacity improvements are implemented north of Russell Road.

The Eastside Expressway will attract most through trips currently using Highway 101. Travel on the Highway 101 mainline could decrease to levels that are equivalent to today's levels. The improved LOS on Highway 101 caused by the Eastside Expressway could provide opportunities for local trips and improve travel on City streets. This improvement will preclude the need to widen Highway 101 to six-lanes south of Boronda Road.

IV. EXISTING CONDITIONS

A. Existing Traffic Volumes and Levels of Service

Figure 2 illustrates the existing street system for the City of Salinas. Figure 4 indicates the existing average daily traffic on many of the major streets within the City. Table 1 tabulates the major streets including collectors, arterials, rural highways and US 101. It includes sections that are freeway and sections that are expressway. This table indicates each roadway's number of travel lanes, the facility type and the direction of travel (i.e., roadway orientation). Existing annual average daily traffic is also provided. The volumes reported include counts performed in 1998 and 1999 during the time of the preparation of the Existing Conditions Report which is included as Appendix A. Traffic counts reported in 1999, 2000 and 2001 are also provided. The 1999 counts in the second column pertain to the most recent data available from Caltrans for certain roadways in North Monterey County. The corresponding LOS for these count years is also provided. Finally, a column is provided indicating the traffic volumes estimated by the travel forecasting model used for predicting future traffic volumes. These volumes indicate what the model calculates for these road segments based upon the network travel characteristics as well as existing land uses based on the 2000 census. They can be compared to actual counts to determine the accuracy of the model for predicting existing travel behavior in the City of Salinas. A comparison of virtually all segments indicates a very close correlation between actual counts and volumes predicted by the model. Again, Levels of Service corresponding with traffic model volumes are provided.

B. Level of Service Standards

The Levels of Service are based upon LOS threshold volumes included as Appendix D. These are planning level volumes and are based upon various assumptions for percentage of traffic in the peak hour, directional split on the roadway and other factors associated with travel lane widths, percentage trucks, signal spacing and a variety of other characteristics that could affect the individual capacity and LOS for each individual roadway. These thresholds have been established as reasonably accurate for program level planning purposes.

LOS is a qualitative description of traffic operations for roadway facilities. LOS A indicates free flow conditions with little or no delay. LOS F indicates a high level of delay with severe congestion. LOS C indicates moderate delay. LOS D indicates marginally acceptable traffic operations in urban areas. The threshold of LOS E is the theoretical capacity of the street or intersection. Appendices D-1 and D-2 provide descriptions of road segment levels of service and the planning level volume thresholds for each level of service.

The City of Salinas established a LOS D as an acceptable LOS in the previous General Plan. LOS C was established as the acceptable LOS for conditional growth areas, which are generally located in the north and easterly areas of the city where new development has been taking place over the past 10 years and is planned for the future. Figure 3 provides the map from the 1988 General Plan Update that identifies the conditional growth areas where LOS C applied. The currently proposed General Plan includes a threshold of LOS D throughout the City, with no LOS C standard anywhere in the City of Salinas. Caltrans has established the "cusp" between Levels of Service C and D as their LOS standard. Caltrans has intentionally not defined a precise LOS standard. This is in order to maintain flexibility to apply a more or less stringent standard for individual situations. It can generally be assumed that LOS "D+" is acceptable.

C. Currently Deficient Roadways

A number of roadways currently operate at LOS D. These are marginally acceptable but will reach unacceptable levels of service in the near future. They include West Laurel Drive immediately east and west of Highway 101, East Laurel Drive between Natividad Road and Constitution Boulevard, East Market Street east of Monterey Street, East Market east of Highway 101 and Highway 101 north of Boronda Road.

Highway 101 north of Boronda Road is a Caltrans facility. Caltrans LOS standards, therefore, apply. The planning level threshold for LOS D for a four-lane freeway is 69,000 vehicles per day. LOS C is 57,000 vehicles per day. Existing volumes, based upon the traffic model, are actually near the E end of LOS D. This, therefore, is currently operating at an unacceptable LOS and warrants widening to a six-lane freeway. Six lanes are planned for this segment as a part of the Highway 101 Prunedale Bypass (Caltrans Alternative 4E) as well as the potential upgrade of the existing Highway 101 through Prunedale to a freeway in Alternative 2 and Alternative 210. Caltrans, the Transportation Agency for Monterey County, Monterey County and the City of Salinas as well as other affected local agencies are in the process of identifying the preferred alternative for improvements along the Highway 101 corridor through North Monterey County north of the City of Salinas at the present time. A total of $210,000,000 has been earmarked for this project. On the other hand, the upgrade of the existing alignment (Alternative 2) as well as the Prunedale Bypass (Alternative 4E) are estimated to cost over $550,000,000. Securing the additional funding or developing a scaled down project is currently being investigated by these agencies. It is hoped that a feasible project can be identified and that construction can take place within the next 10 years to provide some traffic relief in this corridor.

Several streets in the City of Salinas currently operate at LOS E or F. They are as follows:

1. Abbott Street, south of John Street currently operates at LOS E and is an undivided four-lane arterial. Traffic volumes declined from 1998/1999 to 2000/2001 on this roadway segment. This is possibly due to the relocation of the auto-dealers from Abbott Street to the new auto center located at the southwest quadrant of the Highway 101/Boronda Road interchange. The provision of left turn channelization at major intersections and driveways along this street would result in LOS C being achieved. Parking must be prohibited where median left-turn lanes will be added.

2. Blanco Road currently operates at LOS E west of and immediately east of Davis Road. This is a primary commuter route between the Monterey Peninsula and the City of Salinas. It is currently a two-lane rural highway west of Davis Road. It is planned for widening to a four-lane highway in the future. This widening project has been identified as a needed improvement in the Monterey County Regional Transportation Plan prepared by the Transportation Agency for Monterey County, however full funding for this improvement has not been secured.

3. East Boronda Road currently operates at LOS E to F on its two-lane section between San Juan Grade Road and Constitution Boulevard. This is a roadway that is planned to be widened in the future to a six-lane expressway. When this roadway is widened in the future, it will operate at an acceptable LOS A or B with existing volumes.

4. Davis Road between Blanco Road and Market Street (State Route 183) currently operates at LOS F. David Road is a two-lane rural highway in this area. The existing congestion could be mitigated by widening the existing Davis Road to four-lanes. The City of Salinas and County of Monterey are planning a Western Bypass that will result in the existing Davis Road becoming a frontage road. The Western Bypass will divert the vast majority of traffic from Davis Road onto this four-lane expressway. Davis Road would then operate well within an acceptable LOS.

5. Davis Road currently operates at LOS E on its existing four-lane section just south of West Laurel Drive. This can be remedied to some extent by traffic signal timing optimization. The City of Salinas is in the process of completing a Congestion Mitigation and Air Quality Grant (CMAQ) project to coordinate traffic signals along Davis Road and Laurel Drive in the vicinity of the Highway 101/Laurel Drive interchange, which will improve traffic operations in this area. Additional improvements in traffic operations can be achieved by adding capacity on side-street approaches and by providing better channelization for left-turn movements. Monterey County, in cooperation with the City of Salinas, is in the process of planning the Rossi Street extension from Davis Road westerly to Boronda Road in the southern portion of the Boronda area. This will relieve traffic volumes on Calle Del Adobe and Post Drive in the vicinity of this impacted segment of Davis Road. Ultimately, Davis Road will need to be widened to six lanes. Alternatively, the Western Bypass will be needed to divert traffic from Davis Road.

7. John Street west of Highway 101 currently operates at LOS D as a four-lane undivided arterial. The model predicts traffic volumes slightly higher than the actual counts, which would correspond with LOS E based upon planning thresholds. This section of roadway is marginally acceptable at the present time. The implementation of left-turn channelization at some of the major private driveways along this section of roadway would result in a significant improvement in traffic operations and ensure an acceptable LOS.

8. Laurel Drive operates at LOS E east of Highway 101. Left turn channelization at major intersections and driveways would result in LOS C or better. As discussed for Davis Road just south of Laurel Drive, the City of Salinas is completing signal coordination improvement studies that will partially improve the LOS at the Highway 101 interchange. Ramp widening and channelization improvements at the interchange are also planned that will improve traffic operations. In the future, the Alvin Drive undercrossing would divert traffic from Laurel Drive which would result in an acceptable LOS with no improvements to this segment of Laurel Drive.

9. North Main Street is operating at LOS E between Market Street and Bernal Drive. A review of historic traffic volumes indicates that traffic volumes were actually higher several years ago than in the most recent counts. The City of Salinas is in the process of evaluating methods of increasing capacity along this corridor. One method is to add capacity on the Rossi Street approaches at Main Street, which would allow more signal green time to be allocated to Main Street. Signal coordination is also being considered. A further option is to eliminate on-street parking and provide a third travel lane in the northbound direction to accommodate the heavier peaks that are experienced in the evening peak-hour period.

10. Highway 101 currently operates at LOS F north of the Russell/Espinosa intersection, where it is a four-lane conventional highway. As discussed earlier, the Transportation Agency for Monterey County and other affected local agencies are in the process of trying to implement appropriate improvements along Highway 101 by constructing a bypass to relieve existing congestion and safety deficiencies along this corridor.

In addition to implementing capacity improvements, the City of Salinas also has policies to reduce traffic demand. This is accomplished by providing pedestrian and bicycle facilities, participating in the Monterey Salinas Transit District to provide city-wide bus service and being actively involved in bringing Caltrain service to the City of Salinas and Monterey County to provide for commuters to Santa Clara County. A number of specific policies regarding alternative modes of transportation, trip reduction strategies and neighborhood traffic operations are provided in the General Plan. A more detailed discussion of alternative modes of transportation are provided in the previously cited *Existing Conditions Report* prepared by DKS Associates, which is included as Appendix A.

The City of Salinas has received a number of inquiries regarding cut-through traffic in residential neighborhoods. The City is in the process of developing neighborhood traffic calming and traffic management policies in order to systematically and consistently evaluate traffic operations in residential areas throughout the City. The City is in the process of testing various traffic calming strategies and is planning on implementing traffic calming measures throughout the City as the policies are developed and priorities are established.

V. GENERAL PLAN BUILDOUT TRAFFIC CONDITIONS

A. General Plan Buildout Without Roadway Improvements (No-Build Alternative)

As discussed in the introduction to this report, the City of Salinas will experience a significant population growth during the course of the buildout of this General Plan update. The 2000 population of 144,000 is expected to expand to a population of about 215,000.

Significant corresponding increases in traffic volumes are expected at General Plan buildout. Figure 5 depicts traffic volumes on some of the major streets with General Plan buildout, assuming that no capacity improvements are implemented on existing streets and no new streets are constructed. Traffic volumes on all of the study street segments for this network scenario are tabulated on Table 2. This network scenario is included in this report as a base condition, which indicates anticipated traffic operations with an unmitigated network. Inherent in the development of much of the anticipated growth is the implementation of major street improvements. This scenario, therefore, will not exist, but is only provided for comparative purposes. As indicated on Table 2, the following roadways are expected to operate at LOS E or F:

1. Abbott Street (south of John Street)
2. Alisal Road (south of Bardin Road)
3. Bernal Drive (east of N. Main Street)
4. Major sections of Blanco Road
5. Virtually all of Boronda Road
6. Davis Road (between Boronda Road and Laurel Drive)
7. Espinosa Road (LOS D) (County jurisdiction)
8. Front Street (south of Alisal Street)
9. Harrison Road (County jurisdiction)
10. Hebert Road (County jurisdiction)
11. John Street (east of Abbott Street)
12. Laurel Drive (Highway 101 to Sanborn Road)
13. North Main Street (between Market Street and Bernal Street)
14. South Main Street (between John Street and Romie Lane)
15. Market Street (between Lincoln Avenue and Front Street)
16. Market Street (east of Highway 101)
17. McKinnon Street (south of Boronda Road)

18. Natividad Road (north of East Boronda Road)
19. Natividad Road (between Bernal Drive and Laurel Drive)
20. Sanborn Road (north of Highway 101)
21. San Juan Grade Road (between Main Street and Rogge Road)
22. Highway 101 (from Airport Boulevard to Russell Road-Espinosa Road in north Monterey County)
23. Williams Road (between Alisal Street and Boronda Road)

It is evident by the substantial number of streets that will experience E or F levels of service that much of the existing street network would fail if no capacity improvements were provided on existing roadways and no new network was developed. The next three alternative networks provide substantial increases in the capacity of many existing roadways serving the proposed development areas as well as new roadways that will substantially mitigate all of the otherwise-expected traffic impacts from General Plan buildout development.

B. Alternative 210 General Plan Buildout Traffic Operations

Alternative 210 includes upgrades along the existing Highway 101 between the Russell Road-Espinosa Road intersection and Highway 156 in north Monterey County to create a four-lane freeway and eliminate nearly all of the at-grade access on this existing conventional highway. The two existing northbound Highway 101 travel lanes would be converted into a two-lane frontage road that would serve as an extension of Main Street north of Boronda Road. The four-lane freeway would be constructed immediately west of the existing northbound Highway 101 travel lanes. Major interchange improvements would be constructed at the existing Highway 101/Highway 156 interchange. Interchanges at Highway 101/Crazy Horse Canyon Road-Echo Valley Road and on the existing Highway 101 just north of Russell Road – Espinosa Road would be constructed.

The Western Bypass is another major roadway improvement included in this network alternative. This would involve constructing a four-lane expressway immediately west of the two-lane section of Davis Road north of Blanco Road, which would then swing to the northwest to be parallel to and just west of the existing Boronda Road, ultimately extending north and connecting into Boronda Road just west of Highway 101.

Another major improvement is the Eastside Bypass, which will involve the construction of a new interchange on Highway 101 at Harris Road. The Eastside Bypass will extend northeasterly from this new interchange around the south side of the Salinas Municipal Airport, across Alisal Road and then turn to the north to become an extension of Boronda Road where it intersects at Williams Road. Moffett Street will be extended from the existing airport industrial area across an existing drainage channel along the Eastside Bypass at Alisal Road and from future development areas south of Williams Road and east of Alisal Road.

Highway 101 is also assumed to be widened to a six-lane freeway from Airport Boulevard to Russell Road.

A number of other capacity improvements and city arterial extensions will be constructed as a part of this alternative. Two of the other major extensions of significance include the Russell Road extension east from San Juan Grade Road to connect with Old Stage Road. Constitution Boulevard will extend to Old Stage Road to the east. Constitution Boulevard will extend west from Laurel Drive to connect with Kern Street near the Highway 101/Market Street interchange. Bernal Road will be extended from Natividad Road to connect to the Constitution Boulevard extension.

1. Highway 101 Through Salinas

Today, a significant demand is placed on Highway 101 between Main Street and Russell Road. Continued growth in local trips and increased numbers of through trips will exceed the capacity of Highway 101 on this segment. In the future, if there is no additional highway capacity on Highway 101, nor a Western Bypass, nor an Eastside Bypass with a connection to the Highway, then travel demand for Highway 101 will certainly lead to adverse conditions in the mainline. Highway 101 through Salinas will require six lanes in addition to some auxiliary lanes. Daily traffic volumes on the mainline could reach 80,000 vehicles per day (vpd) by 2020. All together, daily vehicles on Highway 101, North Main Street, the Western Bypass and Davis Road could exceed 130,000 vpd. Please see Table 8, U.S 101 Daily Traffic Volume Summary.

Moreover, without additional capacity, downtown streets such as Main Street, West Market Street and John Street and other streets such as Blanco Road, Davis Road will deteriorate in the peak hour and some off-peak periods of the day. Mitigation could become very costly in the City. Limited capacity on the mainline will also lead to traffic problems on collector roads and intersections in the City's residential neighborhoods.

In 1990, the Route 101 Interchange Study, prepared by TAMC, identified level of service problems at all the interchanges along Highway 101 in Salinas. Since that time, the LOS on-ramps and merge areas have further deteriorated. *The Prunedale Freeway Operational Analysis (2001)* report by Caltrans, District 6, shows degradation on the mainline between Laurel Drive and Boronda Road as well as Boronda Road and Espinosa Road – Russell Road. The study also shows critical intersection failures in the Highway 101 corridor at North Davis Road and West Laurel Drive, Highway 101 and Espinosa Road and North Main and Russell Road. Other recent studies show failures at the Airport Road interchange and the Sanborn interchange. The AM peak hour may have as many as 12% trucks at these locations. East-west arterials serving the interchanges in the Highway 101 corridor also have important capacity and travel demand issues including: Sanborn Road, Airport Road, Main Street, Laurel Drive and Boronda Road.

Increased capacity on Highway 101, additional east-west arterial connections and interchange improvements can mitigate the potential for adverse impacts caused by growth. Moreover, a West Side Bypass and an Eastside Bypass could lead to important reductions in traffic throughout the City.

2. Boronda Road Widening to Six Lanes from San Juan Grade Road to Williams Road

By 2020, daily traffic volumes on East Boronda Road could reach 60,000 vpd near US 101. Today, about 42,000 vpd traverse East Boronda Road between North Main Street and Highway 101. Similarly, future volumes could range from 24,000 vpd to 37,000 vpd on Boronda Road at selected locations between San Juan Grade Road and Williams Road. Six lanes will be required to maintain Boronda Road at a Level of Service D or better. Moreover, additional east-west arterial capacity will also be required to maintain Boronda Road at LOS D or better. In the buildout network, the Russell Road Extension to Old Stage and the Alvin Driveundercrossing of Highway 101 provide two opportunities to maintain East Boronda Road at a Level of Service D or better. In the absence of additional east-west service, Boronda Road between Natividad Road and Highway 101 will operate below standard.

3. The Western Bypass

The Western Bypass could have important regional and local benefits. Travel demand is projected to be between 20,000 and 30,000 vpd at various locations along the Western Bypass. Through trips that use local arterial streets such as Main Street and Laurel Drive could be diverted to the Bypass. Similarly, the Bypass could divert regional traffic off Highway 101 between the interchanges at Boronda Road and Main Street. Significant traffic reductions on Davis Road will occur, precluding the need to widen Davis Road.

The Western Bypass will present planning and design problems. A connection on the north end of the Bypass with Highway 101 at Espinosa Road through prime agricultural land is strongly discouraged. The connection at Boronda Road interchange may require an additional lane on the northbound loop ramp and a northbound auxiliary lane between Boronda Road and Russell Road to accommodate the travel demand. Conversely, a flyover ramp over Boronda Road and on to the northbound direction of Highway 101 could be too costly. On the west side of the interchange, the southbound off-ramp to the Bypass can be widened and free flow movements are achievable.

Several considerations pertain to east-west arterial connections with the Western Bypass. A connection with Calle Del Adobe is prohibitive due to the historical significance of the Adobe. Connections with other east-west arterials are required to conveniently attract adequate numbers of vehicle trips to justify the Bypass costs. This must be done without further impacting Boronda Road and Laurel Drive, City arterial streets already reaching capacity. These include: 1.) Auto Center Circle Extension; 2.) Alvin Drive undercrossing with a connection to Westridge Parkway; 3.) Rossi Street extension; 4.) West Market Street; (Hwy 183) interchange; 5.) West Acacia Street; and 6.) an intersection with Blanco Road. Other factors that affect traffic loading on the Western Bypass include the widening of Blanco Road to four-lanes between Davis Road and the City of Marina. Existing Davis Road between Highway 183 and West Blanco Road is downgraded to a collector street with a speed of 35 mph and is terminated at Ambrose Drive. A major design issue that will be encountered is the method for the bypass cross Highway 183 and the Union Pacific railroad tracks, if the interchange on Davis Road cannot be used. A bridge for the Western Bypass similar to the existing Davis Road structure will be expensive.

An abbreviated version of the Western Bypass was tested with the northerly endpoint at the Boronda Road interchange and the southerly endpoint at the junction of the Rossi Street extension. This scaled-down Bypass did not extend to Highway 183. The traffic loading would be insignificant and is not considered justifiable based on the minimal benefits compared with the relatively high cost. This reduced alternative was not considered a viable improvement to handle long-term traffic demand.

4. The Russell Road Widening and Extension to Old Stage Road

Today, a major deficiency in the City of Salinas Circulation System is the absence of an east-west arterial and another interchange at Highway 101 other than Boronda Road to serve development in the Northeast area. Deficiencies on existing east-west segments and intersections within the Highway 101 corridor are critical in south and north Salinas. The Russell Road extension to Old Stage Road as a four lane arterial will provide the much needed traffic relief on existing east-west streets in North Salinas including Boronda Road, Russell-Espinosa and Laurel Drive. Under the proposed General Plan Update at buildout, the Russell Road extension could remove up to 25,000 vpd from the existing east-west traffic grid in North Salinas. Traffic loading on Russell Road between Natividad Road and Highway 101 is noteworthy: about 26,000 vpd each way. At a minimum, 10,000 vehicles could be removed from the interchange of Highway 101 at Boronda Road at build out with the Russell Road extension. The Russell Road widening and extension combined with improvements in the Highway 101 corridor to the north and to the south could have the most positive outcome in Salinas' circulation system.

5. Old Stage Road Widening between Williams Road Natividad Road

The Old Stage widening project will facilitate local travel from East Salinas to the Russell Road extension and thereby reduce travel through the City. Without any improvements in the 101 corridor in Salinas and Prunedale, Old Stage Road will take on regional and local significance. Again, depending upon whether or not there are regional network capacity improvements in the Highway corridor, traffic could increase from about 1,000 vpd today to over 8,000 vpd on Old Stage Road. Old Stage Road is an important alternative to Highway 101 for trips traversing the Salinas Valley. If Highway 101 North of Salinas is increasingly congested, local and regional trips will divert to Old Stage Road.

6. Alvin Drive Undercrossing

The Alvin Drive undercrossing of Highway 101 to the Western Bypass will reduce east-west traffic on Boronda Road and Laurel Drive. A connection to Westridge Parkway, west of Davis Road, will enable easy access to important shopping attractions for trips that originate in North and East Salinas. For a detailed discussion, refer to Alvin Drive/US 101 Northbound Temporary Slip Ramps (1993) by DKS and Associates. Traffic that originates in East Salinas and currently uses Boronda Road and Laurel Drive could divert to the Alvin Drive undercrossing. The model analysis shows that 16,000 vpd will use the Alvin Drive undercrossing. Important benefits will be realized at the following intersections: Laurel Drive and Adams Street, West Laurel Drive and Davis Road, North Main Street and Boronda Road, and Harden Ranch Parkway at North Main Street. Other benefits may include a reduction in cut through traffic in north Salinas neighborhoods. If there is no other east west arterial is added to the network, such as the Russell Road extension, traffic on the Alvin Drive undercrossing could easily exceed 20,000 vpd. On the other hand, if the Alvin Drive undercrossing is connected to both the Western Bypass and Davis Road, traffic loading may not be significant enough to justify the cost.

7. The Eastside Bypass between Harris Road Interchange and Boronda Road

In this study, a regional Eastside Expressway was tested that would traverse the foothills of the Gabilan Mountains and divert through trips around the City of Salinas. However, an abbreviated version of an Eastside Bypass was maintained in the modeling analysis that would extend from Harris Road at Highway 101 to Boronda Road at Williams Road. This Eastside Bypass would be incremental toward the regional Eastside Expressway. Under the proposed General Plan at buildout, the Eastside Bypass could remove up to 20,000 vpd from the existing east-west traffic grid in South Salinas. Connections between the Eastside Bypass and Moffett Street and Alisal Road are important linkages for traffic loading to occur. In addition, a significant new interchange at Harris Road and Highway 101 is proposed in the analysis that could accommodate freeway to expressway volume movements. Like the Russell Road extension in North Salinas, the abbreviated version of the Eastside Expressway will mitigate intersection problems in the Highway 101 corridor in the south including: Airport Boulevard, Sanborn Road, John Street and Williams Road.

8. The Rossi Street Extension and the East Rossi Street Widening

The Rossi Street extension westerly from Davis Road to the Western Bypass could carry about 10,000 vpd. In the absence of the Western Bypass, the Rossi Street extension to either Madison Lane or West Boronda could result in about 9,000 vpd. The travel demand for Rossi Street further increases with improved operations and widening of East Rossi Street between Sherwood and North Main Street. The modeling analysis suggests that improved service between Sherwood Drive and the

Boronda neighorhood will result in significant loading. Additional benefits include reduced travel on East Market Street between Pajaro Street and Lincoln Avenue and Main Street between Highway 101 and downtown. Other benefits include decreased traffic at the West Laurel and Davis interchange.

9. The Bernal Drive and Constitution Boulevard Extensions in Carr Lake

The General Plan Update proposes to extend Bernal Drive at Sherwood Drive to an extension of Constitution Boulevard in Carr Lake. Constitution Boulevard is from between Laurel Drive to Kern Street. Travel demand on the Bernal extension is about 2,700 vpd. Travel demand was estimated to be about 5,700 vpd on the Constitution Boulevard extension. Although the traffic loading on the network may not appear substantive to warrant their construction, there will be traffic relief at the intersection of Laurel Drive and Natividad Road, already operating at LOS E. Traffic volumes on Natividad Road could reach 40,000 under the buildout plan. In addition, benefits will occur on Sherwood Drive and North Main Street. Alternative Constitution Boulevard connections with Kern Street and Highway 101 should be considered when planning for this improvement in order to maximize the usage of the facility.

10. Airport Road Interchange and Flyover

Today, high volumes of traffic use the narrow east-west flyover of Highway 101 at the Airport Road Interchange. There are currently substantial ramp storage issues and ramp geometry problems. Moreover, its close proximity to the Sanborn Road interchange causes operational and safety issues on Highway 101. At General Plan buildout, the new interchange proposed by Caltrans will accommodate the increased travel anticipated on the flyover bridge and on the north side ramps. Under the Eastside Expressway alternative, traffic will be diverted from this Airport interchange to the future Harris Road interchange. Traffic diversions may be significant enough to reduce some of the needed improvements at the Airport interchange. For example, trucks will continue to use the Highway 101 corridor and Airport interchange to access the freight loading and unloading facilities in South Salinas rather than use the Eastside Expressway and the Harris Road interchange. Trips to and from this area that use this interchange are unique because they typically originate in the Bay Area or they are traveling across the United States on the Interstate system

The above street and highway improvements as well as several other major improvements are described in more detail below.

There are a total of over 40 major street extensions and roadway widening projects associated with this alternative. They are illustrated on Figure 6 and tabulated on Table 3.

Figure 7 depicts the resulting average daily traffic volumes under the General Plan Buildout Development scenario with all of these improvements in place. A tabular summary of all of the major streets in the City of Salinas for this development scenario is provided on Table 4. Table 7 provides a tabulation of anticipated Levels of Service on Street extensions and new roadways that do not currently exist.

The network described above will substantially mitigate traffic operational deficiencies throughout the city of Salinas. However, a number of additional streets will require capacity improvements beyond those identified in the base improvement program. They are described as follows. Their locations are depicted on Figure 12.

1. Abbott Street will operate at LOS F as a four-lane undivided arterial between John Street and Romie Lane. With the implementation of left turn channelization described for mitigation for the existing condition, LOS E can be achieved. Elimination of parking on both sides of the street and widening of Abbott Street to create a six-lane arterial would result in LOS B.

2. Alisal Street is expected to operate at LOS E east of Monterey Street where it is currently a four-lane undivided arterial. The implementation of left turn channelization at major intersections would result in LOS B.

3. Harris Road, a County road that is expected to operate at LOS D between Abbott Street and Spreckels Boulevard. This LOS is acceptable according to Salinas standards but is governed by the Monterey County standard of LOS C. To achieve LOS C, it would need to be widened to a four-lane highway, which would result in LOS A.

4. John Street is expected to operate at LOS F east of Abbott Street where it is a four-lane undivided arterial. The provision of left turn channelization would result in LOS C. This would require eliminating on-street parking.

5. Harris Road, a County road that is expected to operate at LOS D between Abbott Street and Spreckels Boulevard. This LOS is acceptable according to Salinas standards but is governed by the Monterey County standard of LOS C. To achieve LOS C, it would need to be widened to a four-lane highway, which would result in LOS A.

5. Laurel Drive is expected to operate at LOS F between Natividad Road and Sanborn Road. It will require widening from its existing four lanes to six lanes on its approaches to Natividad Boulevard and Constitution Boulevard. Left turn channelization will be required on the segment east of Constitution Boulevard where left turn channelization is not currently provided. With these improvements, Laurel Drive would operate at LOS C.

6. Main Street is expected to operate at LOS F between Market Street and Bernal Street where it is only a four-lane divided arterial. It will need to be widened to a six-lane arterial LOS C. This will require eliminating on-street parking and widening the existing undercrossing at the Union Pacific Railroad tracks north of Market Street.

7. South Main Street is expected to operate at LOS F south of John Street where no left turn channelization is currently provided. On-street parking needs to be eliminated to accommodate left turn channelization. This will result in LOS D. The section of South Main Street immediately north of Romie Lane already has left turn channelization but is expected to operate just into LOS E. Traffic signal timing optimization may be able to improve the LOS slightly to achieve an acceptable LOS D. The City has approved additional parking elimination to provide left turn lanes at street interchange and major driveways. Caltrans is expected to stripe these turn lanes in 2004 or 2005.

8. McKinnon Street is expected to operate at LOS F south of East Boronda Road where it is a two-lane collector street. With the provision of left turn channelization at major intersections, it could be improved to LOS D. This is in the conditional growth area and LOS D may or may not be considered acceptable. This area has already been developed and the policy may need to be revisited for this roadway because of the difficulty to widen the roadway to provide adequate capacity.

9. Natividad Road is expected to operate at LOS F as a four-lane divided arterial south of east Laurel Drive. This section of roadway will require widening to a six-lane arterial which would to achieve LOS C. This widening may need to be implemented from Bernal Drive to Laurel Drive. The construction of the Constitution Boulevard extension south of Laurel Drive will not be enough to offset traffic volumes to achieve an acceptable LOS E on this road segment.

10. Williams Road is expected to operate at LOS D/E as a four-lane divided arterial. The roadway would need to be widened to a six-lane divided arterial, which would achieve LOS D. This is problematic given the extensive amount of existing development along both sides of the street through most of this area. It is currently planned to be widened to a four-lane arterial with a landscaped median.

All of the new streets, based on the volumes and LOS tabulated on Table 7, are expected to be able to accommodate traffic volumes at an acceptable D or better LOS as proposed.

C. General Plan Buildout With the Prunedale Bypass

Figure 8 depicts the street network under General Plan Buildout Conditions with the Prunedale Bypass. The Prunedale Bypass is indicated as extending from existing Highway 101/Russell Road – Espinosa Road intersection through the easterly portion of Prunedale, and connecting back with Highway 101 near the existing Highway 101/Crazy Horse Canyon Road – Echo Valley Road intersections. The Eastside Bypass and Western Bypass, Russell Road extension and Constitution Boulevard extensions are proposed to be identical to the network included in Alternative 210. Highway 101 is proposed to be widened to a six-lane freeway from Airport Boulevard to north of Russell Road – Espinosa Road. The entire internal arterial network for the city is also proposed to be identical to Alternative 210. The improvements associated with the Prunedale Bypass itself are described on Table 3.

Figure 9 depicts representative daily traffic volumes throughout the Salinas major street network assuming General Plan Buildout with the Prunedale bypass. The corresponding volumes for all major streets in the City of Salinas are tabulated on Tables 5 and 7.

A comparison of Table 5 with Table 4 (which pertains to Alternative 210), which is provided on Table 9, indicates that the Salinas street network will operate almost identically under both of these alternatives. The same deficiencies that would require additional mitigations under Alternative 210 would require identical mitigation for the Prunedale Bypass. This is because the Prunedale Bypass directs traffic to the existing Highway 101 corridor in an almost identical manner to Alternative 210. Regional traffic to and from the north of the City of Salinas will enter the Salinas area at the existing Highway 101/Russell Road – Espinosa Road intersection area with the Prunedale Bypass as well as with Alternative 210. All the recommended additional improvements described for Alternative 210 apply to this scenario as well.

D. General Plan Buildout With the Prunedale Bypass and Eastside Expressway

This alternative is virtually identical to the Prunedale Bypass alternative with the exception of constructing the Eastside Bypass as a high-speed expressway that would extend the previous Eastside Bypass northeasterly from Boronda Road to intersect Old Stage Road in the southeasterly part of the City of Salinas. Old Stage Road will be upgraded to a four-lane expressway that will extend across San Juan Grade Road to a new interchange on the Highway 101/Prunedale Bypass. This alternative and the individual improvements associated with it are depicted on Figure 10. These improvements are briefly described on Table 3.

Figure 11 illustrates traffic volumes on many of the major roadways in the City of Salinas. Table 6 provides additional traffic volumes to be inclusive of all major streets in the City of Salinas. A comparison of Table 6 with Tables 4 and 5 indicates that traffic volumes on the city street system are expected to be very similar to the other two alternatives. The segments expected to operate deficiently are the same and the improvements to mitigate anticipated deficiencies are also the same. The only exception is Highway 101 which is required to be widened to a six-lane freeway between Russell Road – Espinosa Road and Airport Boulevard under the Prunedale Bypass and Alternative 210 in order to achieve an acceptable LOS but only requires widening to six lanes between Russell Road – Espinosa Road and Boronda Road to achieve an acceptable LOS with the Eastside Expressway. This is because the Eastside Expressway would carry in the range of 35,000 to 40,000 vehicles per day. Table 8 provides a comparison of Highway 101 volumes and Levels of Service for existing conditions as well as the four future networks.

What this implies is that the Eastside Expressway will serve not only to divert some traffic generated in the City of Salinas away from the Highway 101 corridor but will primarily provide an alternative route for through traffic between areas south of the City of Salinas and north of the City of Salinas. With this alternative, Highway 101 is expected to experience a decrease in traffic volumes on many of the segments compared to what is currently experienced. This is in spite of the substantial growth in the City of Salinas and the surrounding communities. A close examination of Figure 11 indicates the traffic volumes on each of the ramps at the proposed Highway 101/Harris Road – Eastside Bypass interchange in the southerly portion of the City of Salinas. Ramps connecting the south leg of Highway 101 with the east leg of the Eastside Bypass will each carry volumes in the 11,000 to 12,000 vehicles per day range. This is a significant diversion from Highway 101. The traffic volumes within the network and on the regional facilities through and around the city indicate that the Eastside Expressway will not have a major effect on traffic circulation internal to the City of Salinas.

The new streets described on Table 3 with traffic volumes and Levels of Service will be adequate to accommodate the General Plan Buildout traffic demand. No additional mitigations will be required.

E. Impacts on the Regional Highway System

The buildout of the Salinas General Plan will generate traffic that will impact major highways and roadways external to the City of Salinas. A number of the major highway facilities immediately adjacent to the City of Salinas have been analyzed earlier in this report. This includes Highway 101 immediately north and south of the City of Salinas, Blanco Road immediately west of the City of Salinas, Highway 68 immediately south of the City of Salinas, Old Stage Road and Crazy Horse Canyon Road.

A portion of City generated traffic will also impact state highways and county roads beyond the immediate vicinity of the City of Salinas. County roads include Blanco Road between the City of Marina and the City of Salinas, Hall Road and San Miguel Canyon Road in North Monterey County. State highways that will be impacted by traffic include Highway 1 between Castroville and the Santa Cruz County line, Highway 68 between the City of Salinas and the City of Monterey, Highway 101 north of Prunedale, Highway 156 between Castroville and Highway 101, and Highway 183 between the City of Salinas and Highway 1 immediately west of Castroville. As indicated on Table 10, all of these roadways currently operate deficiently.

Assuming no roadway improvements are implemented, the Monterey County 21st Century General Plan Environmental Impact Report indicates that the above roadways will continue to deteriorate with all of these roadways operating at Level of Service E or F by the year 2020. Table 10 also indicates 2020 Regional Transportation Improvements (RTP) will correct some of the anticipated deficiencies. However, funding is anticipated to improve most of these roadways through 2020. Table 10 also indicates that the 2020 roadway network proposed in the Monterey County 21st Century Draft General Plan published in March, 2002 would improve most of these roadways to acceptable Levels of Service assuming corresponding funding is obtained. However, Highway 101 north of Crazy Horse Canyon Road – Echo Valley Road, Highway 1 between Castroville and the Santa Cruz County line, Highway 183 between Salinas and Highway 1 in Castroville and Highway 68 between Monterey and Salinas will continue to operate deficiently. No improvements are expected to be funded for these roadways by the year 2020. This is also true of San Miguel Canyon Road – Hall Road. The existing deficiencies will deteriorate further with no anticipated mitigation. It can therefore be concluded that the City of Salinas will contribute to unmitigated cumulative significant traffic impacts.

Some of the necessary roadway improvements may be able to be implemented if the County of Monterey, Transportation Agency for Monterey County and cities within Monterey County are able to develop additional funding sources. A Regional Traffic Impact fee is being considered by TAMC (Transportation Agency for Monterey County) at the present time. The introduction of a sales tax increase has also been proposed but rejected by the voters in the past. If these types of funding programs can be put in place in the future, it is possible that at least some of the additional roadway improvements will be able to be implemented. Because it is speculative to anticipate additional funding at the present time, it must be assumed that no additional funding will be available.

VI. MITIGATION MEASURES

1. The General Plan is proposed to be self-mitigating with the implementation of the above recommendations for each network alternative. It includes a transportation network that will be consistent with the traffic demand created by the proposed land uses.

2. If the individual roadway improvements described in the preceding text are implemented when warranted, all of the streets within or in the immediate vicinity of the City of Salinas will operate at acceptable Levels of Service.

3. As a part of the implementation process, the City of Salinas is planning on performing more detailed intersection analyses on the selected network alternative subsequent to the adoption of the General Plan. This may identify additional intersection level of improvements including channelization and signal operations.

4. The City will update the city's traffic impact fee ordinance in order to develop a funding mechanism to implement the required improvements.

5. The proposed General Plan Circulation Element has a number of travel demand management strategies to reduce traffic on the city street network. The city is considering adopting a neighborhood traffic management program that will address traffic operations at the residential neighborhood and local street level.

6. The City is working with other local agencies as well as the Transportation Agency for Monterey County (TAMC) and Caltrans on potential development of a regional traffic impact fee, which will assist in the funding of regional transportation improvements throughout Monterey

County. This will serve as a vehicle for the city to participate in accommodating its share of sub-regional and regional traffic. However, it is highly unlikely that all needed major highway improvements will be able to be implemented prior to the buildout of the General Plan. This assumes that a regional traffic impact fee is adopted and imposed on future development. The City of Salinas General Plan will contribute to cumulative regional traffic impacts that will not be fully mitigated. The City of Salinas will, therefore, contribute to unavoidable significant cumulative regional impacts.

Please refer to Section 5.2 of the EIR for color copies of some of the following figures.

TABLE 1
EXISTING CONDITIONS AND MODEL VALIDATION
Daily Volumes and Associated Levels of Service on
Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC					
					TRAFFIC COUNT				TRAFFIC MODEL	
					(98 & 99)[1] COUNT	LEVEL OF SERVICE	(99, 00 & 01)[2] COUNT	LEVEL OF SERVICE	MODEL VOLUME	LEVEL OF SERVICE
1	**ABBOTT ST** S/O JOHN STREET	4	Undivided Arterial	N/S	27,034	F	25,906	E	26,413	E
2	**ABBOTT ST** N/O SANBORN ROAD	4	Divided Arterial	N/S	22,552	B	22,073	B	23,230	B
3	**ABBOTT ST** E/O HARKINS ROAD	4	Divided Arterial	N/S	-	-	18,932	A	17,528	A
4	**ABBOTT ST** CITY LIMITS	4	Undivided Arterial	N/S	15,805	A	10,908	A	11,165	A
5	**ACACIA STREET** E/O DAVIS ROAD	2	Collector	E/W	6,194	B	6,200	B	5,495	A
6	**AIRPORT BOULEVARD** W/O U.S. 101	4	Undivided Arterial	E/W	19,540	C	18,180	B	17,777	B
7	**AIRPORT BOULEVARD** W/O MOFFETT STREET	3	Divided Arterial	E/W	-	-	10,000	A	10,719	A
8	**W. ALISAL STREET** N/O AMBROSE DRIVE	4	Undivided Arterial	N/S	-	-	8,207	A	8,179	A
9	**W. ALISAL STREET** W/O HOMESTEAD AVE.	4	Undivided Arterial	E/W	10,402	A	9,511	A	10,729	A
10	**E. ALISAL STREET** E/O MONTEREY STREET	4	Undivided Arterial	E/W	14,362	A	14,362	A	16,079	B
11	**E. ALISAL STREET** E/O FRONT STREET	4	Undivided Arterial	E/W	18,612	B	-	-	15,754	A
12	**E. ALISAL STREET** E/O WORK STREET	4	Undivided Arterial	E/W	18,709	B	16,956	B	18,172	B
13	**E. ALISAL STREET** E/O U.S. 101	4	Undivided Arterial	E/W	18,464	B	-	-	15,891	A
14	**E. ALISAL STREET** W/O SANBORN ROAD	4	Undivided Arterial	E/W	-	-	10,902	A	11,698	A
15	**E. ALISAL STREET** E/O SANBORN ROAD	4	Undivided Arterial	E/W	22,281	D	17,221	B	16,775	B
16	**E. ALISAL STREET** W/O E. MARKET STREET	2	Arterial	E/W	8,877	A	8,877	A	8,909	A
17	**ALISAL ROAD** S/O BARDIN ROAD	2	Rural Highway	N/S	5,659	B	-	-	6,786	B
18	**E. ALVIN DRIVE** E/O CHEROKEE DRIVE	4	Undivided Arterial	E/W	3,224	A	3,220	A	3,273	A
19	**E. ALVIN DRIVE** W/O McKINNON STREET	4	Undivided Arterial	E/W	11,000	A	11,089	A	10,824	A
20	**E. ALVIN DRIVE** W/O NATIVIDAD RD	4	Undivided Arterial	E/W	10,195	A	11,186	A	12,457	A
21	**BARDIN ROAD** S/O WILLIAMS ROAD	4	Undivided Arterial	N/S	-	-	8,654	A	7,927	A
22	**BERNAL DRIVE** E/O N. MAIN STREET	3	Divided Arterial	E/W	12,321	B	12,136	B	12,539	B
23	**W. BLANCO ROAD** W/O DAVIS ROAD	2	Rural Highway	E/W	-	-	22,086	E	22,900	E
24	**W. BLANCO ROAD** E/O DAVIS ROAD	2	Arterial	E/W	-	-	19,542	F	19,423	F
25	**W. BLANCO ROAD** W/O S. MAIN STREET	4	Divided Arterial	E/W	28,393	C	22,272	B	24,223	B
26	**E. BLANCO ROAD** E/O S. MAIN STREET	4	Divided Arterial	E/W	28,207	C	24,110	B	24,081	B
27	**E. BLANCO ROAD** E/O LA MESA WAY	4	Divided Arterial	E/W	-	-	24,778	B	25,526	C
28	**E. BORONDA ROAD** E/O U.S. 101	6	Divided Arterial	E/W	43,243	D	42,997	C	42,957	C

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29	E. BORONDA ROAD W/O McKINNON STREET	2	Arterial	E/W	22,246	F	24,388	F	25,219	F
30	E. BORONDA ROAD E/O McKINNON STREET	2	Arterial	E/W	17,945	E	19,566	F	21,116	F
31	E. BORONDA ROAD E/O NATIVIDAD ROAD	2	Arterial	E/W	16,019	E	21,412	F	20,743	F
32	E. BORONDA ROAD E/O INDEPENDENCE BLVD.	2	Arterial	E/W	12,296	B	-	-	16,753	E
33	E. BORONDA ROAD E/O CONSTITUTION BLVD.	2	Arterial	E/W	-	-	7,861	A	8,461	A
34	E. BORONDA ROAD W/O WILLIAMS ROAD	2	Arterial	E/W	-	-	4,997	A	5,204	A
35	CENTRAL AVENUE E/O DAVIS ROAD	2	Collector	E/W	4,534	A	3,855	A	3,488	A
36	CONSTITUTION BLVD. N/O E. LAUREL DRIVE	4	Divided Arterial	N/S	14,344	A	15,926	A	16,258	A
37	CONSTITUTION BLVD. S/O E. BORONDA ROAD	4	Divided Arterial	N/S	10,277	A	5,161	A	4,398	A
38	N. DAVIS ROAD S/O BORONDA ROAD	4	Undivided Arterial	N/S	10,407	A	16,948	B	16,755	B
39	N. DAVIS ROAD N/O W. LAUREL DRIVE	4	Divided Arterial	N/S	23,433	B	-	-	21,674	A
40	N. DAVIS ROAD S/O W. LAUREL DRIVE	4	Divided Arterial	N/S	-	-	36,944	E	37,685	E
41	N. DAVIS ROAD S/O POST DRIVE	4	Divided Arterial	N/S	35,435	E	-	-	34,174	E
42	N. DAVIS ROAD N/O W. MARKET STREET	4	Divided Arterial	N/S	35,469	E	-	-	30,215	D
43	DAVIS ROAD N/O CENTRAL AVENUE	2	Rural Highway	N/S	34,264	F	-	-	28,912	F
44	DAVIS ROAD N/O W. ACACIA STREET	2	Rural Highway	N/S	-	-	27,430	F	27,119	F
45	DAVIS ROAD S/O W. BLANCO ROAD	2	Rural Highway	N/S	-	-	4,300	B	4,196	B
46	DEL MONTE AVENUE W/O N. SANBORN ROAD	2	Collector	E/W	-	-	6,526	B	6,947	B
47	DEL MONTE AVENUE W/O WILLIAMS ROAD	2	Collector	E/W	6,889	B	6,800	B	7,127	B
48	EL DORADO DRIVE S/O E. BORONDA ROAD	2	Collector	N/S	-	-	3,433	A	3,465	A
49	ESPINOSA ROAD W/O U.S. 101	2	Rural Highway	E/W	-	-	9,500	C	9,688	C
50	FREEDOM PARKWAY E/O CONSTITUTION BLVD.	4	Undivided Arterial	E/W	11,611	A	7,111	A	6,708	A
51	FREEDOM PARKWAY W/O WILLIAMS ROAD	4	Undivided Arterial	E/W	6,007	A	5,348	A	5,361	A
52	FRONT STREET S/O E. ALISAL STREET	4	Divided Arterial	N/S	17,071	A	17,969	A	19,205	A
53	HARKINS ROAD S/O DAYTON STREET	2	Rural Highway	N/S	5,223	B	6,514	B	6,180	B
54	HARRIS ROAD W/O ABBOTT STREET	2	Rural Highway	N/S	-	-	8,120	C	8,779	C
55	HARRISON ROAD N/O RUSSELL ROAD	2	Rural Highway	N/S	-	-	-	-	3,160	A
56	HEBERT ROAD E/O SAN JUAN GRADE RD.	2	Rural Highway	N/S	-	-	4,472	B	4,686	B

TABLE 1
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NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC — TRAFFIC COUNT: (98 & 99)[1] COUNT	LEVEL OF SERVICE	(99, 00 & 01)[2] COUNT	LEVEL OF SERVICE	TRAFFIC MODEL: MODEL VOLUME	LEVEL OF SERVICE
57	INDEPENDENCE BLVD. S/O E. BORONDA ROAD	4	Undivided Arterial	N/S	4,511	A	6,473	A	7,106	A
58	JOHN STREET E/O S. MAIN STREET	4	Undivided Arterial	E/W	13,366	A	-	-	10,465	A
59	JOHN STREET W/O ABBOTT STREET	4	Undivided Arterial	E/W	-	-	11,112	A	11,204	A
60	JOHN STREET E/O ABBOTT STREET	4	Undivided Arterial	E/W	-	-	23,450	D	24,147	E
61	JOHN STREET W/O SANBORN ROAD	4	Undivided Arterial	E/W	13,034	A	10,075	A	9,760	A
62	LAS CASITAS DRIVE S/O CONSTITUTION BLVD.	2	Collector	E/W	5,308	A	5,801	A	6,290	B
63	W. LAUREL DRIVE W/O U.S. 101	6	Divided Arterial	E/W	40,396	C	41,544	C	43,399	D
64	W. LAUREL DRIVE E/O U.S. 101	4	Undivided Arterial	E/W	24,071	E	24,501	E	22,982	D
65	E. LAUREL DRIVE W/O LOMA DRIVE	4	Undivided Arterial	E/W	20,931	C	21,178	C	19,849	C
66	E. LAUREL DRIVE W/O CONSTITUTION BLVD.	4	Divided Arterial	E/W	33,193	E	31,936	D	31,325	D
67	E. LAUREL DRIVE E/O CONSTITUTION BLVD.	4	Divided Arterial	E/W	20,270	A	20,990	A	21,787	A
68	N. MAIN STREET S/O E. BORONDA ROAD	4	Divided Arterial	N/S	-	-	15,730	A	16,272	A
69	N. MAIN STREET S/O SAN JUAN GRADE ROAD	6	Divided Arterial	N/S	22,547	A	-	-	20,810	A
70	N. MAIN STREET S/O ALVIN DRIVE	6	Divided Arterial	N/S	28,931	A	26,766	A	26,838	A
71	N. MAIN STREET N/O LAUREL DRIVE	6	Divided Arterial	N/S	30,962	A	29,729	A	30,591	A
72	N. MAIN STREET S/O LAUREL DRIVE	6	Divided Arterial	N/S	27,290	A	29,127	A	27,324	A
73	N. MAIN STREET N/O U.S. 101	5	Divided Arterial	N/S	42,105	E	36,382	D	32,590	C
74	N. MAIN STREET N/O MARKET	4	Divided Arterial	N/S	32,555	E	32,187	D	34,097	E
75	S. MAIN STREET S/O JOHN STREET	4	Undivided Arterial	N/S	29,481	F	25,763	E	25,659	E
76	S. MAIN STREET N/O ROMIE LANE	4	Divided Arterial	N/S	25,123	C	26,727	C	28,113	C
77	S. MAIN STREET N/O BLANCO ROAD	4	Divided Arterial	N/S	26,182	C	26,097	C	24,436	B
78	S. MAIN STREET S/O BLANCO ROAD	4	Expressway	N/S	33,814	C	33,230	C	33,212	C
79	W. MARKET STREET E/O DAVIS ROAD	4	Divided Arterial	E/W	17,740	A	19,477	A	18,419	A
80	W. MARKET STREET W/O LINCOLN AVENUE	4	Divided Arterial	E/W	22,706	B	22,306	B	21,384	A
81	E. MARKET STREET W/O MONTEREY STREET	4	Divided Arterial	E/W	-	-	20,990	A	20,384	A
82	E. MARKET STREET E/O MONTEREY STREET	4	Divided Arterial	E/W	22,901	B	-	-	23,211	B
83	E. MARKET STREET E/O SHERWOOD DRIVE	4	Undivided Arterial	E/W	19,661	C	18,600	B	17,572	B
84	E. MARKET STREET E/O U.S. 101	4	Divided Arterial	E/W	21,598	A	21,485	A	23,208	B

TABLE 1
EXISTING CONDITIONS AND MODEL VALIDATION
Daily Volumes and Associated Levels of Service on
Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC					
					TRAFFIC COUNT				TRAFFIC MODEL	
					(98 & 99)[1] COUNT	LEVEL OF SERVICE	(99, 00 & 01)[2] COUNT	LEVEL OF SERVICE	MODEL VOLUME	LEVEL OF SERVICE
85	E. MARKET STREET E/O HEBBRON AVE.	4	Undivided Arterial	E/W	17,260	B	17,102	B	18,615	B
86	E. MARKET STREET E/O N. SANBORN ROAD	4	Undivided Arterial	E/W	9,268	A	10,418	A	10,890	A
87	McKINNON STREET S/O E. BORONDA ROAD	2	Collector	N/S	9,848	D	8,488	C	7,182	B
88	MONTEREY STREET N/O E. GABILAN STREET	3	One-Way Arterial	N/S	-	-	13,294	A	12,738	A
89	MONTEREY STREET S/O E. ALISAL STREET	3	One-Way Arterial	N/S	-	-	11,554	A	11,561	A
90	NATIVIDAD ROAD N/O E. BORONDA ROAD	2	Rural Highway	N/S	6,389	B	7,131	C	7,246	C
91	NATIVIDAD ROAD S/O ARCADIA WAY	6	Divided Arterial	N/S	-	-	10,093	A	9,881	A
92	NATIVIDAD ROAD S/O E. ALVIN DRIVE	6	Divided Arterial	N/S	21,935	A	24,487	A	27,742	A
93	NATIVIDAD ROAD N/O E. LAUREL DRIVE	6	Divided Arterial	N/S	24,862	A	26,246	A	28,994	A
94	NATIVIDAD ROAD S/O E. LAUREL DRIVE	4	Divided Arterial	N/S	30,494	D	30,516	D	29,328	D
95	OLD STAGE ROAD S/O NATIVIDAD ROAD	2	Rural Highway	N/S	-	-	1,225	A	1,155	A
96	POST DRIVE W/O DAVIS ROAD	4	Undivided Arterial	E/W	-	-	10,000	A	10,324	A
97	ROMIE LANE E/O LOS PALOS DR.	4	Undivided Arterial	E/W	9,256	A	8,878	A	8,564	A
98	ROSSI STREET E/O DAVIS ROAD	2	Arterial	E/W	9,955	A	9,885	A	9,439	A
99	RUSSELL ROAD E/O U.S. 101	2	Arterial	E/W	-	-	4,201	A	4,288	A
100	RUSSELL ROAD E/O VAN BUREN AVENUE	2	Arterial	E/W	6,133	A	7,447	A	7,736	A
101	SALINAS STREET S/O W. ALISAL STREET	3	One-Way Arterial	N/S	-	-	12,887	A	11,036	A
102	S. SANBORN ROAD S/O U.S. 101	4	Divided Arterial	N/S	31,794	D	26,892	C	24,127	B
103	S. SANBORN ROAD N/O U.S. 101	4	Divided Arterial	N/S	26,202	C	26,619	C	26,000	C
104	N. SANBORN ROAD S/O E. LAUREL DRIVE	4	Divided Arterial	N/S	24,296	B	22,476	B	21,180	A
105	N. SANBORN ROAD S/O DEL MONTE AVENUE	4	Undivided Arterial	N/S	10,816	A	11,238	A	10,857	A
106	N. SANBORN ROAD W/O FREEDOM PKWY.	4	Divided Arterial	E/W	3,396	A	4,297	A	4,473	A
107	SAN JUAN GRADE ROAD N/O RUSSELL ROAD	2	Arterial	N/S	-	-	13,000	C	11,905	B
108	SAN JUAN GRADE ROAD N/O E. BORONDA ROAD	2	Arterial	N/S	-	-	14,700	D	14,766	D
109	SAN JUAN GRADE ROAD S/O E. BORONDA ROAD	4	Divided Arterial	N/S	9,847	A	-	-	12,199	A
110	SHERWOOD DRIVE N/O U.S. 101	4	Divided Arterial	N/S	22,135	B	22,135	B	22,417	B
111	TOWT STREET W/O FREEDOM PKWY.	2	Collector	E/W	2,832	A	1,914	A	1,959	A
112	U.S. 101 N/O RUSSELL-ESPINOSA	4	Expressway	N/S	-	-	57,093	F	59,381	F

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NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC: TRAFFIC COUNT: (98 & 99)[1] COUNT	LEVEL OF SERVICE	(99, 00 & 01)[2] COUNT	LEVEL OF SERVICE	TRAFFIC MODEL: MODEL VOLUME	LEVEL OF SERVICE
113	U.S. 101 N/O BORONDA ROAD	4	Freeway	N/S	-	-	-	-	68,540	D
114	U.S. 101 N/O LAUREL DRIVE	4	Freeway	N/S	-	-	-	-	56,500	C
115	U.S. 101 S/O LAUREL DRIVE	4	Freeway	N/S	-	-	55,430	C	53,121	C
116	U.S. 101 S/O N. MAIN STREET	4	Freeway	N/S	-	-	-	-	54,375	C
117	U.S. 101 S/O AIRPORT BLVD.	4	Freeway	N/S	-	-	26,107	B	26,997	B
118	WILLIAMS ROAD N/O E. LAUREL DRIVE	4	Divided Arterial	N/S	17,070	A	-	-	17,171	A
119	WILLIAMS ROAD S/O DEL MONTE DRIVE	4	Divided Arterial	N/S	14,935	A	17,656	A	17,116	A
120	WILLIAMS ROAD S/O FREEDOM PARKWAY	3	Divided Arterial	N/S	7,719	A	9,897	A	10,590	A
121	WILLIAMS ROAD N/O FREEDOM PARKWAY	2	Arterial	N/S	-	-	5,698	A	5,609	A
122	WILLIAMS ROAD N/O E. BORONDA ROAD	2	Arterial	N/S	-	-	2,340	A	2,154	A
123	WORK STREET S/O JOHN STREET	4	Undivided Arterial	N/S	4,433	A	3,500	A	3,505	A
124	WORK STREET W/O S. SANBORN ROAD	4	Undivided Arterial	N/S	2,619	A	-	-	3,675	A

NOTES:
1. Traffic volumes collected in 1998 and 1999 from *Existing Conditions - Traffic and Circulation - City of Salinas General Plan Update*, DKS Associates, May 30, 2000.
2. Traffic volumes collected in 1999 through 2001, as provided by the City of Salinas and Caltrans. These more recent counts are used for model validation.
3. Land Use Sources: The 2000 US Census and the California Employment Development Department.
4. Traffic Network: Based on observations by staff of Monterey County, City of Salinas and Higgins Associates.
5. Highlighted segments operate at a deficient level of service under this scenario.

TABLE 2
GENERAL PLAN BUILDOUT WITHOUT ROADWAY IMPROVEMENTS
Daily Volumes and Associated Levels of Service on
Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC — TRAFFIC COUNT (99, 00 & 01)[1] COUNT	TRAFFIC COUNT LEVEL OF SERVICE	TRAFFIC MODEL 2000 VOLUME	TRAFFIC MODEL LEVEL OF SERVICE	TRAFFIC MODEL BUILDOUT VOLUME	TRAFFIC MODEL LEVEL OF SERVICE
1	ABBOTT ST S/O JOHN STREET	4	Undivided Arterial	N/S	25,906	E	26,413	E	34,039	F
2	ABBOTT ST N/O SANBORN ROAD	4	Divided Arterial	N/S	22,073	B	23,230	B	30,121	D
3	ABBOTT ST E/O HARKINS ROAD	4	Divided Arterial	N/S	18,932	A	17,528	A	21,807	A
4	ABBOTT ST CITY LIMITS	4	Undivided Arterial	N/S	10,908	A	11,165	A	14,489	A
5	ACACIA STREET E/O DAVIS ROAD	2	Collector	E/W	6,200	B	5,495	A	5,699	A
6	AIRPORT BOULEVARD W/O U.S. 101	4	Undivided Arterial	E/W	18,180	B	17,777	B	23,435	D
7	AIRPORT BOULEVARD W/O MOFFETT STREET	3	Divided Arterial	E/W	10,000	A	10,719	A	23,204	E
8	W. ALISAL STREET N/O AMBROSE DRIVE	4	Undivided Arterial	N/S	8,207	A	8,179	A	11,599	A
9	W. ALISAL STREET W/O HOMESTEAD AVE.	4	Undivided Arterial	E/W	9,511	A	10,729	A	14,769	A
10	E. ALISAL STREET E/O MONTEREY STREET	4	Undivided Arterial	E/W	14,362	A	16,079	B	22,536	D
11	E. ALISAL STREET E/O FRONT STREET	4	Undivided Arterial	E/W	-	-	15,754	A	11,765	A
12	E. ALISAL STREET E/O WORK STREET	4	Undivided Arterial	E/W	16,956	B	18,172	B	23,529	D
13	E. ALISAL STREET E/O U.S. 101	4	Undivided Arterial	E/W	-	-	15,891	A	19,909	C
14	E. ALISAL STREET W/O SANBORN ROAD	4	Undivided Arterial	E/W	10,902	A	11,698	A	15,240	A
15	E. ALISAL STREET E/O SANBORN ROAD	4	Undivided Arterial	E/W	17,221	B	16,775	B	20,553	C
16	E. ALISAL STREET W/O E. MARKET STREET	2	Arterial	E/W	8,877	A	8,909	A	9,512	A
17	ALISAL ROAD S/O BARDIN ROAD	2	Rural Highway	N/S	-	-	6,786	B	11,765	D
18	E. ALVIN DRIVE E/O CHEROKEE DRIVE	4	Undivided Arterial	E/W	3,220	A	3,273	A	3,485	A
19	E. ALVIN DRIVE W/O McKINNON STREET	4	Undivided Arterial	E/W	11,089	A	10,824	A	14,408	A
20	E. ALVIN DRIVE W/O NATIVIDAD RD	4	Undivided Arterial	E/W	11,186	A	12,457	A	18,417	B
21	BARDIN ROAD S/O WILLIAMS ROAD	4	Undivided Arterial	N/S	8,654	A	7,927	A	12,184	A
22	BERNAL DRIVE E/O N. MAIN STREET	3	Divided Arterial	E/W	12,136	B	12,539	B	21,829	E
23	W. BLANCO ROAD W/O DAVIS ROAD	2	Rural Highway	E/W	22,086	E	22,900	E	34,007	F
24	W. BLANCO ROAD E/O DAVIS ROAD	2	Arterial	E/W	19,542	F	19,423	F	25,723	F
25	W. BLANCO ROAD W/O S. MAIN STREET	4	Divided Arterial	E/W	22,272	B	24,223	B	29,648	D
26	E. BLANCO ROAD E/O S. MAIN STREET	4	Divided Arterial	E/W	24,110	B	24,081	B	31,540	D
27	E. BLANCO ROAD E/O LA MESA WAY	4	Divided Arterial	E/W	24,778	B	25,526	C	33,214	E
28	E. BORONDA ROAD									

TABLE 2
GENERAL PLAN BUILDOUT WITHOUT ROADWAY IMPROVEMENTS
Daily Volumes and Associated Levels of Service on
Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC — TRAFFIC COUNT (99, 00 & 01)[1] COUNT	TRAFFIC COUNT LEVEL OF SERVICE	TRAFFIC MODEL 2000 VOLUME	TRAFFIC MODEL LEVEL OF SERVICE	TRAFFIC MODEL BUILDOUT VOLUME	TRAFFIC MODEL LEVEL OF SERVICE
	E/O U.S. 101	6	Divided Arterial	E/W	42,997	C	42,957	C	59,569	F
29	E. BORONDA ROAD W/O McKINNON STREET	2	Arterial	E/W	24,388	F	25,219	F	37,028	F
30	E. BORONDA ROAD E/O McKINNON STREET	2	Arterial	E/W	19,566	F	21,116	F	33,828	F
31	E. BORONDA ROAD E/O NATIVIDAD ROAD	2	Arterial	E/W	21,412	F	20,743	F	37,608	F
32	E. BORONDA ROAD E/O INDEPENDENCE BLVD.	2	Arterial	E/W	-	-	16,753	E	33,313	F
33	E. BORONDA ROAD E/O CONSTITUTION BLVD.	2	Arterial	E/W	7,861	A	8,461	A	23,185	F
34	E. BORONDA ROAD W/O WILLIAMS ROAD	2	Arterial	E/W	4,997	A	5,204	A	23,638	F
35	CENTRAL AVENUE E/O DAVIS ROAD	2	Collector	E/W	3,855	A	3,488	A	3,868	A
36	CONSTITUTION BLVD. N/O E. LAUREL DRIVE	4	Divided Arterial	N/S	15,926	A	16,258	A	23,849	B
37	CONSTITUTION BLVD. S/O E. BORONDA ROAD	4	Divided Arterial	N/S	5,161	A	4,398	A	11,289	A
38	N. DAVIS ROAD S/O BORONDA ROAD	4	Undivided Arterial	N/S	16,948	B	16,755	B	20,354	C
39	N. DAVIS ROAD N/O W. LAUREL DRIVE	4	Divided Arterial	N/S	-	-	21,674	A	23,743	B
40	N. DAVIS ROAD S/O W. LAUREL DRIVE	4	Divided Arterial	N/S	36,944	E	37,685	E	47,690	F
41	N. DAVIS ROAD S/O POST DRIVE	4	Divided Arterial	N/S	-	-	34,174	E	44,304	F
42	N. DAVIS ROAD N/O W. MARKET STREET	4	Divided Arterial	N/S	-	-	30,215	D	39,501	F
43	DAVIS ROAD N/O CENTRAL AVENUE	2	Rural Highway	N/S	-	-	28,912	F	36,424	F
44	DAVIS ROAD N/O W. ACACIA STREET	2	Rural Highway	N/S	27,430	F	27,119	F	34,842	F
45	DAVIS ROAD S/O W. BLANCO ROAD	2	Rural Highway	N/S	4,300	B	4,196	B	5,827	B
46	DEL MONTE AVENUE W/O N. SANBORN ROAD	2	Collector	E/W	6,526	B	6,947	B	7,983	C
47	DEL MONTE AVENUE W/O WILLIAMS ROAD	2	Collector	E/W	6,800	B	7,127	B	8,396	C
48	EL DORADO DRIVE S/O E. BORONDA ROAD	2	Collector	N/S	3,433	A	3,465	A	6,754	B
49	ESPINOSA ROAD W/O U.S. 101	2	Rural Highway	E/W	9,500	C	9,688	C	12,229	D
50	FREEDOM PARKWAY E/O CONSTITUTION BLVD.	4	Undivided Arterial	E/W	7,111	A	6,708	A	10,649	A
51	FREEDOM PARKWAY W/O WILLIAMS ROAD	4	Undivided Arterial	E/W	5,348	A	5,361	A	9,511	A
52	FRONT STREET S/O E. ALISAL STREET	4	Divided Arterial	N/S	17,969	A	19,205	A	26,493	C
53	HARKINS ROAD S/O DAYTON STREET	2	Rural Highway	N/S	6,514	B	6,180	B	10,322	C
54	HARRIS ROAD W/O ABBOTT STREET	2	Rural Highway	N/S	8,120	C	8,779	C	10,861	C
55	HARRISON ROAD N/O RUSSELL ROAD	2	Rural Highway	N/S	-	-	3,160	A	25,512	E

TABLE 2

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NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC — TRAFFIC COUNT (99, 00 & 01)[1] COUNT	TRAFFIC COUNT LEVEL OF SERVICE	TRAFFIC MODEL 2000 VOLUME	TRAFFIC MODEL LEVEL OF SERVICE	TRAFFIC MODEL BUILDOUT VOLUME	TRAFFIC MODEL LEVEL OF SERVICE
56	HEBERT ROAD E/O SAN JUAN GRADE RD.	2	Rural Highway	N/S	4,472	B	4,686	B	17,015	D
57	INDEPENDENCE BLVD. S/O E. BORONDA ROAD	4	Undivided Arterial	N/S	6,473	A	7,106	A	10,223	A
58	JOHN STREET E/O S. MAIN STREET	4	Undivided Arterial	E/W	-	-	10,465	A	11,035	A
59	JOHN STREET W/O ABBOTT STREET	4	Undivided Arterial	E/W	11,112	A	11,204	A	12,659	A
60	JOHN STREET E/O ABBOTT STREET	4	Undivided Arterial	E/W	23,450	D	24,147	E	28,844	F
61	JOHN STREET W/O SANBORN ROAD	4	Undivided Arterial	E/W	10,075	A	9,760	A	11,322	A
62	LAS CASITAS DRIVE S/O CONSTITUTION BLVD.	2	Collector	E/W	5,801	A	6,290	B	7,508	C
63	W. LAUREL DRIVE W/O U.S. 101	6	Divided Arterial	E/W	41,544	C	43,399	D	57,810	F
64	W. LAUREL DRIVE E/O U.S. 101	4	Undivided Arterial	E/W	24,501	E	22,982	D	28,265	F
65	E. LAUREL DRIVE W/O LOMA DRIVE	4	Undivided Arterial	E/W	21,178	C	19,849	C	26,492	E
66	E. LAUREL DRIVE W/O CONSTITUTION BLVD.	4	Divided Arterial	E/W	31,936	D	31,325	D	45,219	F
67	E. LAUREL DRIVE E/O CONSTITUTION BLVD.	4	Divided Arterial	E/W	20,990	A	21,787	A	31,509	D
68	N. MAIN STREET S/O E. BORONDA ROAD	4	Divided Arterial	N/S	15,730	A	16,272	A	22,139	B
69	N. MAIN STREET S/O SAN JUAN GRADE ROAD	6	Divided Arterial	N/S	-	-	20,810	A	39,454	C
70	N. MAIN STREET S/O ALVIN DRIVE	6	Divided Arterial	N/S	26,766	A	26,838	A	37,290	B
71	N. MAIN STREET N/O LAUREL DRIVE	6	Divided Arterial	N/S	29,729	A	30,591	A	39,598	C
72	N. MAIN STREET S/O LAUREL DRIVE	6	Divided Arterial	N/S	29,127	A	27,324	A	36,744	B
73	N. MAIN STREET N/O U.S. 101	5	Divided Arterial	N/S	36,382	D	32,590	C	45,490	F
74	N. MAIN STREET N/O MARKET	4	Divided Arterial	N/S	32,187	D	34,097	E	46,614	F
75	S. MAIN STREET S/O JOHN STREET	4	Undivided Arterial	N/S	25,763	E	25,659	E	32,886	F
76	S. MAIN STREET N/O ROMIE LANE	4	Divided Arterial	N/S	26,727	C	28,113	C	35,471	E
77	S. MAIN STREET N/O BLANCO ROAD	4	Divided Arterial	N/S	26,097	C	24,436	B	29,744	D
78	S. MAIN STREET S/O BLANCO ROAD	4	Expressway	N/S	33,230	C	33,212	C	40,840	D
79	W. MARKET STREET E/O DAVIS ROAD	4	Divided Arterial	E/W	19,477	A	18,419	A	22,496	B
80	W. MARKET STREET W/O LINCOLN AVENUE	4	Divided Arterial	E/W	22,306	B	21,384	A	26,452	C
81	E. MARKET STREET W/O MONTEREY STREET	4	Divided Arterial	E/W	20,990	A	20,384	A	26,174	C
82	E. MARKET STREET E/O MONTEREY STREET	4	Divided Arterial	E/W	-	-	23,211	B	30,295	D
83	E. MARKET STREET									

TABLE 2
GENERAL PLAN BUILDOUT WITHOUT ROADWAY IMPROVEMENTS
Daily Volumes and Associated Levels of Service on
Roadway and Highway Segments Within and Near the City of Salinas

					ANNUAL AVERAGE DAILY TRAFFIC					
					TRAFFIC COUNT		TRAFFIC MODEL			
NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	(99, 00 & 01)[1] COUNT	LEVEL OF SERVICE	2000 VOLUME	LEVEL OF SERVICE	BUILDOUT VOLUME	LEVEL OF SERVICE
	E/O SHERWOOD DRIVE	4	Undivided Arterial	E/W	18,600	B	17,572	B	21,309	C
84	**E. MARKET STREET** E/O U.S. 101	4	Divided Arterial	E/W	21,485	A	23,208	B	26,488	C
85	**E. MARKET STREET** E/O HEBBRON AVE.	4	Undivided Arterial	E/W	17,102	B	18,615	B	21,802	C
86	**E. MARKET STREET** E/O N. SANBORN ROAD	4	Undivided Arterial	E/W	10,418	A	10,890	A	12,840	A
87	**McKINNON STREET** S/O E. BORONDA ROAD	2	Collector	N/S	8,488	C	7,182	B	10,952	D
88	**MONTEREY STREET** N/O E. GABILAN STREET	3	One-Way Arterial	N/S	13,294	A	12,738	A	15,725	A
89	**MONTEREY STREET** S/O E. ALISAL STREET	3	One-Way Arterial	N/S	11,554	A	11,561	A	15,114	A
90	**NATIVIDAD ROAD** N/O E. BORONDA ROAD	2	Rural Highway	N/S	7,131	C	7,246	C	19,775	E
91	**NATIVIDAD ROAD** S/O ARCADIA WAY	6	Divided Arterial	N/S	10,093	A	9,881	A	21,323	A
92	**NATIVIDAD ROAD** S/O E. ALVIN DRIVE	6	Divided Arterial	N/S	24,487	A	27,742	A	41,924	C
93	**NATIVIDAD ROAD** N/O E. LAUREL DRIVE	6	Divided Arterial	N/S	26,246	A	28,994	A	42,194	C
94	**NATIVIDAD ROAD** S/O E. LAUREL DRIVE	4	Divided Arterial	N/S	30,516	D	29,328	D	42,404	F
95	**OLD STAGE ROAD** S/O NATIVIDAD ROAD	2	Rural Highway	N/S	1,225	A	1,155	A	8,306	C
96	**POST DRIVE** W/O DAVIS ROAD	4	Undivided Arterial	E/W	10,000	A	10,324	A	13,080	A
97	**ROMIE LANE** E/O LOS PALOS DR.	4	Undivided Arterial	E/W	8,878	A	8,564	A	9,802	A
98	**ROSSI STREET** E/O DAVIS ROAD	2	Arterial	E/W	9,885	A	9,439	A	11,934	B
99	**RUSSELL ROAD** E/O U.S. 101	2	Arterial	E/W	4,201	A	4,288	A	9,814	A
100	**RUSSELL ROAD** E/O VAN BUREN AVENUE	2	Arterial	E/W	7,447	A	7,736	A	13,298	C
101	**SALINAS STREET** S/O W. ALISAL STREET	3	One-Way Arterial	N/S	12,887	A	11,036	A	15,476	A
102	**S. SANBORN ROAD** S/O U.S. 101	4	Divided Arterial	E/W	26,892	C	24,127	B	32,434	D
103	**S. SANBORN ROAD** N/O U.S. 101	4	Divided Arterial	N/S	26,619	C	26,000	C	32,697	E
104	**N. SANBORN ROAD** S/O E. LAUREL DRIVE	4	Divided Arterial	N/S	22,476	B	21,180	A	24,979	B
105	**N. SANBORN ROAD** S/O DEL MONTE AVENUE	4	Undivided Arterial	N/S	11,238	A	10,857	A	12,973	A
106	**N. SANBORN ROAD** W/O FREEDOM PKWY.	4	Divided Arterial	N/S	4,297	A	4,473	A	7,890	A
107	**SAN JUAN GRADE ROAD** N/O RUSSELL ROAD	2	Arterial	N/S	13,000	C	11,905	B	22,742	F
108	**SAN JUAN GRADE ROAD** N/O E. BORONDA ROAD	2	Arterial	N/S	14,700	D	14,766	D	28,162	F
109	**SAN JUAN GRADE ROAD** S/O E. BORONDA ROAD	4	Divided Arterial	N/S	-	-	12,199	A	30,295	D
110	**SHERWOOD DRIVE** N/O U.S. 101	4	Divided Arterial	N/S	22,135	B	22,417	B	29,824	D

TABLE 2
GENERAL PLAN BUILDOUT WITHOUT ROADWAY IMPROVEMENTS
Daily Volumes and Associated Levels of Service on
Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC: TRAFFIC COUNT: (99, 00 & 01)[1] COUNT	TRAFFIC COUNT: LEVEL OF SERVICE	TRAFFIC MODEL: 2000 VOLUME	TRAFFIC MODEL: LEVEL OF SERVICE	TRAFFIC MODEL: BUILDOUT VOLUME	TRAFFIC MODEL: LEVEL OF SERVICE
111	TOWT STREET W/O FREEDOM PKWY.	2	Collector	E/W	1,914	A	1,959	A	2,098	A
112	U.S. 101 N/O RUSSELL-ESPINOSA	4	Expressway	N/S	57,093	F	59,381	F	66,439	F
113	U.S. 101 N/O BORONDA ROAD	4	Freeway	N/S	-	-	68,540	D	81,484	F
114	U.S. 101 N/O LAUREL DRIVE	4	Freeway	N/S	-	-	56,500	C	76,007	F
115	U.S. 101 S/O LAUREL DRIVE	4	Freeway	N/S	55,430	C	53,121	C	67,712	D
116	U.S. 101 S/O N. MAIN STREET	4	Freeway	N/S	-	-	54,375	C	69,381	E
117	U.S. 101 S/O AIRPORT BLVD.	4	Freeway	N/S	26,107	B	26,997	B	34,457	B
118	WILLIAMS ROAD N/O E. LAUREL DRIVE	4	Divided Arterial	N/S	-	-	17,171	A	39,591	F
119	WILLIAMS ROAD S/O DEL MONTE DRIVE	4	Divided Arterial	N/S	17,656	A	17,116	A	37,549	E
120	WILLIAMS ROAD S/O FREEDOM PARKWAY	3	Divided Arterial	N/S	9,897	A	10,590	A	31,959	F
121	WILLIAMS ROAD N/O FREEDOM PARKWAY	2	Arterial	N/S	5,698	A	5,609	A	26,484	F
122	WILLIAMS ROAD N/O E. BORONDA ROAD	2	Arterial	N/S	2,340	A	2,154	A	5,447	A
123	WORK STREET S/O JOHN STREET	4	Undivided Arterial	N/S	3,500	A	3,505	A	6,634	A
124	WORK STREET W/O S. SANBORN ROAD	4	Undivided Arterial	N/S	-	-	3,675	A	5,047	A

NOTES:
1. Traffic volumes collected in 1999 through 2001, as provided by the City of Salinas and Caltrans. These more recent counts are used for model validation.
2. Land Use Sources: The 2000 US Census and the California Employment Development Department.
3. Traffic Network: Based on observations by staff of Monterey County, City of Salinas and Higgins Associates.
4. Highlighted segments operate at a deficient level of service under this scenario.

TABLE 3
ROADWAY NETWORK IMPROVEMENTS

A. **Identified Roadway Network Improvements Under the "210 Scenario":**

1. **New Interchange at U.S. 101/Crazy Horse Canyon Road:** Construct a new diamond interchange on the existing U.S. 101 alignment at Crazy Horse Canyon Road-Echo Valley Road.
2. **Crazy Horse Canyon Road:** Implement operational improvements on Crazy Horse Canyon Road including shoulder widening and left and right turn channelization.
3. **U.S. 101:** Construct a median barrier and remove all at grade crossings of U.S. 101 between Crazy Horse Canyon Road and the Highway 156/U.S. 101 interchange.
4. **Highway 156/U.S. 101 Interchange:** Implement improvements to the Highway 156/U.S. 101 interchange per the Caltrans "210" concept.
5. **North Main Street:** Convert the existing U.S. 101 alignment to North Main Street from Russell Road to Berta Canyon Road. North Main Street is extended as a two-lane arterial that intersects with the area's local roadways and driveways.
6. **New U.S. 101 Alignment:** Construct a new four-lane freeway located to the west of the existing U.S. 101 alignment. Remove all at-grade intersections presently provided at Pesante Canyon Road, Orchard Lane, Blackie Road, Ralph Lane, Martines Road and White Road.
7. **New Interchange:** Construct a new diamond interchange on U.S. 101 north of Espinosa Road-Russell Road with a fly-over bridge in the vicinity of White Road. This new interchange is connected via an east-west roadway to North Main Street and Espinosa Road.
8. **Russell Road:** Extend Russell Road as a four-lane arterial from San Juan Grade Road to Old Stage Road.
9. **Natividad Road:** Widen Natividad Road from two to four lanes between Boronda Road and Rogge Road.
10. **El Dorado Drive:** Extend El Dorado Drive as a two lane collector from Boronda Road to Rogge Road.
11. **McKinnon Street:** Extend McKinnon Street as a two lane collector from Boronda Road to Rogge Road.
12. **Russell Road:** Widen Russell Road from a two to a four-lane arterial between U.S. 101 and San Juan Grade Road.
13. **San Juan Grade Road:** Widen San Juan Grade Road from a two to a four-lane arterial between Boronda Road and Rogge Road.
14. **San Juan – Natividad Collector:** Construct an east-west two lane collector roadway connecting San Juan Grade Road and Natividad Road to the north of Boronda Road.
15. **Independence Boulevard:** Extend Independence Boulevard as a two lane collector from Boronda Road to Russell Road.
16. **Hemingway Drive:** Extend Hemingway Drive as a two lane collector from Boronda Road to Russell Road.

TABLE 3
ROADWAY NETWORK IMPROVEMENTS

17. **Constitution Boulevard (East):** Extend Constitution Boulevard as a four-lane arterial from Boronda Road to Old Stage Road.
18. **Old Stage:** Upgrade Old Stage Road from a two-lane rural highway to a four-lane expressway between Williams Road and Natividad Road.
19. **Williams – Russell Collector:** Construct a new north-south collector roadway connecting between Williams Road and Russell Road. Extend this street south to connect to the Alisal Street Extension (Improvement 23).
20. **Boronda Road:** Widen Boronda Road to six lanes between San Juan Grade Road and Williams Road.
21. **Sanborn Road:** Extend Sanborn Road as a four-lane arterial from the Boronda Road to Old Stage Road.
22. **Williams Road:** Widen Williams Road from a two-lane roadway to a four-lane arterial between Boronda Road and Old Stage Road.
23. **Alisal Street Extension:** Extend Alisal Street as a two lane collector between Alisal Street/Bardin Road intersection and the Williams-Russell collector listed under the aforementioned improvement number 19.
24. **Eastside Bypass:** Construct a four-lane Eastside Bypass from Harris Road/U.S. 101 interchange to Boronda Road/Williams Road intersection. Traffic access to the Eastside Bypass are via intersections with the following roadways:
    - **24A.** Williams Road
    - **24B.** New east-west roadway (described under improvement #23)
    - **24C.** Alisal Road
    - **24D.** Moffet Street extension

    It should be noted that an access driveway is also recommended on the Eastside Bypass at the industrial area.
25. **Moffet Street:** Extend Moffet Street as a two lane collector industrial street to connect with the Eastside Bypass.
26. **Westside Bypass:** Construct a four-lane Westside Bypass between Boronda Road/U.S. 101 interchange and Blanco Road with roadway connection at the following locations:
    - **26A.** Auto Center Parkway
    - **26B.** North Davis Road
    - **26C.** West Alvin Drive extension
    - **26D.** Boronda Road (northwest leg only)
    - **26E.** West Rossi Street extension
    - **26F.** West Market Street (new interchange)
    - **26G.** Acacia Street extension (with an intersection at North Davis Road)
    - **26H.** West Blanco Road

TABLE 3
ROADWAY NETWORK IMPROVEMENTS

It should be noted that this improvement assumes the following: North Davis Road is disconnected between Acacia Street and West Blanco Road; Davis Road south of Market Street is maintained as a two-lane frontage road with 35 mph speed limit; Ambrose Drive is terminated at Loyola Drive; a two-lane roadway connection is constructed between southbound U.S.101 off ramp and West Alvin Drive extension; an auxiliary lane is constructed on northbound U.S. 101 at the Boronda Road interchange from the northbound on loop ramp to north of the interchange; and, a four-lane arterial (fly-under) connects between Westridge Parkway and Alvin Drive extension (behind COSCO).

27. **Alvin Drive:** Extend Alvin Drive as a four-lane arterial to the Westside Bypass with no connection at Davis Road, and establish a connection to Westridge Parkway.
28. **Laurel Drive:** Add left turn lanes on Laurel Drive between Adams Street and Main Street. Also implement ramp widening and channelization improvements at the Highway 101/Laurel Drive intersection.
29. **Rossi Street:** Widen Rossi Street to four lanes between Davis Road and Coit Way.
30. **Rossi Street:** Widen Rossi Street to four lanes between Main Street and Sherwood Drive.
31. **Main Street:** Widen Main Street from a four to a six-lane arterial between U.S. 101 and Market Street.
32. **U.S. 101:** Widen U.S. 101 to a six-lane freeway through the City of Salinas (between the new interchange north of Espinosa Road and Harris Road), except where there are auxiliary lanes.
33. **Bernal Drive:** Extend Bernal Drive as a four-lane arterial (with a 45 mph speed limit) from Sherwood Drive/Natividad Road intersection to Kern Street. Widen Bernal Drive, as well as construct a sidewalk and a retaining wall on the north side of the road between Main Street and Rosarita Drive.
34. **Constitution Boulevard (West):** Extend Constitution Boulevard from Laurel Drive to connect with the Bernal Drive extension.
35. **Williams Road:** Widen Williams Road from three to four lanes between Del Monte Avenue and Boronda Road.
36. **Alisal Street:** Widen Alisal Street from a two to a four-lane arterial between Williams Road and Alisal Road.
37. **Sanborn Road:** Widen Sanborn Road to six lanes and reconstruct road from John Street to Abbott Street.
38. **Airport Boulevard/U.S. 101 Interchange:** Upgrade Airport Boulevard/U.S. 101 interchange per Caltrans PSR.
39. **Harris Road/U.S. 101 Interchange:** Construct a diamond shaped interchange at Harris Road/U.S. 101 with high speed ramps and partial clover.
40. **Alisal Road:** Upgrade Alisal Road to a four-lane arterial between Bardin Road and one mile south of the Eastside Bypass. Provide traffic operational improvements near Bardin School.

TABLE 3
ROADWAY NETWORK IMPROVEMENTS

41. **Blanco Road:** Widen Blanco Road from a two to a four-lane arterial between Alisal Street and Marina City limit.

B. Additional Roadway Network Improvements Under the "Prunedale Bypass Scenario":

42. **Prunedale Bypass:** Implement the Prunedale Bypass per "Alternative 4E" (see Regional Transportation Plan, TAMC, for description). This replaces Improvements 1 through 7 of the "210 Scenario" described above.
43. **New Interchange:** Construct a new interchange at confluence of existing U.S. 101 and Prunedale Bypass to be called El Camino Real Interchange.
44. **Main Street:** Extend North Main Street to the new El Camino Real Interchange along the existing Harrison Road alignment.
45. **Rancho San Juan Area:** Establish a collector street network and frontage roads associated with the Rancho San Juan area per the 1996 draft EIR.

C. Additional Roadway Network Improvements Under the "Prunedale Bypass and Eastside Expressway Scenario":

46. **U.S. 101:** Widen U.S. 101 to six lanes between Boronda Road and the El Camino Real interchange. It should be noted that U.S. 101 is maintained as four lanes through the City of Salinas (i.e., improvement listed under #32 is not established).
47. **Harris Road/U.S. 101 Interchange:** Construct the Harris Road/U.S. 101 interchange with the configurations illustrated within the insert on Figure 13.
48. **Eastside Bypass:** Extend the Eastside Bypass from the Highway 101/Harris Road interchange to the Boronda Road extension.
49. **Eastside Expressway:** Construct a four-lane expressway to connect between the Eastside Bypass/Old Stage intersection and the Prunedale Bypass. Traffic access to the Eastside Expressway are via intersections with the following roadways:
    - **49A.** Williams Road
    - **49B.** Sanborn Road
    - **49C.** Constitution Boulevard
    - **49D.** Natividad Road
    - **49E.** Russell Road extension
    - **49F.** San Juan Grade Road
50. **New Interchange:** Construct a new diamond shaped interchange at Eastside Expressway/Prunedale Bypass.

TABLE 3
ROADWAY NETWORK IMPROVEMENTS

D. Additional Recommended Improvements:

51. Abbott Street: Implement left turn channelization at major intersections and driveways between John Street and Romie Lane.
52. Alisal Street: Implement left turn channelization at major intersections and driveways between Monterey Street and Work Street.
53. Deleted.
54. John Street: Implement left turn channelization at major intersections and driveways between Abbott Street/Front Street and the Highway 101 northbound off ramp.
55. Laurel Drive: Provide a third through lane on westbound Laurel Drive at Natividad Road and on eastbound Laurel Drive at Constitution Boulevard. Provide left turn channelization at major intersections and driveways near Sanborn Road.
56. Main Street: Widen Main Street to six lanes between Market Street and Bernal Street. This will require widening the existing bridge over Highway 101.
57. South Main Street: Implement left turn channelization at major driveways and intersections south of John Street. Caltrans and the City of Salinas are in the process of implementing this improvement at the present time.
58. Deleted.
59. McKinnon Street: Implement left turn channelization at major intersections between Boronda Road and Harden Parkway.
60. Natividad Road: Widen Natividad Road to a six lane arterial between Bernal Drive and Laurel Drive.
61. Williams Road: Widen Williams Road to a six lane divided arterial to achieve LOS C.

Caltrans Improvements that would Impact Operational Conditions of the Transportation System within and around the City of Salinas (Improvements funded over a 20 year period)

- Construct an interchange at the existing State Route 1/Salinas Road intersection.
- Widen State Route 68 to four lanes between Ragsdale Drive and State Route 218, and add signal at Ragsdale Drive.
- Demolish interchange at Airport Boulevard/Highway 101 and replace with a four-lane over-crossing.
- Implement Phase I of the Prunedale Bypass by constructing a four-lane bypass between Russell Road - Espinosa Road and Crazy Horse Canyon Road - Echo Valley Road, or upgrade the existing Highway 101 to a four lane freeway.
- Construct a new interchange at Highway 101/San Juan Road.
- Implement Phase I of the planned improvements at the Highway 101/State Route 156 interchange.

TABLE 3
ROADWAY NETWORK IMPROVEMENTS

- Widen the west corridor of State Route 156 to four lanes from Castroville Boulevard to Prunedale Road.

FORA Improvements that would Impact Operational Conditions of the Transportation System within the City of Salinas (Improvements funded over a 20 year period)

- Realign 12th Street from Highway 1 to California Avenue as a four-lane arterial, as well as widen 12th Street and Imjin Road from two to four-lane arterials from California Avenue to Reservation Road.
- Widen Davis Road from a two to a four-lane arterial between Blanco Road and Reservation Road.
- Construct a new four-lane arterial from Imjin Road at Abrams Road northeasterly to Reservation Road at Blanco Road.
- Upgrade Inter Garrison Road to a two-lane arterial from 8th Street to Reservation Road.
- Widen Reservation Road from four to six lanes between Del Monte Boulevard and Crescent Avenue, and between Salinas Avenue and Blanco Road. Extend Reservation Road as a four-lane connector from the easterly boundary of UC MBESTE Campus to Walkins Gate.
- Extend Salinas Road as a two-lane arterial from Reservation Road southerly to Abrams Drive
- Extend South Boundary Road to York Road in the Ryan Ranch area.

TABLE 4

GENERAL PLAN BUILDOUT WITH THE '210 IMPROVEMENTS' ALTERNATIVE

Daily Volumes and Associated Levels of Service on

on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC					
					TRAFFIC COUNT		TRAFFIC MODEL			
					(99, 00 & 01)[1] COUNT	LEVEL OF SERVICE	2000 VOLUME	LEVEL OF SERVICE	BUILDOUT VOLUME	LEVEL OF SERVICE
1	ABBOTT ST S/O JOHN STREET	4	Undivided Arterial	N/S	25,906	E	26,413	E	34,662	F
2	ABBOTT ST N/O SANBORN ROAD	4	Divided Arterial	N/S	22,073	B	23,230	B	30,810	D
3	ABBOTT ST E/O HARKINS ROAD	4	Divided Arterial	N/S	18,932	A	17,528	A	22,294	B
4	ABBOTT ST CITY LIMITS	4	Undivided Arterial	N/S	10,908	A	11,165	A	2,857	A
5	ACACIA STREET E/O DAVIS ROAD	2	Collector	E/W	6,200	B	5,495	A	8,495	C
6	AIRPORT BOULEVARD W/O U.S. 101	4	Undivided Arterial	E/W	18,180	B	17,777	B	16,004	B
7	AIRPORT BOULEVARD W/O MOFFETT STREET	4 (3)	Divided Arterial (Divided Arterial)	E/W	10,000	A	10,719	A	13,916	A
8	W. ALISAL STREET N/O AMBROSE DRIVE	4	Undivided Arterial	N/S	8,207	A	8,179	A	15,860	A
9	W. ALISAL STREET W/O HOMESTEAD AVE.	4	Undivided Arterial	E/W	9,511	A	10,729	A	20,251	C
10	E. ALISAL STREET E/O MONTEREY STREET	4	Undivided Arterial	E/W	14,362	A	16,079	B	24,261	E
11	E. ALISAL STREET E/O FRONT STREET	4	Undivided Arterial	E/W	-	-	15,754	A	19,376	C
12	E. ALISAL STREET E/O WORK STREET	4	Undivided Arterial	E/W	16,956	B	18,172	B	20,866	C
13	E. ALISAL STREET E/O U.S. 101	4	Undivided Arterial	E/W	-	-	15,891	A	20,527	C
14	E. ALISAL STREET W/O SANBORN ROAD	4	Undivided Arterial	E/W	10,902	A	11,698	A	14,603	A
15	E. ALISAL STREET E/O SANBORN ROAD	4	Undivided Arterial	E/W	17,221	B	16,775	B	19,905	C
16	E. ALISAL STREET W/O E. MARKET STREET	4 (2)	Undivided Arterial (Arterial)	E/W	8,877	A	8,909	A	4,202	A
17	ALISAL ROAD S/O BARDIN ROAD	4 (2)	Undivided Arterial (Rural Highway)	N/S	-	-	6,786	B	12,115	A
18	E. ALVIN DRIVE E/O CHEROKEE DRIVE	4	Undivided Arterial	E/W	3,220	A	3,273	A	15,869	A
19	E. ALVIN DRIVE W/O McKINNON STREET	4	Undivided Arterial	E/W	11,089	A	10,824	A	12,491	A
20	E. ALVIN DRIVE W/O NATIVIDAD RD	4	Undivided Arterial	E/W	11,186	A	12,457	A	16,616	B
21	BARDIN ROAD S/O WILLIAMS ROAD	4	Undivided Arterial	N/S	8,654	A	7,927	A	13,937	A
22	BERNAL DRIVE E/O N. MAIN STREET	4 (3)	Undivided Arterial (Divided Arterial)	E/W	12,136	B	12,539	B	17,092	B
23	W. BLANCO ROAD W/O DAVIS ROAD	4 (2)	Expressway (Rural Highway)	E/W	22,086	E	22,900	E	31,869	C
24	W. BLANCO ROAD E/O DAVIS ROAD	4 (2)	Divided Arterial (Arterial)	E/W	19,542	F	19,423	F	30,803	D
25	W. BLANCO ROAD W/O S. MAIN STREET	4	Divided Arterial	E/W	22,272	B	24,223	B	29,624	D
26	E. BLANCO ROAD E/O S. MAIN STREET	4	Divided Arterial	E/W	24,110	B	24,081	B	29,777	D
27	E. BLANCO ROAD E/O LA MESA WAY	4	Divided Arterial	E/W	24,778	B	25,526	C	31,295	D
28	E. BORONDA ROAD E/O U.S. 101	6	Divided Arterial	E/W	42,997	C	42,957	C	37,704	B

TABLE 4

GENERAL PLAN BUILDOUT WITH THE '210 IMPROVEMENTS' ALTERNATIVE

Daily Volumes and Associated Levels of Service on

on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC					
					TRAFFIC COUNT		TRAFFIC MODEL			
					(99, 00 & 01)[1] COUNT	LEVEL OF SERVICE	2000 VOLUME	LEVEL OF SERVICE	BUILDOUT VOLUME	LEVEL OF SERVICE
29	E. BORONDA ROAD W/O McKINNON STREET	6 (2)	Divided Arterial (Arterial)	E/W	24,388	F	25,219	F	35,980	B
30	E. BORONDA ROAD E/O McKINNON STREET	6 (2)	Divided Arterial (Arterial)	E/W	19,566	F	21,116	F	26,354	A
31	E. BORONDA ROAD E/O NATIVIDAD ROAD	6 (2)	Divided Arterial (Arterial)	E/W	21,412	F	20,743	F	25,346	A
32	E. BORONDA ROAD E/O INDEPENDENCE BLVD.	6 (2)	Divided Arterial (Arterial)	E/W	-	-	16,753	E	32,360	B
33	E. BORONDA ROAD E/O CONSTITUTION BLVD.	6 (2)	Divided Arterial (Arterial)	E/W	7,861	A	8,461	A	19,568	A
34	E. BORONDA ROAD W/O WILLIAMS ROAD	6 (2)	Divided Arterial (Arterial)	E/W	4,997	A	5,204	A	24,288	A
35	CENTRAL AVENUE E/O DAVIS ROAD	2	Collector	E/W	3,855	A	3,488	A	1,973	A
36	CONSTITUTION BLVD. N/O E. LAUREL DRIVE	4	Divided Arterial	N/S	15,926	A	16,258	A	23,612	B
37	CONSTITUTION BLVD. S/O E. BORONDA ROAD	4	Divided Arterial	N/S	5,161	A	4,398	A	11,148	A
38	N. DAVIS ROAD S/O BORONDA ROAD	4	Undivided Arterial	N/S	16,948	B	16,755	B	3,294	A
39	N. DAVIS ROAD N/O W. LAUREL DRIVE	4	Divided Arterial	N/S	-	-	21,674	A	19,040	A
40	N. DAVIS ROAD S/O W. LAUREL DRIVE	4	Divided Arterial	N/S	36,944	E	37,685	E	17,795	A
41	N. DAVIS ROAD S/O POST DRIVE	4	Divided Arterial	N/S	-	-	34,174	E	16,624	A
42	N. DAVIS ROAD N/O W. MARKET STREET	4	Divided Arterial	N/S	-	-	30,215	D	7,916	A
43	DAVIS ROAD N/O CENTRAL AVENUE	2 (2)	Arterial (Rural Highway)	N/S	-	-	28,912	F	1,932	A
44	DAVIS ROAD N/O W. ACACIA STREET	2 (2)	Arterial (Rural Highway)	N/S	27,430	F	27,119	F	1,664	A
45	DAVIS ROAD S/O W. BLANCO ROAD	4 (2)	Undivided Arterial (Rural Highway)	N/S	4,300	B	4,196	B	8,442	A
46	DEL MONTE AVENUE W/O N. SANBORN ROAD	2	Collector	E/W	6,526	B	6,947	B	7,869	C
47	DEL MONTE AVENUE W/O WILLIAMS ROAD	2	Collector	E/W	6,800	B	7,127	B	9,811	D
48	EL DORADO DRIVE S/O E. BORONDA ROAD	2	Collector	N/S	3,433	A	3,465	A	6,279	B
49	ESPINOSA ROAD W/O U.S. 101	4 (2)	Divided Arterial (Rural Highway)	E/W	9,500	C	9,688	C	9,946	A
50	FREEDOM PARKWAY E/O CONSTITUTION BLVD.	4	Undivided Arterial	E/W	7,111	A	6,708	A	11,918	A
51	FREEDOM PARKWAY W/O WILLIAMS ROAD	4	Undivided Arterial	E/W	5,348	A	5,361	A	7,176	A
52	FRONT STREET S/O E. ALISAL STREET	4	Divided Arterial	N/S	17,969	A	19,205	A	28,067	C
53	HARKINS ROAD S/O DAYTON STREET	2	Rural Highway	N/S	6,514	B	6,180	B	10,295	C
54	HARRIS ROAD W/O ABBOTT STREET	2	Rural Highway	N/S	8,120	C	8,779	C	15,130	D
55	HARRISON ROAD N/O RUSSELL ROAD	4 (2)	Undivided Arterial (Rural Highway)	N/S	-	-	3,160	A	19,606	C
56	HEBERT ROAD E/O SAN JUAN GRADE RD.	2	Rural Highway	N/S	4,472	B	4,686	B	689	A

TABLE 4

GENERAL PLAN BUILDOUT WITH THE '210 IMPROVEMENTS' ALTERNATIVE

Daily Volumes and Associated Levels of Service on

on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC: TRAFFIC COUNT (99, 00 & 01)[1] COUNT	TRAFFIC COUNT LEVEL OF SERVICE	TRAFFIC MODEL 2000 VOLUME	TRAFFIC MODEL LEVEL OF SERVICE	TRAFFIC MODEL BUILDOUT VOLUME	TRAFFIC MODEL LEVEL OF SERVICE
57	INDEPENDENCE BLVD. S/O E. BORONDA ROAD	4	Undivided Arterial	N/S	6,473	A	7,106	A	9,344	A
58	JOHN STREET E/O S. MAIN STREET	4	Undivided Arterial	E/W	-	-	10,465	A	10,357	A
59	JOHN STREET W/O ABBOTT STREET	4	Undivided Arterial	E/W	11,112	A	11,204	A	12,282	A
60	JOHN STREET E/O ABBOTT STREET	4	Undivided Arterial	E/W	23,450	D	24,147	E	28,007	F
61	JOHN STREET W/O SANBORN ROAD	4	Undivided Arterial	E/W	10,075	A	9,760	A	11,107	A
62	LAS CASITAS DRIVE S/O CONSTITUTION BLVD.	2	Collector	E/W	5,801	A	6,290	B	7,535	C
63	W. LAUREL DRIVE W/O U.S. 101	6	Divided Arterial	E/W	41,544	C	43,399	D	33,293	B
64	W. LAUREL DRIVE E/O U.S. 101	6 (4)	Divided Arterial (Undivided Arterial)	E/W	24,501	E	22,982	D	18,144	A
65	E. LAUREL DRIVE W/O LOMA DRIVE	4	Undivided Arterial	E/W	21,178	C	19,849	C	20,794	C
66	E. LAUREL DRIVE W/O CONSTITUTION BLVD.	4	Divided Arterial	E/W	31,936	D	31,325	D	42,683	F
67	E. LAUREL DRIVE E/O CONSTITUTION BLVD.	4	Divided Arterial	E/W	20,990	A	21,787	A	28,601	C
68	N. MAIN STREET S/O E. BORONDA ROAD	4	Divided Arterial	N/S	15,730	A	16,272	A	14,968	A
69	N. MAIN STREET S/O SAN JUAN GRADE ROAD	6	Divided Arterial	N/S	-	-	20,810	A	35,537	B
70	N. MAIN STREET S/O ALVIN DRIVE	6	Divided Arterial	N/S	26,766	A	26,838	A	31,760	A
71	N. MAIN STREET N/O LAUREL DRIVE	6	Divided Arterial	N/S	29,729	A	30,591	A	34,368	C
72	N. MAIN STREET S/O LAUREL DRIVE	6	Divided Arterial	N/S	29,127	A	27,324	A	34,785	E
73	N. MAIN STREET N/O U.S. 101	5	Divided Arterial	N/S	36,382	D	32,590	C	43,610	E
74	N. MAIN STREET N/O MARKET	6 (4)	Divided Arterial (Divided Arterial)	N/S	32,187	D	34,097	E	40,453	C
75	S. MAIN STREET S/O JOHN STREET	4	Divided Arterial	N/S	25,763	E	25,659	E	30,894	D
76	S. MAIN STREET N/O ROMIE LANE	4	Divided Arterial	N/S	26,727	C	28,113	C	33,695	E
77	S. MAIN STREET N/O BLANCO ROAD	4	Divided Arterial	N/S	26,097	C	24,436	B	28,588	C
78	S. MAIN STREET S/O BLANCO ROAD	4	Expressway	N/S	33,230	C	33,212	C	37,222	D
79	W. MARKET STREET E/O DAVIS ROAD	4	Divided Arterial	E/W	19,477	A	18,419	A	19,953	A
80	W. MARKET STREET W/O LINCOLN AVENUE	4	Divided Arterial	E/W	22,306	B	21,384	A	25,100	C
81	E. MARKET STREET W/O MONTEREY STREET	4	Divided Arterial	E/W	20,990	A	20,384	A	21,617	A
82	E. MARKET STREET E/O MONTEREY STREET	4	Divided Arterial	E/W	-	-	23,211	B	20,975	A
83	E. MARKET STREET E/O SHERWOOD DRIVE	4	Undivided Arterial	E/W	18,600	B	17,572	B	21,418	C
84	E. MARKET STREET E/O U.S. 101	4	Divided Arterial	E/W	21,485	A	23,208	B	25,933	C

TABLE 4
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Daily Volumes and Associated Levels of Service on
on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC — TRAFFIC COUNT (99, 00 & 01)[1] COUNT	TRAFFIC COUNT LEVEL OF SERVICE	TRAFFIC MODEL 2000 VOLUME	TRAFFIC MODEL LEVEL OF SERVICE	TRAFFIC MODEL BUILDOUT VOLUME	TRAFFIC MODEL LEVEL OF SERVICE
85	E. MARKET STREET E/O HEBBRON AVE.	4	Undivided Arterial	E/W	17,102	B	18,615	B	20,952	C
86	E. MARKET STREET E/O N. SANBORN ROAD	4	Undivided Arterial	E/W	10,418	A	10,890	A	12,516	A
87	McKINNON STREET S/O E. BORONDA ROAD	2	Collector	N/S	8,488	C	7,182	B	15,130	F
88	MONTEREY STREET N/O E. GABILAN STREET	3	One-Way Arterial	N/S	13,294	A	12,738	A	16,065	B
89	MONTEREY STREET S/O E. ALISAL STREET	3	One-Way Arterial	N/S	11,554	A	11,561	A	14,244	A
90	NATIVIDAD ROAD N/O E. BORONDA ROAD	4 (2)	Divided Arterial (Rural Highway)	N/S	7,131	C	7,246	C	14,986	A
91	NATIVIDAD ROAD S/O ARCADIA WAY	6	Divided Arterial	N/S	10,093	A	9,881	A	20,783	A
92	NATIVIDAD ROAD S/O E. ALVIN DRIVE	6	Divided Arterial	N/S	24,487	A	27,742	A	38,024	C
93	NATIVIDAD ROAD N/O E. LAUREL DRIVE	6	Divided Arterial	N/S	26,246	A	28,994	A	37,881	B
94	NATIVIDAD ROAD S/O E. LAUREL DRIVE	4	Divided Arterial	N/S	30,516	D	29,328	D	40,436	F
95	OLD STAGE ROAD S/O NATIVIDAD ROAD	2	Rural Highway	N/S	1,225	A	1,155	A	9,644	C
96	POST DRIVE W/O DAVIS ROAD	4	Undivided Arterial	E/W	10,000	A	10,324	A	3,413	A
97	ROMIE LANE E/O LOS PALOS DR.	4	Undivided Arterial	E/W	8,878	A	8,564	A	9,867	A
98	ROSSI STREET E/O DAVIS ROAD	4 (2)	Divided Arterial (Arterial)	E/W	9,885	A	9,439	A	10,179	A
99	RUSSELL ROAD E/O U.S. 101	4 (2)	Divided Arterial (Arterial)	E/W	4,201	A	4,288	A	10,242	A
100	RUSSELL ROAD E/O VAN BUREN AVENUE	4 (2)	Divided Arterial (Arterial)	E/W	7,447	A	7,736	A	21,633	A
101	SALINAS STREET S/O W. ALISAL STREET	3	One-Way Arterial	N/S	12,887	A	11,036	A	14,608	A
102	S. SANBORN ROAD S/O U.S. 101	6 (4)	Divided Arterial (Divided Arterial)	E/W	26,892	C	24,127	B	28,656	A
103	S. SANBORN ROAD N/O U.S. 101	6 (4)	Divided Arterial (Divided Arterial)	N/S	26,619	C	26,000	C	28,978	A
104	N. SANBORN ROAD S/O E. LAUREL DRIVE	4	Divided Arterial	N/S	22,476	B	21,180	A	23,124	B
105	N. SANBORN ROAD S/O DEL MONTE AVENUE	4	Undivided Arterial	N/S	11,238	A	10,857	A	12,033	A
106	N. SANBORN ROAD W/O FREEDOM PKWY.	4	Divided Arterial	N/S	4,297	A	4,473	A	7,224	A
107	SAN JUAN GRADE ROAD N/O RUSSELL ROAD	4 (2)	Divided Arterial (Arterial)	N/S	13,000	C	11,905	B	17,755	A
108	SAN JUAN GRADE ROAD N/O E. BORONDA ROAD	4 (2)	Divided Arterial (Arterial)	N/S	14,700	D	14,766	D	14,063	A
109	SAN JUAN GRADE ROAD S/O E. BORONDA ROAD	4	Divided Arterial	N/S	-	-	12,199	A	15,251	A
110	SHERWOOD DRIVE N/O U.S. 101	4	Divided Arterial	N/S	22,135	B	22,417	B	27,105	C
111	TOWT STREET W/O FREEDOM PKWY.	2	Collector	E/W	1,914	A	1,959	A	2,051	A
112	U.S. 101 N/O RUSSELL-ESPINOSA	6 (4)	Freeway (Expressway)	N/S	57,093	F	59,381	F	75,703	C

TABLE 4

GENERAL PLAN BUILDOUT WITH THE '210 IMPROVEMENTS' ALTERNATIVE

Daily Volumes and Associated Levels of Service on

on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC					
					TRAFFIC COUNT		TRAFFIC MODEL			
					(99, 00 & 01)[1] COUNT	LEVEL OF SERVICE	2000 VOLUME	LEVEL OF SERVICE	BUILDOUT VOLUME	LEVEL OF SERVICE
113	U.S. 101 N/O BORONDA ROAD	6 (4)	Freeway (Freeway)	N/S	-	-	68.540	D	74.342	C
114	U.S. 101 N/O LAUREL DRIVE	6 (4)	Freeway (Freeway)	N/S	-	-	56,500	C	65,668	C
115	U.S. 101 S/O LAUREL DRIVE	6 (4)	Freeway (Freeway)	N/S	55,430	C	53,121	C	68,843	C
116	U.S. 101 S/O N. MAIN STREET	6 (4)	Freeway (Freeway)	N/S	-	-	54,375	C	67,310	C
117	U.S. 101 S/O AIRPORT BLVD.	6 (4)	Freeway (Freeway)	N/S	26,107	B	26,997	B	36,860	B
118	WILLIAMS ROAD N/O E. LAUREL DRIVE	4	Divided Arterial	N/S	-	-	17,171	A	34,366	E
119	WILLIAMS ROAD S/O DEL MONTE DRIVE	4	Divided Arterial	N/S	17,656	A	17,116	A	34,426	E
120	WILLIAMS ROAD S/O FREEDOM PARKWAY	4 (3)	Divided Arterial (Divided Arterial)	N/S	9,897	A	10,590	A	23,786	B
121	WILLIAMS ROAD N/O FREEDOM PARKWAY	4 (2)	Divided Arterial (Arterial)	N/S	5,698	A	5,609	A	19,943	A
122	WILLIAMS ROAD N/O E. BORONDA ROAD	4 (2)	Divided Arterial (Arterial)	N/S	2,340	A	2,154	A	5,905	A
123	WORK STREET S/O JOHN STREET	4	Undivided Arterial	N/S	3,500	A	3,505	A	6,744	A
124	WORK STREET W/O S. SANBORN ROAD	4	Undivided Arterial	N/S	-	-	3,675	A	6,771	A

NOTES:
1. Traffic volumes collected in 1999 through 2001, as provided by the City of Salinas and Caltrans. These more recent counts are used for model validation.
2. Land Use Sources: The 2000 US Census and the California Employment Development Department.
3. Traffic Network: Based on observations by staff of Monterey County, City of Salinas and Higgins Associates.
4. Number of Lanes and Facility Type shown are as proposed under this alternative. Existing lanes and facility type are shown in parentheses, if different from this alternative.
5. Highlighted segments operate at a deficient level of service under this scenario.

TABLE 5
GENERAL PLAN BUILDOUT WITH THE PRUNEDALE BYPASS
Daily Volumes and Associated Levels of Service on
on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC: TRAFFIC COUNT (99, 00 & 01)[1] COUNT	TRAFFIC COUNT LEVEL OF SERVICE	TRAFFIC MODEL 2000 VOLUME	TRAFFIC MODEL LEVEL OF SERVICE	TRAFFIC MODEL BUILDOUT VOLUME	TRAFFIC MODEL LEVEL OF SERVICE
1	ABBOTT ST S/O JOHN STREET	4	Undivided Arterial	N/S	25,906	E	26,413	E	34,858	F
2	ABBOTT ST N/O SANBORN ROAD	4	Divided Arterial	N/S	22,073	B	23,230	B	30,938	D
3	ABBOTT ST E/O HARKINS ROAD	4	Divided Arterial	N/S	18,932	A	17,528	A	22,619	B
4	ABBOTT ST CITY LIMITS	4	Undivided Arterial	N/S	10,908	A	11,165	A	2,867	A
5	ACACIA STREET E/O DAVIS ROAD	2	Collector	E/W	6,200	B	5,495	A	8,520	C
6	AIRPORT BOULEVARD W/O U.S. 101	4	Undivided Arterial	E/W	18,180	B	17,777	B	16,031	B
7	AIRPORT BOULEVARD W/O MOFFETT STREET	4 (3)	Divided Arterial (Divided Arterial)	E/W	10,000	A	10,719	A	13,950	A
8	W. ALISAL STREET N/O AMBROSE DRIVE	4	Undivided Arterial	N/S	8,207	A	8,179	A	15,854	A
9	W. ALISAL STREET W/O HOMESTEAD AVE.	4	Undivided Arterial	E/W	9,511	A	10,729	A	20,267	C
10	E. ALISAL STREET E/O MONTEREY STREET	4	Undivided Arterial	E/W	14,362	A	16,079	B	24,129	E
11	E. ALISAL STREET E/O FRONT STREET	4	Undivided Arterial	E/W	-	-	15,754	A	19,350	C
12	E. ALISAL STREET E/O WORK STREET	4	Undivided Arterial	E/W	16,956	B	18,172	B	20,762	C
13	E. ALISAL STREET E/O U.S. 101	4	Undivided Arterial	E/W	-	-	15,891	A	20,454	C
14	E. ALISAL STREET W/O SANBORN ROAD	4	Undivided Arterial	E/W	10,902	A	11,698	A	14,593	A
15	E. ALISAL STREET E/O SANBORN ROAD	4	Undivided Arterial	E/W	17,221	B	16,775	B	19,905	C
16	E. ALISAL STREET W/O E. MARKET STREET	4 (2)	Undivided Arterial (Arterial)	E/W	8,877	A	8,909	A	4,198	A
17	ALISAL ROAD S/O BARDIN ROAD	4 (2)	Undivided Arterial (Rural Highway)	N/S	-	-	6,786	B	12,113	A
18	E. ALVIN DRIVE E/O CHEROKEE DRIVE	4	Undivided Arterial	E/W	3,220	A	3,273	A	15,792	A
19	E. ALVIN DRIVE W/O McKINNON STREET	4	Undivided Arterial	E/W	11,089	A	10,824	A	12,479	A
20	E. ALVIN DRIVE W/O NATIVIDAD RD	4	Undivided Arterial	E/W	11,186	A	12,457	A	16,582	B
21	BARDIN ROAD S/O WILLIAMS ROAD	4	Undivided Arterial	N/S	8,654	A	7,927	A	13,906	A
22	BERNAL DRIVE E/O N. MAIN STREET	4 (3)	Undivided Arterial (Divided Arterial)	E/W	12,136	B	12,539	B	17,061	B
23	W. BLANCO ROAD W/O DAVIS ROAD	4 (2)	Expressway (Rural Highway)	E/W	22,086	E	22,900	E	33,212	C
24	W. BLANCO ROAD E/O DAVIS ROAD	4 (2)	Divided Arterial (Arterial)	E/W	19,542	F	19,423	F	30,618	D
25	W. BLANCO ROAD W/O S. MAIN STREET	4	Divided Arterial	E/W	22,272	B	24,223	B	29,424	D
26	E. BLANCO ROAD E/O S. MAIN STREET	4	Divided Arterial	E/W	24,110	B	24,081	B	29,780	D
27	E. BLANCO ROAD E/O LA MESA WAY	4	Divided Arterial	E/W	24,778	B	25,526	C	31,294	D
28	E. BORONDA ROAD E/O U.S. 101	6	Divided Arterial	E/W	42,997	C	42,957	C	35,361	B

TABLE 5
GENERAL PLAN BUILDOUT WITH THE PRUNEDALE BYPASS
Daily Volumes and Associated Levels of Service on
on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC: TRAFFIC COUNT (99, 00 & 01)[1] COUNT	TRAFFIC COUNT LEVEL OF SERVICE	TRAFFIC MODEL 2000 VOLUME	TRAFFIC MODEL LEVEL OF SERVICE	TRAFFIC MODEL BUILDOUT VOLUME	TRAFFIC MODEL LEVEL OF SERVICE
29	E. BORONDA ROAD W/O McKINNON STREET	6 (2)	Divided Arterial (Arterial)	E/W	24,388	F	25,219	F	33,120	B
30	E. BORONDA ROAD E/O McKINNON STREET	6 (2)	Divided Arterial (Arterial)	E/W	19,566	F	21,116	F	23,592	A
31	E. BORONDA ROAD E/O NATIVIDAD ROAD	6 (2)	Divided Arterial (Arterial)	E/W	21,412	F	20,743	F	22,748	A
32	E. BORONDA ROAD E/O INDEPENDENCE BLVD.	6 (2)	Divided Arterial (Arterial)	E/W	-	-	16,753	E	32,364	B
33	E. BORONDA ROAD E/O CONSTITUTION BLVD.	6 (2)	Divided Arterial (Arterial)	E/W	7,861	A	8,461	A	19,594	A
34	E. BORONDA ROAD W/O WILLIAMS ROAD	6 (2)	Divided Arterial (Arterial)	E/W	4,997	A	5,204	A	24,335	A
35	CENTRAL AVENUE E/O DAVIS ROAD	2	Collector	E/W	3,855	A	3,488	A	1,988	A
36	CONSTITUTION BLVD. N/O E. LAUREL DRIVE	4	Divided Arterial	N/S	15,926	A	16,258	A	23,555	B
37	CONSTITUTION BLVD. S/O E. BORONDA ROAD	4	Divided Arterial	N/S	5,161	A	4,398	A	9,655	A
38	N. DAVIS ROAD S/O BORONDA ROAD	4	Undivided Arterial	N/S	16,948	B	16,755	B	3,690	A
39	N. DAVIS ROAD N/O W. LAUREL DRIVE	4	Divided Arterial	N/S	-	-	21,674	A	18,975	A
40	N. DAVIS ROAD S/O W. LAUREL DRIVE	4	Divided Arterial	N/S	36,944	E	37,685	E	17,891	A
41	N. DAVIS ROAD S/O POST DRIVE	4	Divided Arterial	N/S	-	-	34,174	E	16,726	A
42	N. DAVIS ROAD N/O W. MARKET STREET	4	Divided Arterial	N/S	-	-	30,215	D	8,063	A
43	DAVIS ROAD N/O CENTRAL AVENUE	2	Arterial (Rural Highway)	N/S	-	-	28,912	F	1,927	A
44	DAVIS ROAD N/O W. ACACIA STREET	2	Arterial (Rural Highway)	N/S	27,430	F	27,119	F	1,675	A
45	DAVIS ROAD S/O W. BLANCO ROAD	4 (2)	Undivided Arterial (Rural Highway)	N/S	4,300	B	4,196	B	8,410	A
46	DEL MONTE AVENUE W/O N. SANBORN ROAD	2	Collector	E/W	6,526	B	6,947	B	7,852	C
47	DEL MONTE AVENUE W/O WILLIAMS ROAD	2	Collector	E/W	6,800	B	7,127	B	9,793	D
48	EL DORADO DRIVE S/O E. BORONDA ROAD	2	Collector	N/S	3,433	A	3,465	A	6,229	B
49	ESPINOSA ROAD W/O U.S. 101	4 (2)	Divided Arterial (Rural Highway)	E/W	9,500	C	9,688	C	15,868	A
50	FREEDOM PARKWAY E/O CONSTITUTION BLVD.	4	Undivided Arterial	E/W	7,111	A	6,708	A	11,951	A
51	FREEDOM PARKWAY W/O WILLIAMS ROAD	4	Undivided Arterial	E/W	5,348	A	5,361	A	7,190	A
52	FRONT STREET S/O E. ALISAL STREET	4	Divided Arterial	N/S	17,969	A	19,205	A	28,247	C
53	HARKINS ROAD S/O DAYTON STREET	2	Rural Highway	N/S	6,514	B	6,180	B	10,278	C
54	HARRIS ROAD W/O ABBOTT STREET	2	Rural Highway	N/S	8,120	C	8,779	C	14,444	D
55	HARRISON RD./N. MAIN N/O RUSSELL ROAD	4 (2)	Divided Arterial (Rural Highway)	N/S	-	-	3,160	A	27,388	C
56	HEBERT ROAD E/O SAN JUAN GRADE RD.	2	Rural Highway	N/S	4,472	B	4,686	B	637	A

TABLE 5

GENERAL PLAN BUILDOUT WITH THE PRUNEDALE BYPASS

Daily Volumes and Associated Levels of Service on

on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC					
					TRAFFIC COUNT		TRAFFIC MODEL			
					(99, 00 & 01)[1] COUNT	LEVEL OF SERVICE	2000 VOLUME	LEVEL OF SERVICE	BUILDOUT VOLUME	LEVEL OF SERVICE
57	INDEPENDENCE BLVD. S/O E. BORONDA ROAD	4	Undivided Arterial	N/S	6,473	A	7,106	A	9,368	A
58	JOHN STREET E/O S. MAIN STREET	4	Undivided Arterial	E/W	-	-	10,465	A	10,306	A
59	JOHN STREET W/O ABBOTT STREET	4	Undivided Arterial	E/W	11,112	A	11,204	A	12,225	A
60	JOHN STREET E/O ABBOTT STREET	4	Undivided Arterial	E/W	23,450	D	24,147	E	28,151	F
61	JOHN STREET W/O SANBORN ROAD	4	Undivided Arterial	E/W	10,075	A	9,760	A	11,099	A
62	LAS CASITAS DRIVE S/O CONSTITUTION BLVD.	2	Collector	E/W	5,801	A	6,290	B	7,558	C
63	W. LAUREL DRIVE W/O U.S. 101	6	Divided Arterial	E/W	41,544	C	43,399	D	33,373	B
64	W. LAUREL DRIVE E/O U.S. 101	6 (4)	Divided Arterial (Undivided Arterial)	E/W	24,501	E	22,982	D	18,453	A
65	E. LAUREL DRIVE W/O LOMA DRIVE	4	Undivided Arterial	E/W	21,178	C	19,849	C	20,813	C
66	E. LAUREL DRIVE W/O CONSTITUTION BLVD.	4	Divided Arterial	E/W	31,936	D	31,325	D	42,451	F
67	E. LAUREL DRIVE E/O CONSTITUTION BLVD.	4	Divided Arterial	E/W	20,990	A	21,787	A	28,400	C
68	N. MAIN STREET S/O E. BORONDA ROAD	4	Divided Arterial	N/S	15,730	A	16,272	A	14,884	A
69	N. MAIN STREET S/O SAN JUAN GRADE ROAD	6	Divided Arterial	N/S	-	-	20,810	A	35,111	B
70	N. MAIN STREET S/O ALVIN DRIVE	6	Divided Arterial	N/S	26,766	A	26,838	A	31,392	A
71	N. MAIN STREET N/O LAUREL DRIVE	6	Divided Arterial	N/S	29,729	A	30,591	A	33,988	B
72	N. MAIN STREET S/O LAUREL DRIVE	6	Divided Arterial	N/S	29,127	A	27,324	A	34,685	B
73	N. MAIN STREET N/O U.S. 101	5	Divided Arterial	N/S	36,382	D	32,590	C	43,630	E
74	N. MAIN STREET N/O MARKET	6 (4)	Divided Arterial (Divided Arterial)	N/S	32,187	D	34,097	E	40,965	C
75	S. MAIN STREET S/O JOHN STREET	4	Divided Arterial	N/S	25,763	E	25,659	E	31,165	D
76	S. MAIN STREET N/O ROMIE LANE	4	Divided Arterial	N/S	26,727	C	28,113	C	33,954	E
77	S. MAIN STREET N/O BLANCO ROAD	4	Divided Arterial	N/S	26,097	C	24,436	B	28,856	C
78	S. MAIN STREET S/O BLANCO ROAD	4	Expressway	N/S	33,230	C	33,212	C	37,400	D
79	W. MARKET STREET E/O DAVIS ROAD	4	Divided Arterial	E/W	19,477	A	18,419	A	20,407	A
80	W. MARKET STREET W/O LINCOLN AVENUE	4	Divided Arterial	E/W	22,306	B	21,384	A	25,519	C
81	E. MARKET STREET W/O MONTEREY STREET	4	Divided Arterial	E/W	20,990	A	20,384	A	21,966	A
82	E. MARKET STREET E/O MONTEREY STREET	4	Divided Arterial	E/W	-	-	23,211	B	21,284	A
83	E. MARKET STREET E/O SHERWOOD DRIVE	4	Undivided Arterial	E/W	18,600	B	17,572	B	21,513	C
84	E. MARKET STREET E/O U.S. 101	4	Divided Arterial	E/W	21,485	A	23,208	B	26,163	C

TABLE 5
GENERAL PLAN BUILDOUT WITH THE PRUNEDALE BYPASS
Daily Volumes and Associated Levels of Service on
on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC: TRAFFIC COUNT (99, 00 & 01)[1] COUNT	TRAFFIC COUNT LEVEL OF SERVICE	TRAFFIC MODEL 2000 VOLUME	TRAFFIC MODEL LEVEL OF SERVICE	TRAFFIC MODEL BUILDOUT VOLUME	TRAFFIC MODEL LEVEL OF SERVICE
85	E. MARKET STREET E/O HEBBRON AVE.	4	Undivided Arterial	E/W	17,102	B	18,615	B	21,117	C
86	E. MARKET STREET E/O N. SANBORN ROAD	4	Undivided Arterial	E/W	10,418	A	10,890	A	12,605	A
87	McKINNON STREET S/O E. BORONDA ROAD	2	Collector	N/S	8,488	C	7,182	B	15,173	F
88	MONTEREY STREET N/O E. GABILAN STREET	3	One-Way Arterial	N/S	13,294	A	12,738	A	16,454	B
89	MONTEREY STREET S/O E. ALISAL STREET	3	One-Way Arterial	N/S	11,554	A	11,561	A	14,519	A
90	NATIVIDAD ROAD N/O E. BORONDA ROAD	4 (2)	Divided Arterial (Rural Highway)	N/S	7,131	C	7,246	C	14,343	A
91	NATIVIDAD ROAD S/O ARCADIA WAY	6	Divided Arterial	N/S	10,093	A	9,881	A	20,063	A
92	NATIVIDAD ROAD S/O E. ALVIN DRIVE	6	Divided Arterial	N/S	24,487	A	27,742	A	37,302	B
93	NATIVIDAD ROAD N/O E. LAUREL DRIVE	6	Divided Arterial	N/S	26,246	A	28,994	A	37,157	B
94	NATIVIDAD ROAD S/O E. LAUREL DRIVE	4	Divided Arterial	N/S	30,516	D	29,328	D	39,978	F
95	OLD STAGE ROAD S/O NATIVIDAD ROAD	2	Rural Highway	N/S	1,225	A	1,155	A	6,837	B
96	POST DRIVE W/O DAVIS ROAD	4	Undivided Arterial	E/W	10,000	A	10,324	A	3,413	A
97	ROMIE LANE E/O LOS PALOS DR.	4	Undivided Arterial	E/W	8,878	A	8,564	A	9,842	A
98	ROSSI STREET E/O DAVIS ROAD	4 (2)	Divided Arterial (Arterial)	E/W	9,885	A	9,439	A	10,232	A
99	RUSSELL ROAD E/O U.S. 101	4 (2)	Divided Arterial (Arterial)	E/W	4,201	A	4,288	A	16,191	A
100	RUSSELL ROAD E/O VAN BUREN AVENUE	4 (2)	Divided Arterial (Arterial)	E/W	7,447	A	7,736	A	25,319	C
101	SALINAS STREET S/O W. ALISAL STREET	3	One-Way Arterial	N/S	12,887	A	11,036	A	14,670	A
102	S. SANBORN ROAD S/O U.S. 101	6 (4)	Divided Arterial (Divided Arterial)	E/W	26,892	C	24,127	B	28,591	A
103	S. SANBORN ROAD N/O U.S. 101	6 (4)	Divided Arterial (Divided Arterial)	N/S	26,619	C	26,000	C	28,848	A
104	N. SANBORN ROAD S/O E. LAUREL DRIVE	4	Divided Arterial	N/S	22,476	B	21,180	A	23,073	B
105	N. SANBORN ROAD S/O DEL MONTE AVENUE	4	Undivided Arterial	N/S	11,238	A	10,857	A	11,999	A
106	N. SANBORN ROAD W/O FREEDOM PKWY.	4	Divided Arterial	N/S	4,297	A	4,473	A	7,200	A
107	SAN JUAN GRADE ROAD N/O RUSSELL ROAD	4 (2)	Divided Arterial (Arterial)	N/S	13,000	C	11,905	B	16,945	A
108	SAN JUAN GRADE ROAD N/O E. BORONDA ROAD	4 (2)	Divided Arterial (Arterial)	N/S	14,700	D	14,766	D	13,843	A
109	SAN JUAN GRADE ROAD S/O E. BORONDA ROAD	4	Divided Arterial	N/S	-	-	12,199	A	15,161	A
110	SHERWOOD DRIVE N/O U.S. 101	4	Divided Arterial	N/S	22,135	B	22,417	B	26,736	C
111	TOWT STREET W/O FREEDOM PKWY.	2	Collector	E/W	1,914	A	1,959	A	2,056	A
112	U.S. 101 N/O RUSSELL-ESPINOSA	6 (4)	Freeway (Expressway)	N/S	57,093	F	59,381	F	77,536	C

TABLE 5
GENERAL PLAN BUILDOUT WITH THE PRUNEDALE BYPASS
Daily Volumes and Associated Levels of Service on
on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC: TRAFFIC COUNT (99, 00 & 01)[1] COUNT	TRAFFIC COUNT: LEVEL OF SERVICE	TRAFFIC MODEL: 2000 VOLUME	TRAFFIC MODEL: LEVEL OF SERVICE	TRAFFIC MODEL: BUILDOUT VOLUME	TRAFFIC MODEL: LEVEL OF SERVICE
113	U.S. 101 N/O BORONDA ROAD	6 (4)	Freeway (Freeway)	N/S	-	-	68,540	D	77,536	C
114	U.S. 101 N/O LAUREL DRIVE	6 (4)	Freeway (Freeway)	N/S	-	-	56,500	C	68,173	C
115	U.S. 101 S/O LAUREL DRIVE	6 (4)	Freeway (Freeway)	N/S	55,430	C	53,121	C	72,547	C
116	U.S. 101 S/O N. MAIN STREET	6 (4)	Freeway (Freeway)	N/S	-	-	54,375	C	67,768	C
117	U.S. 101 S/O AIRPORT BLVD.	6 (4)	Freeway (Freeway)	N/S	26,107	B	26,997	B	39,414	B
118	WILLIAMS ROAD N/O E. LAUREL DRIVE	4	Divided Arterial	N/S	-	-	17,171	A	34,427	E
119	WILLIAMS ROAD S/O DEL MONTE DRIVE	4	Divided Arterial	N/S	17,656	A	17,116	A	34,230	E
120	WILLIAMS ROAD S/O FREEDOM PARKWAY	4 (3)	Divided Arterial (Divided Arterial)	N/S	9,897	A	10,590	A	23,608	B
121	WILLIAMS ROAD N/O FREEDOM PARKWAY	4 (2)	Divided Arterial (Arterial)	N/S	5,698	A	5,609	A	19,749	A
122	WILLIAMS ROAD N/O E. BORONDA ROAD	4 (2)	Divided Arterial (Arterial)	N/S	2,340	A	2,154	A	3,536	A
123	WORK STREET S/O JOHN STREET	4	Undivided Arterial	N/S	3,500	A	3,505	A	6,824	A
124	WORK STREET W/O S. SANBORN ROAD	4	Undivided Arterial	N/S	-	-	3,675	A	6,803	A

NOTES:
1. Traffic volumes collected in 1999 through 2001, as provided by the City of Salinas and Caltrans. These more recent counts are used for model validation.
2. Land Use Sources: The 2000 US Census and the California Employment Development Department.
3. Traffic Network: Based on observations by staff of Monterey County, City of Salinas and Higgins Associates.
4. Number of Lanes and Facility Type shown are as proposed under this alternative. Existing lanes and facility type are shown in parentheses, if different from this alternative.
5. Highlighted segments operate at a deficient level of service under this scenario.

TABLE 6

GENERAL PLAN BUILDOUT WITH THE PRUNEDALE BYPASS AND EASTSIDE EXPRESSWAY

Daily Volumes and Associated Levels of Service on Roadway and Highway Segments Within and Near the City of Salinas

					ANNUAL AVERAGE DAILY TRAFFIC					
					TRAFFIC COUNT		TRAFFIC MODEL			
NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	(99, 00 & 01)[1] COUNT	LEVEL OF SERVICE	2000 VOLUME	LEVEL OF SERVICE	BUILDOUT VOLUME	LEVEL OF SERVICE
1	ABBOTT ST S/O JOHN STREET	4	Undivided Arterial	N/S	25,906	E	26,413	E	34,680	F
2	ABBOTT ST N/O SANBORN ROAD	4	Divided Arterial	N/S	22,073	B	23,230	B	30,804	D
3	ABBOTT ST E/O HARKINS ROAD	4	Divided Arterial	N/S	18,932	A	17,528	A	22,275	B
4	ABBOTT ST CITY LIMITS	4	Undivided Arterial	N/S	10,908	A	11,165	A	2,836	A
5	ACACIA STREET E/O DAVIS ROAD	2	Collector	E/W	6,200	B	5,495	A	8,534	C
6	AIRPORT BOULEVARD W/O U.S. 101	4	Undivided Arterial	E/W	18,180	B	17,777	B	15,696	A
7	AIRPORT BOULEVARD W/O MOFFETT STREET	4 (3)	Divided Arterial (Divided Arterial)	E/W	10,000	A	10,719	A	13,724	A
8	W. ALISAL STREET N/O AMBROSE DRIVE	4	Undivided Arterial	N/S	8,207	A	8,179	A	15,867	A
9	W. ALISAL STREET W/O HOMESTEAD AVE.	4	Undivided Arterial	E/W	9,511	A	10,729	A	20,216	C
10	E. ALISAL STREET E/O MONTEREY STREET	4	Undivided Arterial	E/W	14,362	A	16,079	B	24,082	E
11	E. ALISAL STREET E/O FRONT STREET	4	Undivided Arterial	E/W	-	-	15,754	A	19,389	C
12	E. ALISAL STREET E/O WORK STREET	4	Undivided Arterial	E/W	16,956	B	18,172	B	20,823	C
13	E. ALISAL STREET E/O U.S. 101	4	Undivided Arterial	E/W	-	-	15,891	A	20,499	C
14	E. ALISAL STREET W/O SANBORN ROAD	4	Undivided Arterial	E/W	10,902	A	11,698	A	14,617	A
15	E. ALISAL STREET E/O SANBORN ROAD	4	Undivided Arterial	E/W	17,221	B	16,775	B	19,926	C
16	E. ALISAL STREET W/O E. MARKET STREET	4 (2)	Undivided Arterial (Arterial)	E/W	8,877	A	8,909	A	4,210	A
17	ALISAL ROAD S/O BARDIN ROAD	4 (2)	Undivided Arterial (Rural Highway)	N/S	-	-	6,786	B	10,870	A
18	E. ALVIN DRIVE E/O CHEROKEE DRIVE	4	Undivided Arterial	E/W	3,220	A	3,273	A	15,797	A
19	E. ALVIN DRIVE W/O McKINNON STREET	4	Undivided Arterial	E/W	11,089	A	10,824	A	12,490	A
20	E. ALVIN DRIVE W/O NATIVIDAD RD	4	Undivided Arterial	E/W	11,186	A	12,457	A	16,602	B
21	BARDIN ROAD S/O WILLIAMS ROAD	4	Undivided Arterial	N/S	8,654	A	7,927	A	12,785	A
22	BERNAL DRIVE E/O N. MAIN STREET	4 (3)	Undivided Arterial (Divided Arterial)	E/W	12,136	B	12,539	B	17,039	B
23	W. BLANCO ROAD W/O DAVIS ROAD	4 (2)	Expressway (Rural Highway)	E/W	22,086	E	22,900	E	33,229	C
24	W. BLANCO ROAD E/O DAVIS ROAD	4 (2)	Divided Arterial (Arterial)	E/W	19,542	F	19,423	F	30,689	D
25	W. BLANCO ROAD W/O S. MAIN STREET	4	Divided Arterial	E/W	22,272	B	24,223	B	29,498	D
26	E. BLANCO ROAD E/O S. MAIN STREET	4	Divided Arterial	E/W	24,110	B	24,081	B	30,012	D
27	E. BLANCO ROAD E/O LA MESA WAY	4	Divided Arterial	E/W	24,778	B	25,526	C	31,518	D
28	E. BORONDA ROAD E/O U.S. 101	6	Divided Arterial	E/W	42,997	C	42,957	C	35,192	B

TABLE 6

GENERAL PLAN BUILDOUT WITH THE PRUNEDALE BYPASS AND EASTSIDE EXPRESSWAY

Daily Volumes and Associated Levels of Service on

Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC — TRAFFIC COUNT: (99, 00 & 01)[1] COUNT	TRAFFIC COUNT: LEVEL OF SERVICE	TRAFFIC MODEL: 2000 VOLUME	TRAFFIC MODEL: LEVEL OF SERVICE	TRAFFIC MODEL: BUILDOUT VOLUME	TRAFFIC MODEL: LEVEL OF SERVICE
29	E. BORONDA ROAD W/O McKINNON STREET	6 (2)	Divided Arterial (Arterial)	E/W	24,388	F	25,219	F	33,052	B
30	E. BORONDA ROAD E/O McKINNON STREET	6 (2)	Divided Arterial (Arterial)	E/W	19,566	F	21,116	F	23,567	A
31	E. BORONDA ROAD E/O NATIVIDAD ROAD	6 (2)	Divided Arterial (Arterial)	E/W	21,412	F	20,743	F	22,417	A
32	E. BORONDA ROAD E/O INDEPENDENCE BLVD.	6 (2)	Divided Arterial (Arterial)	E/W	-	-	16,753	E	31,836	A
33	E. BORONDA ROAD E/O CONSTITUTION BLVD.	6 (2)	Divided Arterial (Arterial)	E/W	7,861	A	8,461	A	19,328	A
34	E. BORONDA ROAD W/O WILLIAMS ROAD	6 (2)	Divided Arterial (Arterial)	E/W	4,997	A	5,204	A	22,084	A
35	CENTRAL AVENUE E/O DAVIS ROAD	2	Collector	E/W	3,855	A	3,488	A	1,968	A
36	CONSTITUTION BLVD. N/O E. LAUREL DRIVE	4	Divided Arterial	N/S	15,926	A	16,258	A	23,086	B
37	CONSTITUTION BLVD. S/O E. BORONDA ROAD	4	Divided Arterial	N/S	5,161	A	4,398	A	9,343	A
38	N. DAVIS ROAD S/O BORONDA ROAD	4	Undivided Arterial	N/S	16,948	B	16,755	B	3,670	A
39	N. DAVIS ROAD N/O W. LAUREL DRIVE	4	Divided Arterial	N/S	-	-	21,674	A	18,951	A
40	N. DAVIS ROAD S/O W. LAUREL DRIVE	4	Divided Arterial	N/S	36,944	E	37,685	E	17,895	A
41	N. DAVIS ROAD S/O POST DRIVE	4	Divided Arterial	N/S	-	-	34,174	E	16,748	A
42	N. DAVIS ROAD N/O W. MARKET STREET	4	Divided Arterial	N/S	-	-	30,215	D	8,096	A
43	DAVIS ROAD N/O CENTRAL AVENUE	2	Arterial (Rural Highway)	N/S	-	-	28,912	F	1,918	A
44	DAVIS ROAD N/O W. ACACIA STREET	2	Arterial (Rural Highway)	N/S	27,430	F	27,119	F	1,669	A
45	DAVIS ROAD S/O W. BLANCO ROAD	4 (2)	Undivided Arterial (Rural Highway)	N/S	4,300	B	4,196	B	8,368	A
46	DEL MONTE AVENUE W/O N. SANBORN ROAD	2	Collector	E/W	6,526	B	6,947	B	7,840	C
47	DEL MONTE AVENUE W/O WILLIAMS ROAD	2	Collector	E/W	6,800	B	7,127	B	9,489	D
48	EL DORADO DRIVE S/O E. BORONDA ROAD	2	Collector	N/S	3,433	A	3,465	A	6,208	B
49	ESPINOSA ROAD W/O U.S. 101	4 (2)	Divided Arterial (Rural Highway)	E/W	9,500	C	9,688	C	15,784	A
50	FREEDOM PARKWAY E/O CONSTITUTION BLVD.	4	Undivided Arterial	E/W	7,111	A	6,708	A	12,378	A
51	FREEDOM PARKWAY W/O WILLIAMS ROAD	4	Undivided Arterial	E/W	5,348	A	5,361	A	10,195	A
52	FRONT STREET S/O E. ALISAL STREET	4	Divided Arterial	N/S	17,969	A	19,205	A	28,047	C
53	HARKINS ROAD S/O DAYTON STREET	2	Rural Highway	N/S	6,514	B	6,180	B	10,254	C
54	HARRIS ROAD W/O ABBOTT STREET	2	Rural Highway	N/S	8,120	C	8,779	C	14,494	D
55	HARRISON RD./N. MAIN N/O RUSSELL ROAD	4 (2)	Divided Arterial (Rural Highway)	N/S	-	-	3,160	A	26,319	C
56	HEBERT/EASTSIDE EXP. E/O SAN JUAN GRADE RD.	4 (2)	Expressway (Rural Highway)	N/S	4,472	B	4,686	B	32,219	C

TABLE 6

GENERAL PLAN BUILDOUT WITH THE PRUNEDALE BYPASS AND EASTSIDE EXPRESSWAY

Daily Volumes and Associated Levels of Service on

Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC – TRAFFIC COUNT (99, 00 & 01)[1] COUNT	TRAFFIC COUNT LEVEL OF SERVICE	TRAFFIC MODEL 2000 VOLUME	TRAFFIC MODEL LEVEL OF SERVICE	TRAFFIC MODEL BUILDOUT VOLUME	TRAFFIC MODEL LEVEL OF SERVICE
57	INDEPENDENCE BLVD. S/O E. BORONDA ROAD	4	Undivided Arterial	N/S	6,473	A	7,106	A	9,320	A
58	JOHN STREET E/O S. MAIN STREET	4	Undivided Arterial	E/W	-	-	10,465	A	10,274	A
59	JOHN STREET W/O ABBOTT STREET	4	Undivided Arterial	E/W	11,112	A	11,204	A	12,249	A
60	JOHN STREET E/O ABBOTT STREET	4	Undivided Arterial	E/W	23,450	D	24,147	E	28,095	F
61	JOHN STREET W/O SANBORN ROAD	4	Undivided Arterial	E/W	10,075	A	9,760	A	11,123	A
62	LAS CASITAS DRIVE S/O CONSTITUTION BLVD.	2	Collector	E/W	5,801	A	6,290	B	7,555	C
63	W. LAUREL DRIVE W/O U.S. 101	6	Divided Arterial	E/W	41,544	C	43,399	D	33,349	B
64	W. LAUREL DRIVE E/O U.S. 101	6 (4)	Divided Arterial (Undivided Arterial)	E/W	24,501	E	22,982	D	18,271	A
65	E. LAUREL DRIVE W/O LOMA DRIVE	4	Undivided Arterial	E/W	21,178	C	19,849	C	20,672	C
66	E. LAUREL DRIVE W/O CONSTITUTION BLVD.	4	Divided Arterial	E/W	31,936	D	31,325	D	42,385	F
67	E. LAUREL DRIVE E/O CONSTITUTION BLVD.	4	Divided Arterial	E/W	20,990	A	21,787	A	28,344	C
68	N. MAIN STREET S/O E. BORONDA ROAD	4	Divided Arterial	N/S	15,730	A	16,272	A	14,931	A
69	N. MAIN STREET S/O SAN JUAN GRADE ROAD	6	Divided Arterial	N/S	-	-	20,810	A	35,148	B
70	N. MAIN STREET S/O ALVIN DRIVE	6	Divided Arterial	N/S	26,766	A	26,838	A	31,436	A
71	N. MAIN STREET N/O LAUREL DRIVE	6	Divided Arterial	N/S	29,729	A	30,591	A	33,996	B
72	N. MAIN STREET S/O LAUREL DRIVE	6	Divided Arterial	N/S	29,127	A	27,324	A	34,702	B
73	N. MAIN STREET N/O U.S. 101	5	Divided Arterial	N/S	36,382	D	32,590	C	43,657	E
74	N. MAIN STREET N/O MARKET	6 (4)	Divided Arterial (Divided Arterial)	N/S	32,187	D	34,097	E	40,964	C
75	S. MAIN STREET S/O JOHN STREET	4	Divided Arterial	N/S	25,763	E	25,659	E	31,131	D
76	S. MAIN STREET N/O ROMIE LANE	4	Divided Arterial	N/S	26,727	C	28,113	C	33,887	E
77	S. MAIN STREET N/O BLANCO ROAD	4	Divided Arterial	N/S	26,097	C	24,436	B	28,799	C
78	S. MAIN STREET S/O BLANCO ROAD	4	Expressway	N/S	33,230	C	33,212	C	37,734	D
79	W. MARKET STREET E/O DAVIS ROAD	4	Divided Arterial	E/W	19,477	A	18,419	A	20,378	A
80	W. MARKET STREET W/O LINCOLN AVENUE	4	Divided Arterial	E/W	22,306	B	21,384	A	25,473	C
81	E. MARKET STREET W/O MONTEREY STREET	4	Divided Arterial	E/W	20,990	A	20,384	A	21,925	A
82	E. MARKET STREET E/O MONTEREY STREET	4	Divided Arterial	E/W	-	-	23,211	B	21,257	A
83	E. MARKET STREET E/O SHERWOOD DRIVE	4	Undivided Arterial	E/W	18,600	B	17,572	B	21,546	C
84	E. MARKET STREET E/O U.S. 101	4	Divided Arterial	E/W	21,485	A	23,208	B	25,988	C

TABLE 6

GENERAL PLAN BUILDOUT WITH THE PRUNEDALE BYPASS AND EASTSIDE EXPRESSWAY

Daily Volumes and Associated Levels of Service on

Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC: TRAFFIC COUNT (99, 00 & 01)[1] COUNT	TRAFFIC COUNT LEVEL OF SERVICE	TRAFFIC MODEL 2000 VOLUME	TRAFFIC MODEL LEVEL OF SERVICE	TRAFFIC MODEL BUILDOUT VOLUME	TRAFFIC MODEL LEVEL OF SERVICE
85	E. MARKET STREET E/O HEBBRON AVE.	4	Undivided Arterial	E/W	17,102	B	18,615	B	20,942	C
86	E. MARKET STREET E/O N. SANBORN ROAD	4	Undivided Arterial	E/W	10,418	A	10,890	A	12,473	A
87	McKINNON STREET S/O E. BORONDA ROAD	2	Collector	N/S	8,488	C	7,182	B	15,137	F
88	MONTEREY STREET N/O E. GABILAN STREET	3	One-Way Arterial	N/S	13,294	A	12,738	A	16,363	B
89	MONTEREY STREET S/O E. ALISAL STREET	3	One-Way Arterial	N/S	11,554	A	11,561	A	14,431	A
90	NATIVIDAD ROAD N/O E. BORONDA ROAD	4 (2)	Divided Arterial (Rural Highway)	N/S	7,131	C	7,246	C	15,033	A
91	NATIVIDAD ROAD S/O ARCADIA WAY	6	Divided Arterial	N/S	10,093	A	9,881	A	20,420	A
92	NATIVIDAD ROAD S/O E. ALVIN DRIVE	6	Divided Arterial	N/S	24,487	A	27,742	A	37,652	B
93	NATIVIDAD ROAD N/O E. LAUREL DRIVE	6	Divided Arterial	N/S	26,246	A	28,994	A	37,479	B
94	NATIVIDAD ROAD S/O E. LAUREL DRIVE	4	Divided Arterial	N/S	30,516	D	29,328	D	39,836	F
95	OLD STAGE/EASTSIDE EX. S/O NATIVIDAD ROAD	4 (2)	Expressway (Rural Highway)	N/S	1,225	A	1,155	A	27,111	C
96	POST DRIVE W/O DAVIS ROAD	4	Undivided Arterial	E/W	10,000	A	10,324	A	3,402	A
97	ROMIE LANE E/O LOS PALOS DR.	4	Undivided Arterial	E/W	8,878	A	8,564	A	9,841	A
98	ROSSI STREET E/O DAVIS ROAD	4 (2)	Divided Arterial (Arterial)	E/W	9,885	A	9,439	A	10,212	A
99	RUSSELL ROAD E/O U.S. 101	4 (2)	Divided Arterial (Arterial)	E/W	4,201	A	4,288	A	16,111	A
100	RUSSELL ROAD E/O VAN BUREN AVENUE	4 (2)	Divided Arterial (Arterial)	E/W	7,447	A	7,736	A	24,941	B
101	SALINAS STREET S/O W. ALISAL STREET	3	One-Way Arterial	N/S	12,887	A	11,036	A	14,714	A
102	S. SANBORN ROAD S/O U.S. 101	6 (4)	Divided Arterial (Divided Arterial)	E/W	26,892	C	24,127	B	28,837	A
103	S. SANBORN ROAD N/O U.S. 101	6 (4)	Divided Arterial (Divided Arterial)	N/S	26,619	C	26,000	C	29,054	A
104	N. SANBORN ROAD S/O E. LAUREL DRIVE	4	Divided Arterial	N/S	22,476	B	21,180	A	23,098	B
105	N. SANBORN ROAD S/O DEL MONTE AVENUE	4	Undivided Arterial	N/S	11,238	A	10,857	A	12,026	A
106	N. SANBORN ROAD W/O FREEDOM PKWY.	4	Divided Arterial	N/S	4,297	A	4,473	A	7,297	A
107	SAN JUAN GRADE ROAD N/O RUSSELL ROAD	4 (2)	Divided Arterial (Arterial)	N/S	13,000	C	11,905	B	17,352	A
108	SAN JUAN GRADE ROAD N/O E. BORONDA ROAD	4 (2)	Divided Arterial (Arterial)	N/S	14,700	D	14,766	D	13,701	A
109	SAN JUAN GRADE ROAD S/O E. BORONDA ROAD	4	Divided Arterial	N/S	-	-	12,199	A	15,199	A
110	SHERWOOD DRIVE N/O U.S. 101	4	Divided Arterial	N/S	22,135	B	22,417	B	26,611	C
111	TOWT STREET W/O FREEDOM PKWY.	2	Collector	E/W	1,914	A	1,959	A	1,900	A
112	U.S. 101 N/O RUSSELL-ESPINOSA	6 (4)	Freeway (Expressway)	N/S	57,093	F	59,381	F	57,556	B

TABLE 6

GENERAL PLAN BUILDOUT WITH THE PRUNEDALE BYPASS AND EASTSIDE EXPRESSWAY

Daily Volumes and Associated Levels of Service on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	DIRECTION OF TRAVEL	ANNUAL AVERAGE DAILY TRAFFIC					
					TRAFFIC COUNT		TRAFFIC MODEL			
					(99, 00 & 01)[1] COUNT	LEVEL OF SERVICE	2000 VOLUME	LEVEL OF SERVICE	BUILDOUT VOLUME	LEVEL OF SERVICE
113	U.S. 101 N/O BORONDA ROAD	6 (4)	Freeway (Freeway)	N/S	-	-	68,540	D	57,556	B
114	U.S. 101 N/O LAUREL DRIVE	4	Freeway	N/S	-	-	56,500	C	48,138	B
115	U.S. 101 S/O LAUREL DRIVE	4	Freeway	N/S	55,430	C	53,121	C	52,679	B
116	U.S. 101 S/O N. MAIN STREET	4	Freeway	N/S	-	-	54,375	C	47,999	B
117	U.S. 101 S/O AIRPORT BLVD.	4	Freeway	N/S	26,107	B	26,997	B	20,443	A
118	WILLIAMS ROAD N/O E. LAUREL DRIVE	4	Divided Arterial	N/S	-	-	17,171	A	34,427	E
119	WILLIAMS ROAD S/O DEL MONTE DRIVE	4	Divided Arterial	N/S	17,656	A	17,116	A	33,774	E
120	WILLIAMS ROAD S/O FREEDOM PARKWAY	4 (3)	Divided Arterial (Divided Arterial)	N/S	9,897	A	10,590	A	24,079	B
121	WILLIAMS ROAD N/O FREEDOM PARKWAY	4 (2)	Divided Arterial (Arterial)	N/S	5,698	A	5,609	A	20,430	A
122	WILLIAMS ROAD N/O E. BORONDA ROAD	4 (2)	Divided Arterial (Arterial)	N/S	2,340	A	2,154	A	1,584	A
123	WORK STREET S/O JOHN STREET	4	Undivided Arterial	N/S	3,500	A	3,505	A	6,779	A
124	WORK STREET W/O S. SANBORN ROAD	4	Undivided Arterial	N/S	-	-	3,675	A	6,773	A

NOTES:
1. Traffic volumes collected in 1999 through 2001, as provided by the City of Salinas and Caltrans. These more recent counts are used for model validation.
2. Land Use Sources: The 2000 US Census and the California Employment Development Department.
3. Traffic Network: Based on observations by staff of Monterey County, City of Salinas and Higgins Associates.
4. Number of Lanes and Facility Type shown are as proposed under this alternative. Existing lanes and facility type are shown in parentheses, if different from this alternative.
5. Highlighted segments operate at a deficient level of service under this alternative.

TABLE 7
NEW STREET NETWORK
Daily Volumes and Associated Levels of Service on
Roadway and Highway Segments Within and Near the City of Salinas

NO.	IMPROVE-MENT NUMBER	STREET NAME	ANNUAL AVERAGE DAILY TRAFFIC — TRAFFIC MODEL — BUILDOUT - "210" ALTERNATIVE			BUILDOUT - PRUNEDALE BYPASS			BUILDOUT - EASTSIDE EXPRESSWAY		
			LANES	VOLUME	LOS	LANES	VOLUME	LOS	LANES	VOLUME	LOS
1	23	ALISAL STREET EXTENSION ALISAL-BARDIN TO WILLIAMS - RUSSELL COLLECTOR	2	1,897	A	2	1,891	A	2	1,890	A
2	27	ALVIN DRIVE EXTENSION CHEROKEE TO WESTSIDE BYPASS	4	12,702	A	4	12,742	A	4	12,719	A
3	33	BERNAL DRIVE EXTENSION NATIVIDAD TO CONSTITUTION WEST EXTENSION	2	2,734	A	2	2,733	A	2	2,731	A
4	17	CONSTITUTION BOULEVARD EAST EXTENSION BORONDA TO OLD STAGE	4	6,421	A	4	4,837	A	4	4,724	A
5	34	CONSTITUTION BOULEVARD WEST EXTENSION LAUREL TO KERN	4	5,730	A	4	5,716	A	4	5,721	A
6	24	EASTSIDE BYPASS U.S. 101 TO MOFFET EXTENSION	4	18,513	B	4	16,472	A	4	35,277	C
7	24	EASTSIDE BYPASS MOFFET EXTENSION TO ALISAL RD.	4	21,083	B	4	18,976	B	4	38,104	C
8	24	EASTSIDE BYPASS ALISAL RD. TO BORONDA	4	15,858	A	4	13,704	A	4	32,991	C
9	49	EASTSIDE EXPRESSWAY BORONDA TO OLD STAGE	-	-	-	-	-	-	4	21,534	B
10	49	EASTSIDE EXPRESSWAY OLD STAGE TO SAN JUAN GRADE	-	-	-	-	-	-	4	32,242	C
11	49	EASTSIDE EXPRESSWAY SAN JUAN GRADE TO U.S. 101 PRUNEDALE BYPASS	-	-	-	-	-	-	4	31,682	C
12	10	EL DORADO EXTENSION BORONDA TO ROGGE	2	875	A	2	910	A	2	912	A
13	16	HEMINGWAY DRIVE EXTENSION BORONDA TO RUSSELL EXTENSION	2	11,722	B	2	12,943	C	2	13,138	C
14	15	INDEPENDENCE BOULEVARD EXTENSION BORONDA TO RUSSELL EXTENSION	4	9,852	A	4	12,473	A	4	12,285	A
15	44	MAIN STREET EXTENSION (HARRISON ROAD) RUSSELL TO EL CAMINO INTERCHANGE	4	19,606	A	4	27,388	C	4	26,319	C
16	11	MCKINNON STREET EXTENSION BORONDA TO ROGGE	2	1,839	A	2	1,751	A	2	1,751	A
17	25	MOFFET STREET EXTENSION VANDENBERG TO EASTSIDE BYPASS	4	13,447	A	4	13,436	A	4	13,573	A
18	26	ROSSI STREET EXENSION DAVIS TO WESTSIDE BYPASS	4	9,544	A	4	9,560	A	4	9,563	A
19	8	RUSSELL ROAD EXTENSION SAN JUAN GRADE TO OLD STAGE	4	20,595	A	4	23,668	B	4	23,108	B
20	14	SAN JUAN - NATIVIDAD COLLECTOR SAN JUAN GRADE TO NATIVIDAD	2	673	A	2	669	A	2	672	A
21	21	SANBORN ROAD EXTENSION BORONDA TO OLD STAGE	4	5,631	A	4	5,622	A	4	5,828	A
22	42	U.S. 101 PRUNEDALE BYPASS RUSSELL TO EASTSIDE EXPRESSWAY	-	-	-	4	44,115	C	4	22,991	A
23	42	U.S. 101 PRUNEDALE BYPASS EASTSIDE EXPRESSWAY TO CRAZY HORSE	-	-	-	4	44,115	C	4	54,637	C
24	26	WESTSIDE BOULEVARD EXTENSION DAVIS TO ALVIN EXTENSION	4	15,149	A	4	14,877	A	4	14,854	A
25	26	WESTSIDE BYPASS BLANCO TO MARKET	4	28,852	C	4	30,091	C	4	30,184	C

TABLE 7
NEW STREET NETWORK
Daily Volumes and Associated Levels of Service on
Roadway and Highway Segments Within and Near the City of Salinas

NO.	IMPROVE-MENT NUMBER	STREET NAME	ANNUAL AVERAGE DAILY TRAFFIC								
			TRAFFIC MODEL								
			BUILDOUT - "210" ALTERNATIVE			BUILDOUT - PRUNEDALE BYPASS			BUILDOUT - EASTSIDE EXPRESSWAY		
			LANES	VOLUME	LOS	LANES	VOLUME	LOS	LANES	VOLUME	LOS
26	26	WESTSIDE BYPASS									
		MARKET TO ROSSI	4	25,477	B	4	26,813	B	4	26,848	B
27	26	WESTSIDE BYPASS									
		ROSSI TO ALVIN	4	20,395	B	4	21,697	B	4	21,740	B
28	26	WESTSIDE BYPASS									
		ALVIN TO BORONDA	4	23,470	B	4	24,772	B	4	24,794	B
29	19	WILLIAMS - RUSSELL COLLECTOR									
		WILLIAMS TO RUSSELL EXTENSION	2	2,971	A		2,953	A	2	3,264	A

NOTES:
1. Land Use Sources: The 2000 US Census and the California Employment Development Department.
2. LOS = Level of Service.

TABLE 8
U.S. 101 DAILY TRAFFIC VOLUME SUMMARY
Daily Volumes and Associated Levels of Service on
Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	ANNUAL AVERAGE DAILY TRAFFIC																	
		TRAFFIC COUNT			TRAFFIC MODEL														
		LANES	(99, 00 & 01)[2] COUNT	LOS	EXISTING CONDITIONS			BUILDOUT - NO IMPROVEMENTS			BUILDOUT - "210" ALTERNATIVE			BUILDOUT - PRUNEDALE BYPASS			BUILDOUT - EASTSIDE EXPRESSWAY		
					LANES	VOLUME	LOS	LANES	VOLUME	LOS	LANES	VOLUME	LOS	LANES	VOLUME	LOS	LANES	VOLUME	LOS
1	U.S. 101 N/O RUSSELL-ESPINOSA	4	57,093	F	4	59,381	F	4	66,439	F	6	75,703	C	6	77,536	C	6	57,556	B
2	U.S. 101 N/O BORONDA ROAD	4	-	-	4	68,540	D	4	81,484	F	6	74,342	C	6	77,536	C	6	57,556	B
3	U.S. 101 N/O LAUREL DRIVE	4	-	-	4	56,500	C	4	76,007	F	6	65,668	C	6	68,173	C	4	48,138	B
4	U.S. 101 S/O LAUREL DRIVE	4	55,430	C	4	53,121	C	4	67,712	D	6	68,843	C	6	72,547	C	4	52,679	B
5	U.S. 101 S/O N. MAIN STREET	4	-	-	4	54,375	C	4	69,381	E	6	67,310	C	6	67,768	C	4	47,999	B
6	U.S. 101 S/O AIRPORT BLVD.	4	26,107	B	4	26,997	B	4	34,457	B	6	36,860	B	6	39,414	B	4	20,443	A
7	U.S. 101 S/O HARRIS ROAD	4	26,107	B	4	26,997	A	4	34,457	B	4	54,233	C	4	54,647	C	4	54,292	C
8	U.S. 101 BYPASS N/O MAIN-OLD U.S. 101	-	-	-	-	-	-	-	-	-	-	-	-	4	44,115	C	4	22,991	A
9	U.S. 101 BYPASS S/O CRAZY HORSE CYN.	-	-	-	-	-	-	-	-	-	-	-	-	4	44,115	C	4	54,637	C

NOTES:
1. Traffic volumes collected in 1999 through 2001, as provided by the City of Salinas and Caltrans. These more recent counts are used for model validation.
2. Land Use Sources: The 2000 US Census and the California Employment Development Department.
3. Traffic Network: Based on observations by staff of Monterey County, City of Salinas and Higgins Associates.
4. LOS = Level of Service.
5. Highlighted segments operate at a deficient level of service under any scenario.

TABLE 9
GENERAL PLAN BUILDOUT SCENARIOS - COMPARISON OF ALTERNATIVES
Daily Volumes and Associated Levels of Service on
Roadway and Highway Segments Within and Near the City of Salinas

		ANNUAL AVERAGE DAILY TRAFFIC - TRAFFIC MODEL																
.O.	STREET NAME	BUILDOUT - NO IMPROVEMENTS				BUILDOUT - "210" ALTERNATIVE				BUILDOUT - PRUNEDALE BYPASS				BUILDOUT - EASTSIDE EXPRESSWAY				RECOMM-ENDED IMPROVE-MENTS
		LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	
1	ABBOTT ST S/O JOHN STREET	4	Undivided Arterial	34,039	F	4	Undivided Arterial	34,662	F	4	Undivided Arterial	34,858	F	4	Undivided Arterial	34,680	F	Add LT Channelization
2	ABBOTT ST N/O SANBORN ROAD	4	Divided Arterial	30,121	D	4	Divided Arterial	30,810	D	4	Divided Arterial	30,938	D	4	Divided Arterial	30,804	D	
3	ABBOTT ST E/O HARKINS ROAD	4	Divided Arterial	21,807	A	4	Divided Arterial	22,294	B	4	Divided Arterial	22,619	B	4	Divided Arterial	22,275	B	
4	ABBOTT ST CITY LIMITS	4	Undivided Arterial	14,489	A	4	Undivided Arterial	2,857	A	4	Undivided Arterial	2,867	A	4	Undivided Arterial	2,836	A	
5	ACACIA STREET E/O DAVIS ROAD	2	Collector	5,699	A	2	Collector	8,495	C	2	Collector	8,520	C	2	Collector	8,534	C	
6	AIRPORT BOULEVARD W/O U.S. 101	4	Undivided Arterial	23,435	D	4	Undivided Arterial	16,004	B	4	Undivided Arterial	16,031	B	4	Undivided Arterial	15,696	A	
7	AIRPORT BOULEVARD W/O MOFFETT STREET	3	Divided Arterial	23,204	E	4	Divided Arterial	13,916	A	4	Divided Arterial	13,950	A	4	Divided Arterial	13,724	A	
8	W. ALISAL STREET N/O AMBROSE DRIVE	4	Undivided Arterial	11,599	A	4	Undivided Arterial	15,860	A	4	Undivided Arterial	15,854	A	4	Undivided Arterial	15,867	A	
9	W. ALISAL STREET W/O HOMESTEAD AVE.	4	Undivided Arterial	14,769	A	4	Undivided Arterial	20,251	C	4	Undivided Arterial	20,267	C	4	Undivided Arterial	20,216	C	
10	E. ALISAL STREET E/O MONTEREY STREET	4	Undivided Arterial	22,536	D	4	Undivided Arterial	24,261	E	4	Undivided Arterial	24,129	E	4	Undivided Arterial	24,082	E	Add LT Channelization
11	E. ALISAL STREET E/O FRONT STREET	4	Undivided Arterial	11,765	A	4	Undivided Arterial	19,376	C	4	Undivided Arterial	19,350	C	4	Undivided Arterial	19,389	C	
12	E. ALISAL STREET E/O WORK STREET	4	Undivided Arterial	23,529	D	4	Undivided Arterial	20,866	C	4	Undivided Arterial	20,762	C	4	Undivided Arterial	20,823	C	
13	E. ALISAL STREET E/O U.S. 101	4	Undivided Arterial	19,909	C	4	Undivided Arterial	20,527	C	4	Undivided Arterial	20,454	C	4	Undivided Arterial	20,499	C	
14	E. ALISAL STREET W/O SANBORN ROAD	4	Undivided Arterial	15,240	A	4	Undivided Arterial	14,603	A	4	Undivided Arterial	14,593	A	4	Undivided Arterial	14,617	A	
15	E. ALISAL STREET E/O SANBORN ROAD	4	Undivided Arterial	20,553	C	4	Undivided Arterial	19,905	C	4	Undivided Arterial	19,905	C	4	Undivided Arterial	19,926	C	
16	E. ALISAL STREET W/O E. MARKET STREET	2	Arterial	9,512	A	4	Undivided Arterial	4,202	A	4	Undivided Arterial	4,198	A	4	Undivided Arterial	4,210	A	
17	ALISAL ROAD S/O BARDIN ROAD	2	Rural Highway	11,765	D	4	Undivided Arterial	12,115	A	4	Undivided Arterial	12,113	A	4	Undivided Arterial	10,870	A	
18	E. ALVIN DRIVE E/O CHEROKEE DRIVE	4	Undivided Arterial	3,485	A	4	Undivided Arterial	15,869	A	4	Undivided Arterial	15,792	A	4	Undivided Arterial	15,797	A	
19	E. ALVIN DRIVE W/O McKINNON STREET	4	Undivided Arterial	14,408	A	4	Undivided Arterial	12,491	A	4	Undivided Arterial	12,479	A	4	Undivided Arterial	12,490	A	
20	E. ALVIN DRIVE W/O NATIVIDAD RD	4	Undivided Arterial	18,417	B	4	Undivided Arterial	16,616	B	4	Undivided Arterial	16,582	B	4	Undivided Arterial	16,602	B	
21	BARDIN ROAD S/O WILLIAMS ROAD	4	Undivided Arterial	12,184	A	4	Undivided Arterial	13,937	A	4	Undivided Arterial	13,906	A	4	Undivided Arterial	12,785	A	
22	BERNAL DRIVE E/O N. MAIN STREET	3	Divided Arterial	21,829	E	4	Undivided Arterial	17,092	B	4	Undivided Arterial	17,061	B	4	Undivided Arterial	17,039	B	
23	W. BLANCO ROAD W/O DAVIS ROAD	2	Rural Highway	34,007	F	4	Expressway	31,869	C	4	Expressway	33,212	C	4	Expressway	33,229	C	
24	W. BLANCO ROAD E/O DAVIS ROAD	2	Arterial	25,723	F	4	Divided Arterial	30,803	D	4	Divided Arterial	30,618	D	4	Divided Arterial	30,689	D	
25	W. BLANCO ROAD W/O S. MAIN STREET	4	Divided Arterial	29,648	D	4	Divided Arterial	29,624	D	4	Divided Arterial	29,424	D	4	Divided Arterial	29,498	D	
26	E. BLANCO ROAD E/O S. MAIN STREET	4	Divided Arterial	31,540	D	4	Divided Arterial	29,777	D	4	Divided Arterial	29,780	D	4	Divided Arterial	30,012	D	
27	E. BLANCO ROAD E/O LA MESA WAY	4	Divided Arterial	33,214	E	4	Divided Arterial	31,295	D	4	Divided Arterial	31,294	D	4	Divided Arterial	31,518	D	
28	E. BORONDA ROAD E/O U.S. 101	6	Divided Arterial	59,569	F	6	Divided Arterial	37,704	B	6	Divided Arterial	35,361	B	6	Divided Arterial	35,192	B	
29	E. BORONDA ROAD W/O McKINNON STREET	2	Arterial	37,028	F	6	Divided Arterial	35,980	B	6	Divided Arterial	33,120	B	6	Divided Arterial	33,052	B	
30	E. BORONDA ROAD E/O McKINNON STREET	2	Arterial	33,828	F	6	Divided Arterial	26,354	A	6	Divided Arterial	23,592	A	6	Divided Arterial	23,567	A	
31	E. BORONDA ROAD E/O NATIVIDAD ROAD	2	Arterial	37,608	F	6	Divided Arterial	25,346	A	6	Divided Arterial	22,748	A	6	Divided Arterial	22,417	A	
32	E. BORONDA ROAD E/O INDEPENDENCE BLVD.	2	Arterial	33,313	F	6	Divided Arterial	32,360	B	6	Divided Arterial	32,364	B	6	Divided Arterial	31,836	A	
33	E. BORONDA ROAD E/O CONSTITUTION BLVD.	2	Arterial	23,185	F	6	Divided Arterial	19,568	A	6	Divided Arterial	19,594	A	6	Divided Arterial	19,328	A	
34	E. BORONDA ROAD						Divided				Divided				Divided			

TABLE 9

GENERAL PLAN BUILDOUT SCENARIOS - COMPARISON OF ALTERNATIVES

Daily Volumes and Associated Levels of Service on

Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	ANNUAL AVERAGE DAILY TRAFFIC — TRAFFIC MODEL — BUILDOUT - NO IMPROVEMENTS				BUILDOUT - "210" ALTERNATIVE				BUILDOUT - PRUNEDALE BYPASS				BUILDOUT - EASTSIDE EXPRESSWAY				RECC ENDE. IMPROVE-MENTS
		LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	
	W/O WILLIAMS ROAD	2	Arterial	23,638	F	6	Divided Arterial	24,288	A	6	Divided Arterial	24,335	A	6	Divided Arterial	22,084	A	
35	CENTRAL AVENUE E/O DAVIS ROAD	2	Collector	3,868	A	2	Collector	1,973	A	2	Collector	1,988	A	2	Collector	1,968	A	
36	CONSTITUTION BLVD. N/O E. LAUREL DRIVE	4	Divided Arterial	23,849	B	4	Divided Arterial	23,612	B	4	Divided Arterial	23,555	B	4	Divided Arterial	23,086	B	
37	CONSTITUTION BLVD. S/O E. BORONDA ROAD	4	Divided Arterial	11,289	A	4	Divided Arterial	11,148	A	4	Divided Arterial	9,655	A	4	Divided Arterial	9,343	A	
38	N. DAVIS ROAD S/O BORONDA ROAD	4	Undivided Arterial	20,354	C	4	Undivided Arterial	3,294	A	4	Undivided Arterial	3,690	A	4	Undivided Arterial	3,670	A	
39	N. DAVIS ROAD N/O W. LAUREL DRIVE	4	Divided Arterial	23,743	B	4	Divided Arterial	19,040	A	4	Divided Arterial	18,975	A	4	Divided Arterial	18,951	A	
40	N. DAVIS ROAD S/O W. LAUREL DRIVE	4	Divided Arterial	47,690	F	4	Divided Arterial	17,795	A	4	Divided Arterial	17,891	A	4	Divided Arterial	17,895	A	
41	N. DAVIS ROAD S/O POST DRIVE	4	Divided Arterial	44,304	F	4	Divided Arterial	16,624	A	4	Divided Arterial	16,726	A	4	Divided Arterial	16,748	A	
42	N. DAVIS ROAD N/O W. MARKET STREET	4	Divided Arterial	39,501	F	4	Divided Arterial	7,916	A	4	Divided Arterial	8,063	A	4	Divided Arterial	8,096	A	
43	DAVIS ROAD N/O CENTRAL AVENUE	2	Rural Highway	36,424	F	2	Arterial	1,932	A	2	Arterial	1,927	A	2	Arterial	1,918	A	
44	DAVIS ROAD N/O W. ACACIA STREET	2	Rural Highway	34,842	F	2	Arterial	1,664	A	2	Arterial	1,675	A	2	Arterial	1,669	A	
45	DAVIS ROAD S/O W. BLANCO ROAD	2	Rural Highway	5,827	B	4	Undivided Arterial	8,442	A	4	Undivided Arterial	8,410	A	4	Undivided Arterial	8,368	A	
46	DEL MONTE AVENUE W/O N. SANBORN ROAD	2	Collector	7,983	C	2	Collector	7,869	C	2	Collector	7,852	C	2	Collector	7,840	C	
47	DEL MONTE AVENUE W/O WILLIAMS ROAD	2	Collector	8,396	C	2	Collector	9,811	D	2	Collector	9,793	D	2	Collector	9,489	D	
48	EL DORADO DRIVE S/O E. BORONDA ROAD	2	Collector	6,754	B	2	Collector	6,279	B	2	Collector	6,229	B	2	Collector	6,208	B	
49	ESPINOSA ROAD W/O U.S. 101	2	Rural Highway	12,229	D	4	Divided Arterial	9,946	A	4	Divided Arterial	15,868	A	4	Divided Arterial	15,784	A	
50	FREEDOM PARKWAY E/O CONSTITUTION BLVD.	4	Undivided Arterial	10,649	A	4	Undivided Arterial	11,918	A	4	Undivided Arterial	11,951	A	4	Undivided Arterial	12,378	A	
51	FREEDOM PARKWAY W/O WILLIAMS ROAD	4	Undivided Arterial	9,511	A	4	Undivided Arterial	7,176	A	4	Undivided Arterial	7,190	A	4	Undivided Arterial	10,195	A	
52	FRONT STREET S/O E. ALISAL STREET	4	Divided Arterial	26,493	C	4	Divided Arterial	28,067	C	4	Divided Arterial	28,247	C	4	Divided Arterial	28,047	C	
53	HARKINS ROAD S/O DAYTON STREET	2	Rural Highway	10,322	C	2	Rural Highway	10,295	C	2	Rural Highway	10,278	C	2	Rural Highway	10,254	C	
54	HARRIS ROAD W/O ABBOTT STREET	2	Rural Highway	10,861	C	2	Rural Highway	15,130	D	2	Rural Highway	14,444	D	2	Rural Highway	14,494	D	Widen to 4 Lanes
55	HARRISON RD./N. MAIN N/O RUSSELL ROAD	2	Rural Highway	25,512	E	4	Undivided Arterial	19,606	C	4	Divided Arterial	27,388	C	4	Divided Arterial	26,319	C	
56	HEBERT/EASTSIDE EXP. E/O SAN JUAN GRADE RD.	2	Rural Highway	17,015	D	2	Rural Highway	689	A	2	Rural Highway	637	A	4	Expressway	32,219	C	
57	INDEPENDENCE BLVD. S/O E. BORONDA ROAD	4	Undivided Arterial	10,223	A	4	Undivided Arterial	9,344	A	4	Undivided Arterial	9,368	A	4	Undivided Arterial	9,320	A	
58	JOHN STREET E/O S. MAIN STREET	4	Undivided Arterial	11,035	A	4	Undivided Arterial	10,357	A	4	Undivided Arterial	10,306	A	4	Undivided Arterial	10,274	A	
59	JOHN STREET W/O ABBOTT STREET	4	Undivided Arterial	12,659	A	4	Undivided Arterial	12,282	A	4	Undivided Arterial	12,225	A	4	Undivided Arterial	12,249	A	
60	JOHN STREET E/O ABBOTT STREET	4	Undivided Arterial	28,844	F	4	Undivided Arterial	28,007	F	4	Undivided Arterial	28,151	F	4	Undivided Arterial	28,095	F	Add LT Channelization
61	JOHN STREET W/O SANBORN ROAD	4	Undivided Arterial	11,322	A	4	Undivided Arterial	11,107	A	4	Undivided Arterial	11,099	A	4	Undivided Arterial	11,123	A	
62	LAS CASITAS DRIVE S/O CONSTITUTION BLVD.	2	Collector	7,508	C	2	Collector	7,535	C	2	Collector	7,558	C	2	Collector	7,555	C	
63	W. LAUREL DRIVE W/O U.S. 101	6	Divided Arterial	57,810	F	6	Divided Arterial	33,293	B	6	Divided Arterial	33,373	B	6	Divided Arterial	33,349	B	
64	W. LAUREL DRIVE E/O U.S. 101	4	Undivided Arterial	28,265	F	6	Divided Arterial	18,144	A	6	Divided Arterial	18,453	A	6	Divided Arterial	18,271	A	
65	E. LAUREL DRIVE W/O LOMA DRIVE	4	Undivided Arterial	26,492	E	4	Undivided Arterial	20,794	C	4	Undivided Arterial	20,813	C	4	Undivided Arterial	20,672	C	
66	E. LAUREL DRIVE W/O CONSTITUTION BLVD.	4	Divided Arterial	45,219	F	4	Divided Arterial	42,683	F	4	Divided Arterial	42,451	F	4	Divided Arterial	42,385	F	Widen to
67	E. LAUREL DRIVE E/O CONSTITUTION BLVD.	4	Divided Arterial	31,509	D	4	Divided Arterial	28,601	C	4	Divided Arterial	28,400	C	4	Divided Arterial	28,344	C	

TABLE 9

GENERAL PLAN BUILDOUT SCENARIOS - COMPARISON OF ALTERNATIVES

Daily Volumes and Associated Levels of Service on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	ANNUAL AVERAGE DAILY TRAFFIC																RECOMMENDED IMPROVEMENTS
		TRAFFIC MODEL																
		BUILDOUT - NO IMPROVEMENTS				BUILDOUT - "210" ALTERNATIVE				BUILDOUT - PRUNEDALE BYPASS				BUILDOUT - EASTSIDE EXPRESSWAY				
		LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	
68	N. MAIN STREET S/O E. BORONDA ROAD	4	Divided Arterial	22,139	B	4	Divided Arterial	14,968	A	4	Divided Arterial	14,884	A	4	Divided Arterial	14,931	A	
69	N. MAIN STREET S/O SAN JUAN GRADE ROAD	6	Divided Arterial	39,454	C	6	Divided Arterial	35,537	B	6	Divided Arterial	35,111	B	6	Divided Arterial	35,148	B	
70	N. MAIN STREET S/O ALVIN DRIVE	6	Divided Arterial	37,290	B	6	Divided Arterial	31,760	A	6	Divided Arterial	31,392	A	6	Divided Arterial	31,436	A	
71	N. MAIN STREET N/O LAUREL DRIVE	6	Divided Arterial	39,598	C	6	Divided Arterial	34,368	C	6	Divided Arterial	33,988	B	6	Divided Arterial	33,996	B	
72	N. MAIN STREET S/O LAUREL DRIVE	6	Divided Arterial	36,744	B	6	Divided Arterial	34,785	E	6	Divided Arterial	34,685	B	6	Divided Arterial	34,702	B	
73	N. MAIN STREET N/O U.S. 101	5	Divided Arterial	45,490	F	5	Divided Arterial	43,610	E	5	Divided Arterial	43,630	E	5	Divided Arterial	43,657	E	Widen to 6 Lanes
74	N. MAIN STREET N/O MARKET	4	Divided Arterial	46,614	F	6	Divided Arterial	40,453	C	6	Divided Arterial	40,965	C	6	Divided Arterial	40,964	C	
75	S. MAIN STREET S/O JOHN STREET	4	Undivided Arterial	32,886	F	4	Divided Arterial	30,894	D	4	Divided Arterial	31,165	D	4	Divided Arterial	31,131	D	
76	S. MAIN STREET N/O ROMIE LANE	4	Divided Arterial	35,471	E	4	Divided Arterial	33,695	E	4	Divided Arterial	33,954	E	4	Divided Arterial	33,887	E	Signal Timing
77	S. MAIN STREET N/O BLANCO ROAD	4	Divided Arterial	29,744	D	4	Divided Arterial	28,588	C	4	Divided Arterial	28,856	C	4	Divided Arterial	28,799	C	
78	S. MAIN STREET S/O BLANCO ROAD	4	Expressway	40,840	D	4	Expressway	37,222	D	4	Expressway	37,400	D	4	Expressway	37,734	D	
79	W. MARKET STREET E/O DAVIS ROAD	4	Divided Arterial	22,496	B	4	Divided Arterial	19,953	A	4	Divided Arterial	20,407	A	4	Divided Arterial	20,378	A	
80	W. MARKET STREET W/O LINCOLN AVENUE	4	Divided Arterial	26,452	C	4	Divided Arterial	25,100	C	4	Divided Arterial	25,519	C	4	Divided Arterial	25,473	C	
81	E. MARKET STREET W/O MONTEREY STREET	4	Divided Arterial	26,174	C	4	Divided Arterial	21,617	A	4	Divided Arterial	21,966	A	4	Divided Arterial	21,925	A	
82	E. MARKET STREET E/O MONTEREY STREET	4	Divided Arterial	30,295	D	4	Divided Arterial	20,975	A	4	Divided Arterial	21,284	A	4	Divided Arterial	21,257	A	
83	E. MARKET STREET E/O SHERWOOD DRIVE	4	Undivided Arterial	21,309	C	4	Undivided Arterial	21,418	C	4	Undivided Arterial	21,513	C	4	Undivided Arterial	21,546	C	
84	E. MARKET STREET E/O U.S. 101	4	Divided Arterial	26,488	C	4	Divided Arterial	25,933	C	4	Divided Arterial	26,163	C	4	Divided Arterial	25,988	C	
85	E. MARKET STREET E/O HEBBRON AVE.	4	Undivided Arterial	21,802	C	4	Undivided Arterial	20,952	C	4	Undivided Arterial	21,117	C	4	Undivided Arterial	20,942	C	
86	E. MARKET STREET E/O N. SANBORN ROAD	4	Undivided Arterial	12,840	A	4	Undivided Arterial	12,516	A	4	Undivided Arterial	12,605	A	4	Undivided Arterial	12,473	A	
87	McKINNON STREET S/O E. BORONDA ROAD	2	Collector	10,952	D	2	Collector	15,130	F	2	Collector	15,173	F	2	Collector	15,137	F	Add LT Channelization
88	MONTEREY STREET N/O E. GABILAN STREET	3	One-Way Arterial	15,725	A	3	One-Way Arterial	16,065	B	3	One-Way Arterial	16,454	B	3	One-Way Arterial	16,363	B	
89	MONTEREY STREET S/O E. ALISAL STREET	3	One-Way Arterial	15,114	A	3	One-Way Arterial	14,244	A	3	One-Way Arterial	14,519	A	3	One-Way Arterial	14,431	A	
90	NATIVIDAD ROAD N/O E. BORONDA ROAD	2	Rural Highway	19,775	E	4	Divided Arterial	14,986	A	4	Divided Arterial	14,343	A	4	Divided Arterial	15,033	A	
91	NATIVIDAD ROAD S/O ARCADIA WAY	6	Divided Arterial	21,323	A	6	Divided Arterial	20,783	A	6	Divided Arterial	20,063	A	6	Divided Arterial	20,420	A	
92	NATIVIDAD ROAD S/O E. ALVIN DRIVE	6	Divided Arterial	41,924	C	6	Divided Arterial	38,024	C	6	Divided Arterial	37,302	B	6	Divided Arterial	37,652	B	
93	NATIVIDAD ROAD N/O E. LAUREL DRIVE	6	Divided Arterial	42,194	C	6	Divided Arterial	37,881	B	6	Divided Arterial	37,157	B	6	Divided Arterial	37,479	B	
94	NATIVIDAD ROAD S/O E. LAUREL DRIVE	4	Divided Arterial	42,404	F	4	Divided Arterial	40,436	F	4	Divided Arterial	39,978	F	4	Divided Arterial	39,836	F	Widen to 6 Lanes
95	OLD STAGE/EASTSIDE EX. S/O NATIVIDAD ROAD	2	Rural Highway	8,306	C	2	Rural Highway	9,644	C	2	Rural Highway	6,837	B	4	Expressway	27,111	C	
96	POST DRIVE W/O DAVIS ROAD	4	Undivided Arterial	13,080	A	4	Undivided Arterial	3,413	A	4	Undivided Arterial	3,413	A	4	Undivided Arterial	3,402	A	
97	ROMIE LANE E/O LOS PALOS DR.	4	Undivided Arterial	9,802	A	4	Undivided Arterial	9,867	A	4	Undivided Arterial	9,842	A	4	Undivided Arterial	9,841	A	
98	ROSSI STREET E/O DAVIS ROAD	2	Arterial	11,934	B	4	Divided Arterial	10,179	A	4	Divided Arterial	10,232	A	4	Divided Arterial	10,212	A	
99	RUSSELL ROAD E/O U.S. 101	2	Arterial	9,814	A	4	Divided Arterial	10,242	A	4	Divided Arterial	16,191	A	4	Divided Arterial	16,111	A	
100	RUSSELL ROAD E/O VAN BUREN AVENUE	2	Arterial	13,298	C	4	Divided Arterial	21,633	A	4	Divided Arterial	25,319	C	4	Divided Arterial	24,941	B	
101	SALINAS STREET		One-Way				One-Way				One-Way				One-Way			

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Daily Volumes and Associated Levels of Service on

Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	ANNUAL AVERAGE DAILY TRAFFIC – TRAFFIC MODEL – BUILDOUT - NO IMPROVEMENTS				BUILDOUT - "210" ALTERNATIVE				BUILDOUT - PRUNEDALE BYPASS				BUILDOUT - EASTSIDE EXPRESSWAY				RECOMMENDED IMPROVEMENTS
		LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	
	S/O W. ALISAL STREET	3	One-way Arterial	15,476	A	3	One-way Arterial	14,608	A	3	One-way Arterial	14,670	A	3	One-way Arterial	14,714	A	
102	S. SANBORN ROAD S/O U.S. 101	4	Divided Arterial	32,434	D	6	Divided Arterial	28,656	A	6	Divided Arterial	28,591	A	6	Divided Arterial	28,837	A	
103	S. SANBORN ROAD N/O U.S. 101	4	Divided Arterial	32,697	E	6	Divided Arterial	28,978	A	6	Divided Arterial	28,848	A	6	Divided Arterial	29,054	A	
104	N. SANBORN ROAD S/O E. LAUREL DRIVE	4	Divided Arterial	24,979	B	4	Divided Arterial	23,124	B	4	Divided Arterial	23,073	B	4	Divided Arterial	23,098	B	
105	N. SANBORN ROAD S/O DEL MONTE AVENUE	4	Undivided Arterial	12,973	A	4	Undivided Arterial	12,033	A	4	Undivided Arterial	11,999	A	4	Undivided Arterial	12,026	A	
106	N. SANBORN ROAD W/O FREEDOM PKWY.	4	Divided Arterial	7,890	A	4	Divided Arterial	7,224	A	4	Divided Arterial	7,200	A	4	Divided Arterial	7,297	A	
107	SAN JUAN GRADE ROAD N/O RUSSELL ROAD	2	Arterial	22,742	F	4	Divided Arterial	17,755	A	4	Divided Arterial	16,945	A	4	Divided Arterial	17,352	A	
108	SAN JUAN GRADE ROAD N/O E. BORONDA ROAD	2	Arterial	28,162	F	4	Divided Arterial	14,063	A	4	Divided Arterial	13,843	A	4	Divided Arterial	13,701	A	
109	SAN JUAN GRADE ROAD S/O E. BORONDA ROAD	4	Divided Arterial	30,295	D	4	Divided Arterial	15,251	A	4	Divided Arterial	15,161	A	4	Divided Arterial	15,199	A	
110	SHERWOOD DRIVE N/O U.S. 101	4	Divided Arterial	29,824	D	4	Divided Arterial	27,105	C	4	Divided Arterial	26,736	C	4	Divided Arterial	26,611	C	
111	TOWT STREET W/O FREEDOM PKWY.	2	Collector	2,098	A	2	Collector	2,051	A	2	Collector	2,056	A	2	Collector	1,900	A	
112	U.S. 101 N/O RUSSELL-ESPINOSA	4	Expressway	66,439	F	6	Freeway	75,703	C	6	Freeway	77,536	C	6	Freeway	57,556	B	
113	U.S. 101 N/O BORONDA ROAD	4	Freeway	81,484	F	6	Freeway	74,342	C	6	Freeway	77,536	C	6	Freeway	57,556	B	
114	U.S. 101 N/O LAUREL DRIVE	4	Freeway	76,007	F	6	Freeway	65,668	C	6	Freeway	68,173	C	4	Freeway	48,138	B	
115	U.S. 101 S/O LAUREL DRIVE	4	Freeway	67,712	D	6	Freeway	68,843	C	6	Freeway	72,547	C	4	Freeway	52,679	B	
116	U.S. 101 S/O N. MAIN STREET	4	Freeway	69,381	E	6	Freeway	67,310	C	6	Freeway	67,768	C	4	Freeway	47,999	B	
117	U.S. 101 S/O AIRPORT BLVD.	4	Freeway	34,457	B	6	Freeway	36,860	B	6	Freeway	39,414	B	4	Freeway	20,443	A	
118	WILLIAMS ROAD N/O E. LAUREL DRIVE	4	Divided Arterial	39,591	F	4	Divided Arterial	34,366	E	4	Divided Arterial	34,427	E	4	Divided Arterial	34,427	E	Widen to 6 Lanes
119	WILLIAMS ROAD S/O DEL MONTE DRIVE	4	Divided Arterial	37,549	E	4	Divided Arterial	34,426	E	4	Divided Arterial	34,230	E	4	Divided Arterial	33,774	E	Widen to 6 Lanes
120	WILLIAMS ROAD S/O FREEDOM PARKWAY	3	Divided Arterial	31,959	F	4	Divided Arterial	23,786	B	4	Divided Arterial	23,608	B	4	Divided Arterial	24,079	B	
121	WILLIAMS ROAD N/O FREEDOM PARKWAY	2	Arterial	26,484	F	4	Divided Arterial	19,943	A	4	Divided Arterial	19,749	A	4	Divided Arterial	20,430	A	
122	WILLIAMS ROAD N/O E. BORONDA ROAD	2	Arterial	5,447	A	4	Divided Arterial	5,905	A	4	Divided Arterial	3,536	A	4	Divided Arterial	1,584	A	
123	WORK STREET S/O JOHN STREET	4	Undivided Arterial	6,634	A	4	Undivided Arterial	6,744	A	4	Undivided Arterial	6,824	A	4	Undivided Arterial	6,779	A	
124	WORK STREET W/O S. SANBORN ROAD	4	Undivided Arterial	5,047	A	4	Undivided Arterial	6,771	A	4	Undivided Arterial	6,803	A	4	Undivided Arterial	6,773	A	

NOTES:

1. Land Use Sources: The 2000 US Census and the California Employment Development Department.
2. Traffic Network: Based on observations by staff of Monterey County, City of Salinas and Higgins Associates.
3. Highlighted segments operate at a deficient level of service under the respective scenarios.

TABLE 10
SUMMARY OF REGIONAL HIGHWAYS
Daily Volumes and Associated Levels of Service on
on Roadway and Highway Segments Within and Near the City of Salinas

NO.	STREET NAME	ANNUAL AVERAGE DAILY TRAFFIC															
		TRAFFIC COUNT				TRAFFIC MODEL											
		2000 EXISTING TRAFFIC COUNT				2020 AMBAG NO-BUILD				2020 RTP WITH AMBAG LAND USE				2020 COUNTY NETWORK AND LAND USE			
		LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS	LANES	FACILITY	VOLUME	LOS
1	BLANCO RD																
1	COOPER RD TO DAVIS RD	2	Rural Highway	19542	E	2	Rural Highway	34041	F	4	Expressway	34122	C	4	Expressway	27137	B
2	HALL RD																
2	ELKHORN RD TO JOHNSON RD	2	Rural Highway	19389	E	2	Rural Highway	20773	E	2	Rural Highway	23147	E	2	Rural Highway	20674	E
3	HIGHWAY 1																
3	MOLERA RD (North) TO MERRITT ST (HWY 183)	2	Rural Highway	30372	F	2	Rural Highway	36966	F	2	Rural Highway	36990	F	2	Rural Highway	35979	F
4	HIGHWAY 68																
4	JOSSELYN CANYON RD TO OLMSTEAD RD	2	Rural Highway	19606	E	2	Rural Highway	27238	F	2	Rural Highway	26761	F	2	Rural Highway	30023	F
5	HIGHWAY 156																
5	MERIDIAN RD TO US 101	2	Rural Highway	28000	F	2	Rural Highway	39660	F	4	Freeway	41294	B	4	Freeway	5569	A
6	HIGHWAY 183																
6	COOPER RD TO ESPINOSA RD	2	Rural Highway	17000	E	2	Rural Highway	22296	E	2	Rural Highway	21384	E	2	Rural Highway	22867	E
7	SAN MIGUEL CYN RD																
7	US 101 TO HALL RD	2	Rural Highway	16640	E	2	Rural Highway	19571	E	2	Rural Highway	25897	F	2	Rural Highway	25897	F
8	US 101																
8	(SB) HWY 156 TO DUNBARTON RD	4	Expressway	59328	F	4	Freeway	85804	F	4	Freeway	90051	F	4	Freeway	91206	F

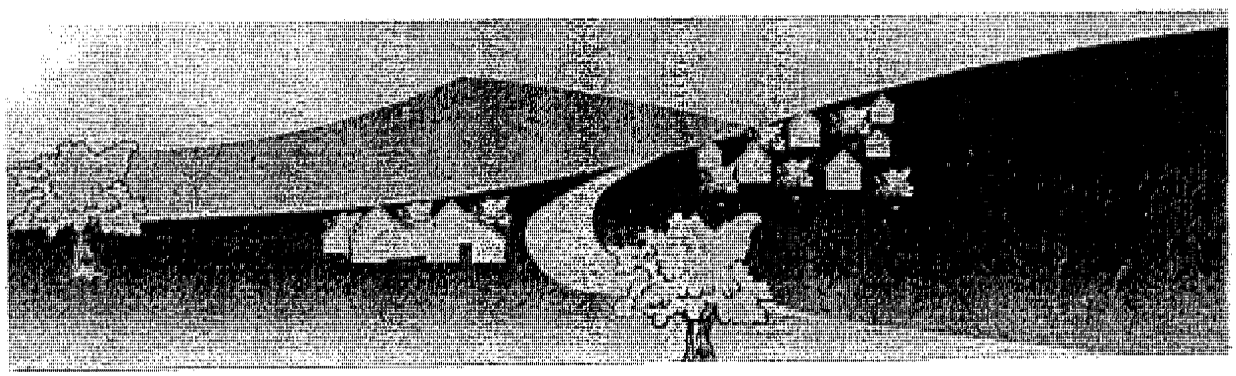
NOTES:
1. Source: Monterey County General Plan Update traffic analysis performed by Higgins Associates in March 2002.
2. Highlighted segments operate at a deficient level of service under that scenario.

APPENDICES

APPENDIX A –
"EXISTING CONDITIONS
TRAFFIC AND CIRCULATION
CITY OF SALINAS
GENERAL PLAN UPDATE"

DKS ASSOCIATES
MAY 30, 2000

Existing Conditions
Traffic and Circulation



City of Salinas General Plan Update

Prepared for
City of Salinas, California

by

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May 2000

DKS *Associates*

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May 30, 2000

Jenny Mahoney
Community Development Department
200 Lincoln Avenue
Salinas, CA
93901

Subject: **Existing Conditions Traffic and Circulation - City of Salinas General Plan Update** P00088

Dear Ms. Mahoney,

Please find enclosed the final report describing the updated Circulation Element of the 1988 City of Salinas General Plan. This Circulation Element update was performed to reflect the existing multi-modal traffic operational conditions and facilities. All comments received from the City Departments of Community Development and Public Works were incorporated into this final report.

Thank you for the opportunity of working with you on this valuable project. Could we be of any further assistance, please do not hesitate to contact either Mark Spencer or myself.

Sincerely,

DKS Associates
A California Corporation

Heba El-Guendy

Heba El-Guendy
Transportation Engineer

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INTRODUCTION

The existing City of Salinas General Plan was adopted in 1988. The plan establishes development objectives, requirements for supporting infrastructure, and a plan for phasing growth in an affordable manner. This, in turn, would support the forecasted levels of growth in the City's employment, population and housing during the buildout of the General Plan.

Elements covered under the Salinas General Plan are City design, land use, open space, circulation, housing, conservation, safety and noise. This report updates the Circulation Element of the 1988 City of Salinas General Plan to reflect the existing multi-modal traffic operational conditions and facilities. The transportation system's operational conditions are described in this report in terms of:

- General Vehicular Traffic
  - Intersections (Signalized and Unsignalized)
  - Streets (Arterials and Collectors)
- Public Transit
- Bicycle and Pedestrian Traffic
- Truck Traffic
- Air Transportation

GENERAL VEHICULAR TRAFFIC

An evaluation of the existing roadway network operational conditions, including intersections and roadway segments, was performed to identify the existing system deficiencies based on the guiding policies set by the General Plan. This evaluation process will assist in identifying the roadway facilities required to serve automobile traffic at acceptable levels of service, as well as the facilities needed to generate the desired modal share of public transit, cycling and walking. The analysis uses the weekday morning and evening peak hours to represent the time periods of greatest travel demand.

Intersections

Traffic operational conditions at an intersection are based on the type of intersection control, directional vehicular traffic volumes, roadway capacity of the intersection approaches, and delays experienced by motorists. The following TABLE 1 generally defines the operational Levels Of Service (LOS) at signalized and unsignalized intersections.

TABLE 1
Level of Service Definitions

SIGNALIZED INTERSECTIONS			
LOS*	**Vehicle Delay (seconds/vehicle)**	**V/C****	**Description**
A	≤ 5.00	0.00 – 0.60	Free Flow/Insignificant Delays: No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.
B	5.1 – 15.0	0.61 – 0.70	Stable Operation/Minimal Delays: An occasional approach phase is fully utilized. Many drivers begin to feel somewhat restricted within platoons of vehicles.
C	15.1 – 25.0	0.71 – 0.80	Stable Operation/Acceptable Delays: Major approach phases fully utilized. Most drivers feel somewhat restricted.
D	25.1 – 40.0	0.81 – 0.90	Approaching Unstable/Tolerable Delays: Drivers may have to wait through more than one red signal indication. Queues may develop but dissipate rapidly, without excessive delays.
E	40.1 – 60.0	0.91 – 1.00	Unstable Operation/Significant Delays: Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues from upstream from intersection.
F	≥ 60.0	N/A	Forced Flow/Excessive Delays: Represents jammed conditions. Intersection operates below capacity with low volumes. Queues may block upstream intersections.
UNSIGNALIZED INTERSECTIONS			
LOS*	**Vehicle Delay (seconds/vehicle)**		**Description**
A	≤ 5		Little or no delay.
B	> 5 and ≤ 10		Short traffic delay.
C	> 10 and ≤ 20		Average traffic delays.
D	> 20 and ≤ 30		Long traffic delays.
E	> 30 and ≤ 45		Very long traffic delays.
F	> 45		Extreme delays potentially affecting other traffic movements in the intersection.

Notes: LOS*: Level of Service
V/C**: Volume to Capacity Ratio

Source: Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington D.C. 1994

Intersection operational levels of service are categorized by the letters "A" through "F". At signalized intersections, LOS "A", and "B" indicate conditions allowing traffic to move freely with minimal average delays of up-to 15 seconds. LOS "C" and "D" indicate acceptable operational conditions with a maximum allowed average vehicle delay of 40 seconds. LOS "E" and "F" indicate unstable traffic operations with significant average delays of more than 40 seconds.

As shown in TABLE 1, the vehicle delay limits associated with the levels of service differ for unsignalized intersections. The level of service at unsignalized intersections is determined based on the worst movement delay, and not on the overall average delay as per signalized intersections. The allowed worst movement delay at unsignalized intersections is up to 10 seconds for a LOS "B", up to 30 seconds for a LOS "D", and up to 45 seconds for a LOS "E". The acceptable level of service for signalized and unsignalized intersections within the "existing" limits of the City of Salinas is "D". It should be noted that the acceptable level of service is "C" within the City's Conditional Growth Areas as defined in the City of Salinas General Plan.

Analysis of the existing traffic operational conditions during the AM and PM peak hours at the main signalized and unsignalized intersections within the City of Salinas was performed using the Traffix software. The Traffix outputs are included with this report as APPENDIX A. The determined delays and levels of service at the eighty-four intersections included in this analysis are provided in TABLE 2.

All signalized intersections were evaluated based on a 100-second cycle length. All signalized and unsignalized intersections presently operate at acceptable levels of service, except for the intersection of Davis Road with Larkin Street, as well as the intersections of Boronda Road with Natividad Road and San Juan Grade Road. The latter two intersections are located in a Conditional Growth Area where the acceptable LOS is "C". These three intersections are highlighted in yellow in TABLE 2.

The intersections of Boronda Road/Natividad Road and Boronda Road/San Juan Grade (intersections #34 and #35, respectively) operate at LOS "C-" during the P.M. peak hour. The optimal total cycle length at these two intersections is 46 to 47 seconds during the peak hours. Applying the optimal cycle length does not always produce the best possible level of service. A possible signal operational improvement can be achieved by reducing the total cycle length from 100 seconds to 80 seconds at the two intersections. This change in signal cycle length would improve the P.M. peak hour LOS to "C" at each of the two intersections. Analysis results of the change in signal timing at the intersections of Boronda Road/Natividad Road and Boronda Road/San Juan Grade Road are shown in APPENDIX B.

Generally, improvements to an intersection operational level of service can also be achieved through the provision of additional lanes. For example, the westbound approach on Boronda Road at Natividad Road presently consists of one left-turn lane and one shared through/right-turn lane. Replacing the existing westbound shared through/right-turn lane with a through lane and adding a designated westbound right-turn lane would improve the P.M. peak hour level of service to "C". Results of this analysis are provided under APPENDIX C.

It should be noted however, that improvements in signal operations, when possible, are more cost efficient than the construction of additional lanes. Assuming that the right-of-way is available, the total cost of adding a lane with a 12-foot pavement width ranges from $225 to $275 per each foot of lane length. This cost range covers the costs of pavement widening, provision of a new shoulder/sidewalk, drainage and earth work, moderate utility relocation, pavement markings and signing, and the costs of engineering and construction management.

The intersection of Davis Road/Larkin Street (intersection #41) is a T-intersection with Larkin Street being the intersecting leg running east of Davis Road. This intersection is presently controlled by a stop control facing westbound traffic on Larkin Street at Davis Road. The City's Public Works Department has completed the traffic signal design for this intersection; the signal is a fully funded improvement and should be completed by late 2000.

TABLE 2
Intersection Operational Conditions

NO.	INTERSECTION	TYPE OF CONTROL	AM PEAK HOUR			PM PEAK HOUR		
			V/C*	AVE. DELAY**	LOS	V/C*	AVE. DELAY**	LOS
1	Abbott St / Blanco Rd / Sanborn Rd	Signal	0.65	24.8	C-	0.67	27.4	D+
2	Abbott St / Harkins Rd	Signal	0.46	23.9	C-	0.54	25.6	D+
3	Abbott St / Front St / John St	Signal	0.64	23.2	C-	0.80	26.2	D+
4	Abbott St / Romie Ln	Signal	0.38	18.2	C	0.40	18.0	C
5	Acacia St / Alisal St	Signal	0.34	14.6	B-	0.29	13.7	B-
6	Acacia St / Main St	Signal	0.31	12.7	B	0.50	13.4	B-
7	Acosta Plaza / Sanborn Rd	Signal	0.24	13.1	B-	0.36	12.3	B
8	Adams St / Laurel Dr	Signal	0.75	21.1	C	0.81	19.4	C
9	Airport Blvd / De La Torre / 101 NB Ramp(s)	Signal	0.53	20.3	C	0.67	23.6	C-
10	Airport Blvd / Moffett St	One-way Stop	–	1.1	B***	–	5.5	C***
11	Airport Blvd / 101 SB Ramp(s) / Terven Pl	Signal	0.69	15.3	C+	0.71	17.0	C
12	Alisal St / Blanco Rd	Signal	0.38	14.8	B-	0.49	15.1	C+
13	Alisal St / Front St	Signal	0.40	22.3	C	0.58	23.4	C-
14	Alisal St / Hebbron Ave	Signal	0.17	11.9	B	0.33	11.2	B
15	Alisal St / Homestead Ave	Signal	0.28	13.2	B-	0.33	14.0	B-
16	Alisal St / Williams Rd / John St	Signal	0.27	17.4	C	0.46	22.6	C
17	Alisal St / Monterey St	Signal	0.31	14.7	B-	0.47	18.7	C
18	Alisal St / Sanborn Rd	Signal	0.39	22.7	C	0.57	25.3	D+
19	Alisal St / Salinas St	Signal	0.35	14.2	B-	0.40	18.8	C
20	Alisal St / Wood St	Signal	0.20	14.7	B-	0.43	12.3	B
21	Alvin Dr / Main St	Signal	0.25	22.4	C	0.50	22.2	C
22	Alvin Dr / Natividad Rd	Signal	0.48	20.0	C	0.58	18.9	C
23	Bardin Rd / Williams Rd	Signal	0.29	17.8	C	0.38	17.9	C
24	Bernal Dr / Natividad Rd / Sherwood Dr	Signal	0.45	11.6	B	0.55	17.0	C+
25	Bernal Dr / Rosarita Dr	One-way Stop	–	1.1	B***	–	1.1	C***
26	Blanco Rd / Davis Rd	Signal	0.68	24.5	C-	0.83	30.8	D
27	Blanco Rd / Los Olivos	Signal	0.29	10.1	B	0.36	9.5	B
28	Blanco Rd / Main St	Signal	0.73	28.3	D	0.75	33.2	D
29	Blanco Rd / Riker St	Signal	0.32	9.4	B	0.40	11.1	B

Notes: : * V/C: is volume to capacity ratio
** AVE. DELAY: is average Delay in seconds per vehicle
*** LOS: level of service at unsignalized intersections is for the worst/most critical movement

TABLE 2 (continued)
Intersection Operational Conditions

NO.	INTERSECTION	TYPE OF CONTROL	AM PEAK HOUR			PM PEAK HOUR		
			V/C*	AVE. DELAY**	LOS	V/C*	AVE. DELAY**	LOS
30	Boronda Rd / Dartmouth Way	Signal	0.34	4.6	A	0.66	7.1	B
31	Boronda Rd / Independence Blvd	Signal	0.44	14.3	B-	0.38	7.5	B
32	Boronda Rd / Main St	Signal	0.68	24.8	C-	0.80	30.0	D
33	Boronda Rd / McKinnon St	Signal	0.48	14.3	B-	0.53	11.6	B
34	Boronda Rd / Natividad Rd	Signal	0.29	19.9	C	0.58	23.2	C-
35	Boronda Rd / San Juan Grade	Signal	0.38	20.9	C	0.56	24.7	C-
36	Boronda Rd / 101 NB Ramp(s)	Signal	0.66	7.4	B	0.92	20.5	C
37	Boronda Rd / 101 SB Ramp(s)	Signal	0.61	13.4	B-	0.71	16.8	C+
38	Calle Del Adobe / Laurel Dr / Davis Rd	Signal	0.70	24.3	C-	0.95	35.1	D
39	Constitution Blvd / Laurel Dr	Signal	0.28	13.8	B-	0.50	12.8	B
40	Curtis St / Main St	Signal	0.19	13.9	B-	0.35	12.2	B
41	Davis Rd / Larkin St	One-way Stop	--	7.8	F***	--	Overflow	F***
42	Davis Rd / Post Dr	Signal	0.41	18.5	C	0.68	23.6	C-
43	Davis Rd / Rossi St	Signal	0.55	13.7	B-	0.60	10.3	B
44	Davis Rd / Westridge Pkwy	Signal	0.11	9.6	B	0.31	17.4	C
45	Del Monte Ave / Sanborn Rd	Signal	0.16	13.9	B-	0.39	14.2	B-
46	Del Monte Ave / Williams Rd	Signal	0.25	10.3	B	0.28	11.2	B
47	Elvee Dr / Sanborn Rd / US 101 SB Ramps	Signal	0.68	14.0	B-	0.54	19.8	C
48	Front St / Market St	Signal	0.48	16.5	C+	0.58	19.9	C
49	Garner Ave / Sanborn Rd	Signal	0.25	17.7	C	0.52	19.9	C
50	Harden Pkwy / Harden Ranch Drvwy	Signal	0.16	19.3	C	0.34	22.7	C
51	Harden Pkwy / Main St	Signal	0.12	16.8	C+	0.50	36.5	D
52	Harkins Rd / Schilling Pl	Signal	0.51	21.8	C	0.70	27.8	D+
53	Iris Dr / Main St	Signal	0.23	14.7	B-	0.46	16.0	C+
54	John St / Pajaro St	Signal	0.36	21.3	C	0.51	22.8	C
55	John St / Sanborn Rd	Signal	0.42	22.6	C	0.48	22.4	C
56	Kern St / Market St	Signal	0.28	13.9	B-	0.56	17.5	C
57	Kern St / 101 NB Ramp(s)	Two-way Stop	--	2.6	B***	--	4.5	D***
58	Laurel Dr / Linwood Dr	Signal	0.32	15.8	C+	0.48	15.2	C+
59	Laurel Dr / Main St	Signal	0.37	28.8	D	0.68	25.2	D+
60	Laurel Dr / Maryal Dr	Signal	0.16	6.7	B+	0.33	8.1	B

Notes: : * V/C: is volume to capacity ratio

** AVE. DELAY: is average Delay in seconds per vehicle

*** LOS: level of service at unsignalized intersections is for the worst/most critical movement

TABLE 2 (continued)
Intersection Operational Conditions

NO.	INTERSECTION	TYPE OF CONTROL	AM PEAK HOUR			PM PEAK HOUR		
			V/C*	AVE. DELAY**	LOS	V/C*	AVE. DELAY**	LOS
61	Laurel Dr / Natividad Rd	Signal	0.46	23.6	C-	0.82	28.0	D
62	Laurel Dr / Sanborn Rd	Signal	0.38	22.1	C	0.53	22.2	C
63	Laurel Dr / Tyler St	Signal	0.26	11.1	B	0.45	11.0	B
64	Laurel Dr / 101 NB Ramp(s)	Signal	0.44	6.6	B+	0.64	13.2	B-
65	Laurel Dr / 101 SB Ramp(s)	Signal	0.57	14.5	B-	0.68	12.4	B
66	Lincoln Ave / Market St	Signal	0.39	12.1	B	0.55	16.4	C+
67	Los Coches Ave / Natividad Rd	Signal	0.16	12.5	B	0.23	18.2	C
68	Los Palos / Romie Ln	Signal	0.23	19.4	C	0.34	20.0	C
69	Madiera Ave / Sanborn Rd / Oregon St	Signal	0.31	14.3	B-	0.43	14.8	B-
70	Main St / John St	Signal	0.49	21.8	C	0.65	23.6	C-
71	Main St / Romie Ln	Signal	0.47	16.3	C+	0.52	15.8	C+
72	Main St / Rossi St	Signal	0.67	21.6	C	0.68	22.9	C
73	Main St / San Juan Grade Rd	Signal	0.17	18.1	C	0.42	18.9	C
74	Main St / San Joaquin St	Signal	0.34	9.9	B	0.50	17.1	C
75	Market St / Monterey St	Signal	0.43	15.7	C+	0.68	20.6	C
76	Market St / Sanborn Rd	Signal	0.48	20.7	C	0.63	24.1	C-
77	Market St / Salinas St	Signal	0.63	18.4	C	0.67	18.3	C
78	Market St / Sherwood Dr	Signal	0.50	17.8	C	0.67	19.8	C
79	Market St / Simas St	Signal	0.24	9.2	B	0.41	13.6	B-
80	Market St / Williams Rd	Signal	0.22	17.5	C	0.47	20.2	C
81	Pajaro St / Romie Ln	Signal	0.28	13.0	B	0.40	13.5	B-
82	Rico St / Rossi St	Signal	0.29	14.0	B-	0.27	13.4	B-
83	Rossi St / Sherwood Dr	Signal	0.50	14.5	B-	0.60	19.2	C
84	Terven Pl / Work St	Signal	0.30	16.3	C+	0.41	16.1	C+

Notes: : * V/C: is volume to capacity ratio
** AVE. DELAY: is average Delay in seconds per vehicle
*** LOS: level of service at unsignalized intersections is for the worst/most critical movement

Possible mitigation measures were also evaluated for intersections operating at levels of service "D" and "D-", i.e. intersections operating at or near the general acceptable level of service "D" adopted by the City of Salinas. These intersections are highlighted in gray in TABLE 2.

The intersection of Blanco Road/Davis Road (intersection #26) is presently operating at a level of service "D" during the P.M. peak hour. The existing optimal cycle length during the P.M. peak hour at this intersection is 84 seconds. Changing the cycle length was not sufficient to improve the P.M. peak hour level of service. The westbound approach on Blanco Road presently consists of one left-turn lane, one through lane and one right-turn lane. There are relatively heavy westbound through and right-tun traffic movements. Adding a shared through/right-turn lane to the westbound approach would improve the LOS during the P.M. peak hour to "D+". Detailed analysis output is included under APPENDIX C.

Blanco Road/Main Street (intersection #28) is presently operating at a LOS "D" during both the A.M. and P.M. peak hours. The existing P.M. peak hour optimal cycle length at this intersection is 67 seconds. As shown in the analysis output in APPENDIX B, reducing the operating cycle length from 100 seconds to 70 seconds would improve the level of service to "C" during the A.M. and P.M. peak hours. Adding a westbound through lane, as shown in APPENDIX C, would improve the level of service to "D+" during the A.M. and P.M. peak hours. In this case, changing the signal timing is more effective in improving the operational level of service and a more cost efficient approach.

The intersection of Boronda Road/Main Street (intersection #32) is operating at a LOS "D" during the P.M. peak hour. Reducing the total signal cycle length to 70 seconds, or adding a southbound shared through/right-turn lane on Main Street would improve the level of service during the P.M. peak hour to "D+". Analysis results of the changes in signal timing and lane provisions are shown under APPENDIX B and APPENDIX C, respectively.

The intersection of Calle Del Adobe/Laurel Drive/Davis Road (intersection #38) is operating at a LOS "D" during the P.M. peak hour. Changes to the total cycle length, signal phasing allocations, and left-turn movements control did not improve the P.M. peak hour level of service at this intersection. The northbound approach on Davis Road consists of one left-turn lane, two through lanes, and two right-turn lanes. Traffic volume of the northbound right-turn movement is very high relative to all other turning movement volumes. Adding a northbound shared through/right-turn lane would improve the LOS during the P.M. peak hour to "D+". The detailed analysis results are provided in APPENDIX C.

Harden Parkway/Main Street (intersection #51) is presently operating at LOS "D" during the P.M. peak hour. As shown in APPENDIX B, reducing the total cycle length from 100 seconds to 80 seconds would improve the P.M. peak hour level of service to "C".

The intersection of Kern Street/Highway 101 Northbound Ramp (intersection #57) was not included in this analysis since it was recently evaluated in details as part of the Kern Street Motel Traffic Impact Study Report, February 2000. Future improvements at this intersection would require coordination between the City of Salinas and Caltrans.

The operational level of service at the intersection of Laurel Drive/Main Street (intersection #59) is more of a concern during the A.M. peak hour. Reducing the total cycle length from 100 seconds to 80 seconds would improve the operational level of service during the A.M. peak hour from LOS "D" to LOS "C". Also adding a westbound through lane on Laurel Drive in the vicinity to its intersection with Main Street would improve the A.M. peak hour level of service to "C-". Analysis results of these two improvement scenarios are shown in APPENDICES B and C.

The intersection of Laurel Drive/Natividad Road (intersection #61) is operating at LOS "D" during the P.M. peak hour. Improvement to the intersection operational conditions during the P.M. peak hour can be achieved by reducing the total cycle length from 100 seconds to 80 seconds. This reduction in the signal cycle length would improve the P.M. peak hour level of service to "C-". Analysis results of this improvement are included in APPENDIX B. The P.M. peak hour operational level of service at this intersection was more responsive to changes in signal timing than to changes in lane provisions. Factors affecting such responsiveness include directional traffic split, individual turning movement volumes and designated number of lanes on each approach. For example, as shown in APPENDIX C, adding a shared northbound through/right-turn lane on Natividad Road would have the limited effect of improving the P.M. peak hour LOS from "D" to "D+".

Streets

General Plan policies are designed to:

- Provide a properly designed, safe and convenient street network for vehicular traffic movements;
- Gradually reduce the reliance on automobile use;
- Reduce the need for new major roads and/or expansions to existing roads;
- Minimize impacts of new and/or improved roads on neighborhoods and the natural environment; and,
- Maximize intra-urban access while minimizing cut-through traffic in residential communities.

Given consideration to the aforementioned objectives, the 1988 City of Salinas General Plan classifies the roadways as Expressways, Major Arterials, Minor Arterials, Collectors and Locals. TABLE 3 summarizes the main design elements, right-of-way, and number of lanes for the different roadway types. Both the right-of-way widths and number of lanes are dependent on a variety of factors including vehicular traffic demand, provisions for bicycle routes, provisions for sidewalks, width of landscaping, and the need to expand the right-of-way for such matters as utility services.

TABLE 3
Typical Street Design

FACILITY TYPE	RIGHT-OF-WAY (in feet)	NUMBER OF LANES
Expressway (Divided; no access)	110 – 130	6
Major Arterial (Divided; limited access)	106 – 130	4 - 6
Minor Arterial (Limited access)	84	4
Collector Streets		
Commercial	64	2
Industrial	64	2
Residential	60 – 64	2
Local	56 – 60	2

Roadway classification is generally based on the roadway function and serviced traffic volumes. Arterial roadways typically carry high volumes of traffic distributing it from collector roads to collectors, arterials, or controlled access highways. Collectors carry moderate volumes of traffic from local roads to collectors and arterials. Local roads typically carry low traffic volumes for short distances to distribute the traffic from individual properties to collectors and arterials.

The Circulation System plan provided in the 1988 General Plan was updated to reflect the existing number of lanes along the roadway network within the City boundaries. FIGURE 1 illustrates the existing Circulation System.

An evaluation of the existing traffic operational conditions along the main roadway links within the City of Salinas was carried out based on the provisions of the 1985 Highway Capacity Manual (HCM). The operational level of service on a particular roadway segment is determined based on the roadway type, the available number of lanes and the combined (i.e. in both directions) average annual daily traffic served by the subject roadway segment. The HCM level of service threshold volumes for various roadway types are provided in this report under APPENDIX D.

Analysis of roadway segment operational conditions was performed in order to determine the location and extent of capacity deficiencies along the main roadway links within the City. A summary of the roadway segments evaluation is provided in TABLE 4.

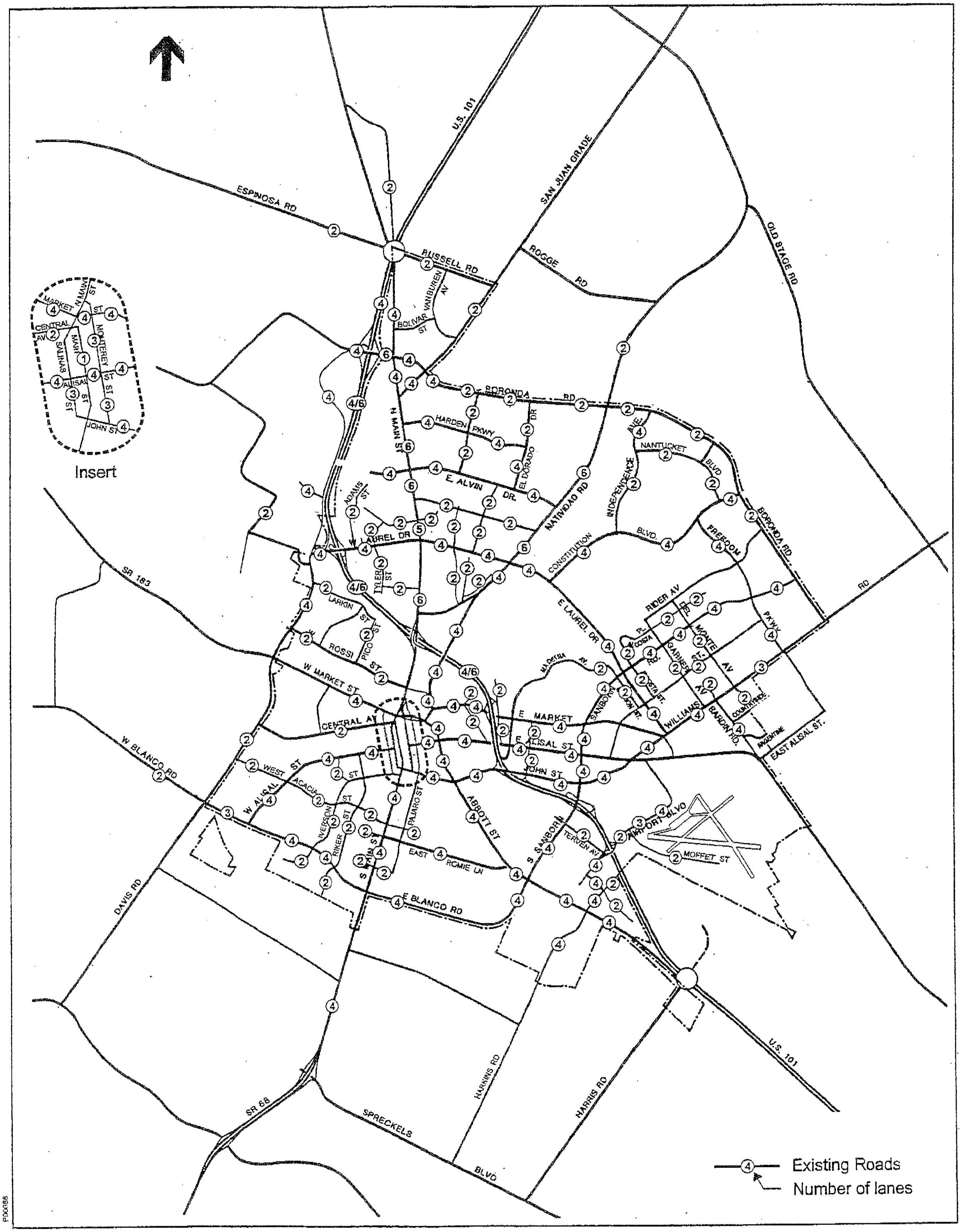


Figure 1
Circulation System

TABLE 4
LOS on Roadway Segments

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	AVERAGE ANNUAL DAILY TRAFFIC		SEGMENT LOS
				N/S	E/W	
1	**ABBOTT STREET** S/O JOHN STREET	4	Undivided Arterial	27,032	-	F
2	**ABBOTT STREET** N/O SANBORN ROAD	4	Divided Arterial	22,552	-	B
3	**ABBOTT STREET** S/O SANBORN ROAD	4	Undivided Arterial	27,971	-	F
4	**ABBOTT STREET** CITY LIMITS	4	Undivided Arterial	15,805	-	A
5	**ACACIA STREET** E/O DAVIS ROAD	2	Collector	-	6,194	B
6	**AIRPORT BOULEVARD** N/O MOFFETT STREET	3	Arterial	7,454	-	A
7	**AIRPORT BOULEVARD** W/O U.S. 101	4	Undivided Arterial	-	19,540	C
8	**ALISAL ROAD** S/O BARDIN ROAD	2	Collector	5,659	-	A
9	**E. ALISAL STREET** E/O FRONT STREET	4	Divided Arterial	-	18,612	A
10	**E. ALISAL STREET** W/O E. MARKET STREET	2	Arterial	-	8,877	A
11	**E. ALISAL STREET** E/O MONTEREY STREET	4	Undivided Arterial	-	14,362	A
12	**E. ALISAL STREET** E/O SANBORN ROAD	4	Divided Arterial	-	22,281	B
13	**E. ALISAL STREET** E/O U.S. 101	4	Undivided Arterial	-	18,464	B
14	**E. ALISAL STREET** E/O WORK STREET	4	Undivided Arterial	-	18,709	B
15	**W. ALISAL STREET** E/O W. BLANCO ROAD	4	Undivided Arterial	8,513	-	A
16	**W. ALISAL STREET** W/O HOMESTEAD AVE.	4	Undivided Arterial	-	10,402	A
17	**ALVIN DRIVE** E/O CHEROKEE DRIVE	4	Undivided Arterial	-	3,224	A
18	**ALVIN DRIVE** E/O McKINNON STREET	4	Undivided Arterial	-	13,735	A
19	**ALVIN DRIVE** W/O McKINNON STREET	4	Undivided Arterial	-	11,000	A
20	**ALVIN DRIVE** W/O NATIVIDAD RD	4	Undivided Arterial	-	10,195	A
21	**BERNAL DRIVE** E/O N. MAIN STREET	2	Arterial	-	12,321	B

TABLE 4 (continued)
LOS on Roadway Segments

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	AVERAGE ANNUAL DAILY TRAFFIC		SEGMENT LOS
				N/S	E/W	
22	**BLANCO ROAD** E/O S. MAIN STREET	4	Divided Arterial	-	28,207	C
23	**E. BLANCO ROAD** W/O ABBOTT STREET	4	Divided Arterial	29,771	-	D
24	**W. BLANCO ROAD** W/O S. MAIN STREET	4	Divided Arterial	-	28,393	C
25	**BORONDA ROAD** E/O INDEPENDENCE BLVD.	2	Arterial	-	12,296	B
26	**BORONDA ROAD** E/O McKINNON STREET	2	Arterial	-	17,945	E
27	**BORONDA ROAD** W/O McKINNON STREET	2	Arterial	-	22,246	F
28	**BORONDA ROAD** E/O NATIVIDAD ROAD	2	Arterial	-	16,019	E
29	**E. BORONDA ROAD** E/O U.S. 101	6	Arterial	-	43,243	D
30	**CENTRAL AVENUE** E/O DAVIS	2	Collector	-	4,534	A
31	**CONSTITUTION BLVD.** S/O E. BORONDA ROAD	4	Undivided Arterial	10,277	-	A
32	**CONSTITUTION BLVD.** N/O E. LAUREL ROAD	4	Undivided Arterial	14,344	-	A
33	**DAVIS ROAD** N/O W. BLANCO ROAD	2	Arterial	25,493	-	F
34	**DAVIS ROAD** S/O BORONDA ROAD	4	Undivided Arterial	10,407	-	A
35	**DAVIS ROAD** N/O CENTRAL AVENUE	2	Arterial	34,264	-	F
36	**DAVIS ROAD** N/O W. LAUREL DRIVE	4	Divided Arterial	23,433	-	B
37	**DAVIS ROAD** N/O W. MARKET STREET	4	Divided Arterial	35,469	-	E
38	**DAVIS ROAD** S/O POST DRIVE	4	Divided Arterial	35,435	-	E
39	**DEL MONTE AVENUE** W/O PACIFIC AVENUE	2	Collector	-	6,246	B
40	**DEL MONTE AVENUE** W/O WILLIAMS ROAD	2	Collector	-	6,889	B
41	**FREEDOM PARKWAY** E/O CONSTITUTION BLVD.	4	Undivided Arterial	-	11,611	A
42	**FREEDOM PARKWAY** W/O WILLIAMS ROAD	4	Undivided Arterial	-	6,007	A

TABLE 4 (continued)
LOS on Roadway Segments

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	AVERAGE ANNUAL DAILY TRAFFIC		SEGMENT LOS
				N/S	E/W	
43	**FRONT STREET** S/O E. ALISAL STREET	4	Undivided Arterial	17,071	-	B
44	**HARKINS ROAD** S/O DAYTON STREET	2	Collector	5,223	-	A
45	**INDEPENDENCE BLVD.** S/O E. BORONDA ROAD	4	Undivided Arterial	4,511	-	A
46	**JOHN STREET** W/O S. SANBORN ROAD	4	Undivided Arterial	-	13,034	A
47	**JOHN STREET** E/O S. MAIN STREET	4	Undivided Arterial	-	13,366	A
48	**JOHN STREET** W/O U.S. 101	4	Undivided Arterial	-	24,601	E
49	**LAS CASITAS DRIVE** S/O CONSTITUTION BLVD.	2	Collector	-	5,308	A
50	**E. LAUREL DRIVE** E/O CONSTITUTION BLVD.	4	Undivided Arterial	-	20,270	C
51	**E. LAUREL DRIVE** W/O CONSTITUTION BLVD.	4	Divided Arterial	-	33,193	E
52	**E. LAUREL DRIVE** W/O LOMA DRIVE	4	Undivided Arterial	-	20,931	C
53	**W. LAUREL DRIVE** E/O U.S. 101	4	Undivided Arterial	-	24,071	E
54	**W. LAUREL DRIVE** W/O U.S. 101	4	Undivided Arterial	-	40,396	F
55	**N. MAIN STREET** S/O ALVIN DRIVE	6	Arterial	28,931	-	A
56	**N. MAIN STREET** N/O LAUREL DRIVE	5	Arterial	30,962	-	D
57	**N. MAIN STREET** S/O LAUREL DRIVE	6	Arterial	27,290	-	A
58	**N. MAIN STREET** N/O MARKET STREET	4	Divided Arterial	32,555	-	E
59	**N. MAIN STREET** S/O RUSSELL ROAD	4	Undivided Arterial	6,750	-	A
60	**N. MAIN STREET** S/O SAN JUAN GRADE ROAD	6	Arterial	22,547	-	A
61	**N. MAIN STREET** N/O U.S. 101	6	Arterial	42,105	-	C
62	**N. MAIN STREET** S/O U.S. 101	4	Undivided Arterial	40,667	-	F
63	**S. MAIN STREET** N/O BLANCO ROAD	4	Divided Arterial	26,182	-	C
64	**S. MAIN STREET** S/O BLANCO ROAD	4	Divided Arterial	33,814	-	E

TABLE 4 (continued)
LOS on Roadway Segments

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	AVERAGE ANNUAL DAILY TRAFFIC		SEGMENT LOS
				N/S	E/W	
65	S. MAIN STREET S/O JOHN STREET	4	Undivided Arterial	29,481	-	F
66	S. MAIN STREET N/O ROMIE LANE	4	Divided Arterial	25,123	-	C
67	E. MARKET STREET E/O HEBBRON AVE.	4	Undivided Arterial	-	17,260	B
68	E. MARKET STREET E/O MONTEREY STREET	4	Undivided Arterial	-	22,901	D
69	E. MARKET STREET E/O SHERWOOD DRIVE	4	Undivided Arterial	-	19,661	C
70	E. MARKET STREET W/O TOWT STREET	4	Undivided Arterial	-	9,268	A
71	E. MARKET STREET E/O U.S. 101	4	Undivided Arterial	-	21,598	C
72	W. MARKET STREET E/O DAVIS ROAD	4	Undivided Arterial	-	17,740	B
73	W. MARKET STREET W/O LINCOLN AVENUE	4	Undivided Arterial	-	22,706	D
74	McKINNON STREET S/O E. BORONDA ROAD	2	Collector	9,848	-	D
75	NATIVIDAD ROAD S/O E. ALVIN DRIVE	6	Arterial	21,935	-	A
76	NATIVIDAD ROAD N/O BORONDA ROAD	2	Collector	6,389	-	B
77	NATIVIDAD ROAD S/O E. BORONDA ROAD	6	Arterial	9,712	-	A
78	NATIVIDAD ROAD N/O E. LAUREL DRIVE	6	Arterial	24,862	-	A
79	NATIVIDAD ROAD S/O E. LAUREL DRIVE	4	Undivided Arterial	30,494	-	F
80	ROMIE LANE E/O LOS PALOS DR.	4	Undivided Arterial	-	9,256	A
81	ROMIE LANE E/O SAN MARINO WAY	4	Undivided Arterial	-	9,204	A
82	ROSSI STREET E/O DAVIS ROAD	2	Arterial	-	9,955	A
83	RUSSELL ROAD E/O VAN BUREN AVENUE	2	Arterial	-	6,133	A
84	SANBORN ROAD W/O FREEDOM PRWY	4	Undivided Arterial	-	3,396	A
85	SANBORN ROAD S/O DEL MONTE DRIVE	4	Undivided Arterial	10,816	-	A
86	N. SANBORN ROAD S/O E. LAUREL DRIVE	4	Divided Arterial	24,296	-	B

TABLE 4 (continued)
LOS on Roadway Segments

NO.	STREET NAME	NUMBER OF LANES	FACILITY TYPE	AVERAGE ANNUAL DAILY TRAFFIC		SEGMENT LOS
				N/S	E/W	
87	**S. SANBORN ROAD** N/O U.S. 101	4	Divided Arterial	26,202	-	C
88	**S. SANBORN ROAD** S/O U.S. 101	4	Divided Arterial	31,794	-	D
89	**SAN JUAN GRADE ROAD** S/O E. BORONDA ROAD	4	Undivided Arterial	9,847	-	A
90	**SHERWOOD DRIVE** N/O E. MARKET STREET	4	Divided Arterial	23,569	-	B
91	**SHERWOOD DRIVE** N/O U.S. 101	4	Divided Arterial	22,135	-	B
92	**TOWT STREET** W/O FREEDOM PRWY	2	Collector	-	2,832	A
93	**WILLIAMS ROAD** S/O DEL MONTE DRIVE	4	Undivided Arterial	14,935	-	A
94	**WILLIAMS ROAD** N/O E. LAUREL DRIVE	4	Undivided Arterial	17,070	-	B
95	**WILLIAMS ROAD** S/O FREEDOM PARKWAY	3	Arterial	7,719	-	A
96	**WORK STREET** S/O JOHN ST.	4	Undivided Arterial	4,433	-	A
97	**WORK STREET** W/O SANBORN ROAD	4	Undivided Arterial	2,619	-	A

A summary of the City's database on vehicular traffic speeds along the arterial and collector roadway network is provided in TABLE 5. Speeding on a particular roadway segment is generally examined by comparing the 85[th] percentile speed with the speed limit assigned to this segment. The 85[th] percentile speed is the speed at or below which 85% of motorists travel.

TABLE 5
Vehicular Traffic Speeds on Roadway Links

STREET NAME	LOCATION	TRAFFIC DIRECTION	POSTED SPEED LIMIT (in mph)	85th PERCENTILE SPEED* (in mph)
1. Abbott Street	Btwn. Front St. & S. Sanborn Rd./E. Blanco Rd.	NB/SB	35	40.2
2. Abbott Street	Btwn. Harkins Rd. & southerly City limits	NB/SB	45	50.5
3. Adams Street	Btwn. W. Laurel Dr. & Inca Wy.	NB/SB	25	32.4
4. Airport Boulevard	Btwn Skyway Blvd. & U.S. 101/De La Torre	EB/WB	45	47.2
5. E. Alisal Street	Btwn. Front St. & N. Sanborn Rd.	EB/WB	35	36.6
6. E. Alisal Street	Btwn. N. Sanborn Rd. & Williams Rd.	EB/WB	35	37.4
7. W. Alisal Street	Btwn. Amherst Dr. & W. Blanco Rd.	EB/WB	35	42.6
8. E. Alvin Drive	Btwn. N. Main St. & Natividad Rd.	EB/WB	35	42.4
9. W. Alvin Drive	Btwn. N. Main St. & Cherokee Dr.	EB/WB	35	40.0
10. Ambrose Drive	Btwn. W. Alisal St. & S. Davis Rd.	EB/WB	25	34.7
11. Beacon Hill Drive	Btwn. Constitution Blvd. & Constitution Blvd.	NB/SB	25	32.9
12. E. Bernal Drive	Btwn. N. Main St. & Sherwood Dr.	EB/WB	35	43.0
13. W. Blanco Drive	Btwn. S. Main St. & westerly City limits	EB/WB	45	50.8
14. Bolivar Street	Btwn. Van Buren Ave. & N. Main St.	EB/WB	25	31.4
15. Boronda Road	Btwn. N. Main Street & Natividad Rd.	EB/WB	45	50.7
16. Boronda Road	Btwn. Natividad Rd. & Constitution Blvd.	EB/WB	45	52.4
17. California Street	Btwn. John St. & E. Romie Ln.	EB/WB	25	32.3
18. Central Avenue	Btwn. N. Davis Rd. & Villa St.	EB/WB	35	36.6
19. Cherokee Drive	Btwn. Seville St. & N. Main St.	EB/WB	25	31.1
20. Cherokee Drive	Btwn. Seville St. & W. Alvin Dr.	NB/SB	25	32.7
21. Cherokee Drive	Btwn. W. Alvin Dr. & southerly terminus	NB/SB	25	33.8
22. Constitution Boulevard	Btwn. E. Laurel Dr. & Independence Blvd.	NB/SB	45	49.4
23. Constitution Boulevard	Btwn. Independence Blvd. & Boronda Rd.	NB/SB	45	47.0
24. W. Curtis Street	Btwn. N. Main St. & Navajo Dr.	EB/WB	25	32.1
25. N. Davis Road	Btwn. W. Rossi St. & Larkin St.	NB/SB	45	51.7
26. Del Monte Avenue	Btwn. Rider Ave. & Williams Rd.	EB/WB	25	31
27. Freedom Parkway	Btwn. Constitution Blvd. & Williams Rd.	EB/WB	35	42.7
28. Harden Parkway	Btwn. McKinnon St. & El Dorado Dr.	NB/SB	35	42.1
29. Harden Parkway	Btwn. N. Main St. & McKinnon St.	NB/SB	35	43.5
30. Harkins Road	Btwn. Abbott St. & southerly City limits	NB/SB	35	38.6
31. Independence Boulevard	Btwn. Provinceton Dr. & Constitution Blvd.	NB/SB	35	42.0
32. Independence Boulevard	Btwn. Provinceton Dr. & Boronda Rd.	NB/SB	35	43.1
33. Iris Drive	Btwn. N. Main St. & Tyler St.	EB/WB	25	33.0
34. Iverson Street	Btwn. Clay St. & W. Blanco Rd.	NB/SB	25	33.0
35. Larkin Street	Btwn. N. Davis Rd. & Rico St.	EB/WB	25	34.0
36. E. Laurel Drive	Btwn. Natividad Rd. & N. Sanborn Rd.	EB/WB	45	53.0
37. E. Laurel Drive	Btwn. N. Sanborn Rd. & Williams Rd.	EB/WB	25	34.3
38. W. Laurel Drive	Btwn. N. Davis Rd. & N. Main St.	EB/WB	35	41.0
39. Linwood Drive	Btwn. E. Laurel Dr. & E. Alvin Dr.	NB/SB	25	34.3
40. N. Main Street	Btwn. Laurel Dr. & Bernal Dr.	NB/SB	35	42.2
41. N. Main Street	Btwn. E. Laurel Dr. & E. Alvin Dr.	NB/SB	35	39.6
42. N. Main Street	Btwn. Boronda Rd. & Russell Rd.	NB/SB	45	49.8

Note: 85th PERCENTILE SPEED*: The speed at or below which 85% of motorists travel

TABLE 5 (continued)
Vehicular Traffic Speeds on Roadway Links

STREET NAME	LOCATION	TRAFFIC DIRECTION	POSTED SPEED LIMIT (in mph)	85th PERCENTILE SPEED* (in mph)
43. E. Market Street	Btwn. Sherwood Dr. & U.S. 101	EB/WB	35	38.4
44. E. Market Street	Btwn. U.S. 101 & N. Sanborn Rd.	EB/WB	35	37.8
45. E. Market Street	Btwn. N. Sanborn Rd. & Williams Rd.	EB/WB	25	36.3
46. McKinnon Street	Btwn. Boronda Rd. & E. Alvin Dr.	NB/SB	35	41.2
47. Moffett Street	Btwn. Airport Blvd. & easterly terminus	EB/WB	35	41.8
48. Natividad Road	Btwn. Sherwood Dr. & E. Laurel Dr.	NB/SB	45	46.0
49. Riker Street	Btwn. W. Acacia St. & W. Blanco Rd.	NB/SB	25	33.2
50. E. Romie Lane	Btwn. S. Main St. & California St.	EB/WB	35	37.0
51. W. Rossi Street	Btwn. N. Davis Rd. & N. Main St.	EB/WB	40	47.0
52. N. Sanborn Road	Btwn. Freedom Pkwy. & Del Monte Ave.	NB/SB	25	37.8
53. N. Sanborn Road	Btwn. Del Monte Ave. & E. Alisal St.	NB/SB	35	37.0
54. S. Sanborn Road	Btwn. E. Alisal St. & U.S. 101	NB/SB	35	37.8
55. S. Sanborn Road	Btwn. Abbott St. & U.S. 101	NB/SB	45	47.2
56. San Juan Grade Road	Btwn. N. Main St. & Boronda Rd.	EB/WB	35	44.2
57. Schilling Place	Btwn. Harkins Rd. & southerly terminus	NB/SB	25	31.7
58. Sherwood Drive	Btwn. E. Market St. & U.S. 101	NB/SB	35	46.0
59. Sherwood Drive	Btwn. U.S. 101 & Bernal Dr./La Posda Wy.	NB/SB	45	53.4
60. Towt Street	Btwn. E. Market St. & E. Laurel Dr.	NB/SB	25	30.7
61. Towt Street	Btwn. E. Laurel Dr. & Garner Ave.	NB/SB	25	33.0
62. Van Buren Avenue	Btwn. Bolivar St. & San Juan Grade Rd.	NB/SB	25	34.8

Note: 85th PERCENTILE SPEED*: The speed at or below which 85% of motorists travel

PUBLIC TRANSIT

The 1988 Salinas General Plan generally strives to increase the accessibility and convenience of public transit usage, as well as encourage a density and form of development which supports public transportation. Monterey-Salinas Transit (MST) provides bus service throughout Salinas. MST focuses on improving operational conditions such as by establishing bus routes and schedules that efficiently meet travel demands, reducing travel times, improving service reliability, and encouraging bike-and-ride initiatives. The existing MST bus routes within the City of Salinas are illustrated on FIGURE 2.

All MST buses are wheelchair accessible. A MST Courtesy Card is available to all disabled individuals free of charge with a physician's written verification or a Medicare Card. This Courtesy Card allows discounted fares and passes.

Presently all buses are equipped with bike racks, thereby making it possible for cyclists to use public transit along sections of the relatively longer trip lengths. Bikes ride free with paying passengers on all MST buses. The bike racks on each bus can fit two bicycles. Also the wheelchair securement area can accommodate two bicycles subject to availability of space.

There are five fare zones within the MST service area. These zones are:

- North County: includes Watsonville, Prunedale, Castroville and Marina
- Salinas: includes Castroville, Prundedale, Salinas, Marina and Laguna Seca
- Peninsula: includes Castroville, Marina, Fort Ord, Seaside, Laguna Seca, Monterey, Pacific Grove, Carmel Rancho, Mid Valley, Carmel Highlands and Carmel-By-The-Sea
- Big Sur: includes Carmel Rancho, Mid Valley, Carmel Highlands and travel south of Mal Paso Creek
- Carmel Valley: includes Carmel Rancho, Mid Valley and Carmel Highlands

The regular MST one-way fare per each of the aforementioned zones is $1.50. Children of age 4 and under ride for free. The regular daily passes are for $3.00 per single zone and $6.00 per multi zones. The regular monthly passes are for $45.00 per single zone and $90.00 for all zones. Discounted fares, as well as discounted daily and monthly passes are 50% of their regular values. Employers with at least three public transit riders can obtain 10% discount on 3-5 monthly passes and up-to 35% discount on 31+ monthly passes.

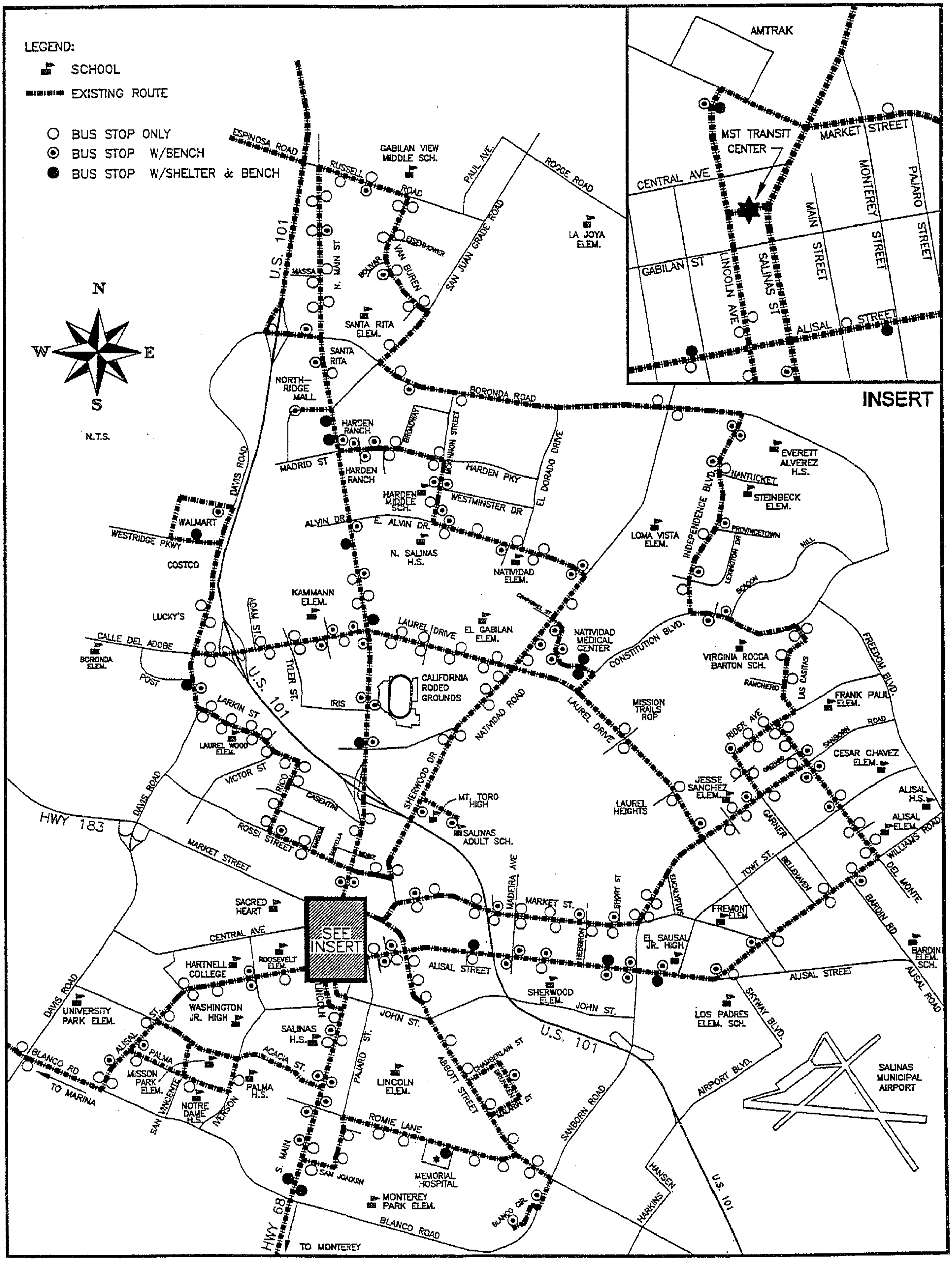


Figure 2
MST Salinas Bus Routes

DKS Associates

BICYCLES AND PEDESTRIANS

The 1988 City of Salinas General Plan and 1998 Bikeways Plan endeavor to provide safe, convenient, connected and pleasurable routes for cyclists; improve bike parking facilities throughout communities; and promote the social, economical and environmental benefits of cycling. Consistent with State and Federal designations, bike routes within the City of Salinas are designated as Class I, Class II, or Class III. Width of bike facilities, location of such facilities, and signs and pavement markings utilized vary according to the bike facility designation. A Class I Bikeway (Bike Path) is defined in the City's Bikeways Plan as a paved route not on a street or roadway, and expressly reserved for bicycles. A Class II Bikeway (Bike Lane) is a corridor expressly reserved by markings for bicycles, existing on a street or roadway in addition to any lanes for use by motorized vehicles. Class III Bikeways (Bike Routes) are facilities shared with motorists and identified only by signs (no pavement markings or lane stripes). FIGURE 3 illustrates the general standard guidelines for the different class designations. FIGURE 4 shows the revised existing and proposed bicycle facilities.

The achievement of increased cycling modal share relies upon the implementation of cycling supportive measures, continued implementation of the planned cycling network, review and modification of operations and maintenance, and enhanced design and construction practices. Recent site evaluation confirmed the existing bicycle facilities shown in FIGURE 4.

The revised bicycle facilities plan succeeds in selecting a connected grid of bicycle routes running throughout the City to serve major bicycle traffic generators such as schools and activity centers. The bicycle plan also succeeds in connecting residential with employment areas to assist in achieving the City's goal to increase bicycle commute trips to ten percent (10%). Some roadways, such as Abbott Street, can easily accommodate the future Class III bike route. However, this is not always the case. For example, the provision of the future Class III bike route on John Street would require more detailed evaluation and possible reduction of speed limit due to the existing lane configurations and considerable vehicular traffic volumes. The provision of the future Class II bike route on Davis Road would require improvements to the roadway shoulder conditions. In addition to the provision of bicycle-related signs and pavement markings along future bike routes, there is usually a need for evaluation of curb-side parking regulations.

Pedestrian sidewalks are provided along the major arterial and collector roadway network within the City of Salinas, except for a few locations such as on Airport Boulevard in the vicinity of U.S. 101 where pedestrian traffic volume is limited. Pedestrian signals and painted crosswalks are also provided at all evaluated signalized intersections. In addition to the general sidewalk/path design guidelines provided in the 1988 General Plan, future considerations should be given to other walking supportive initiatives. Such initiatives could include encouraging a street pattern and mix of land uses in new and redeveloped areas that support walking, ensuring the provision of direct pedestrian connections to transit stations, collaborating pedestrian-friendly streetscape; townscape and landscape elements in site design, modifying where necessary the pedestrian crossing times provided at signalized intersections, and supporting walking through promotion and education initiatives.

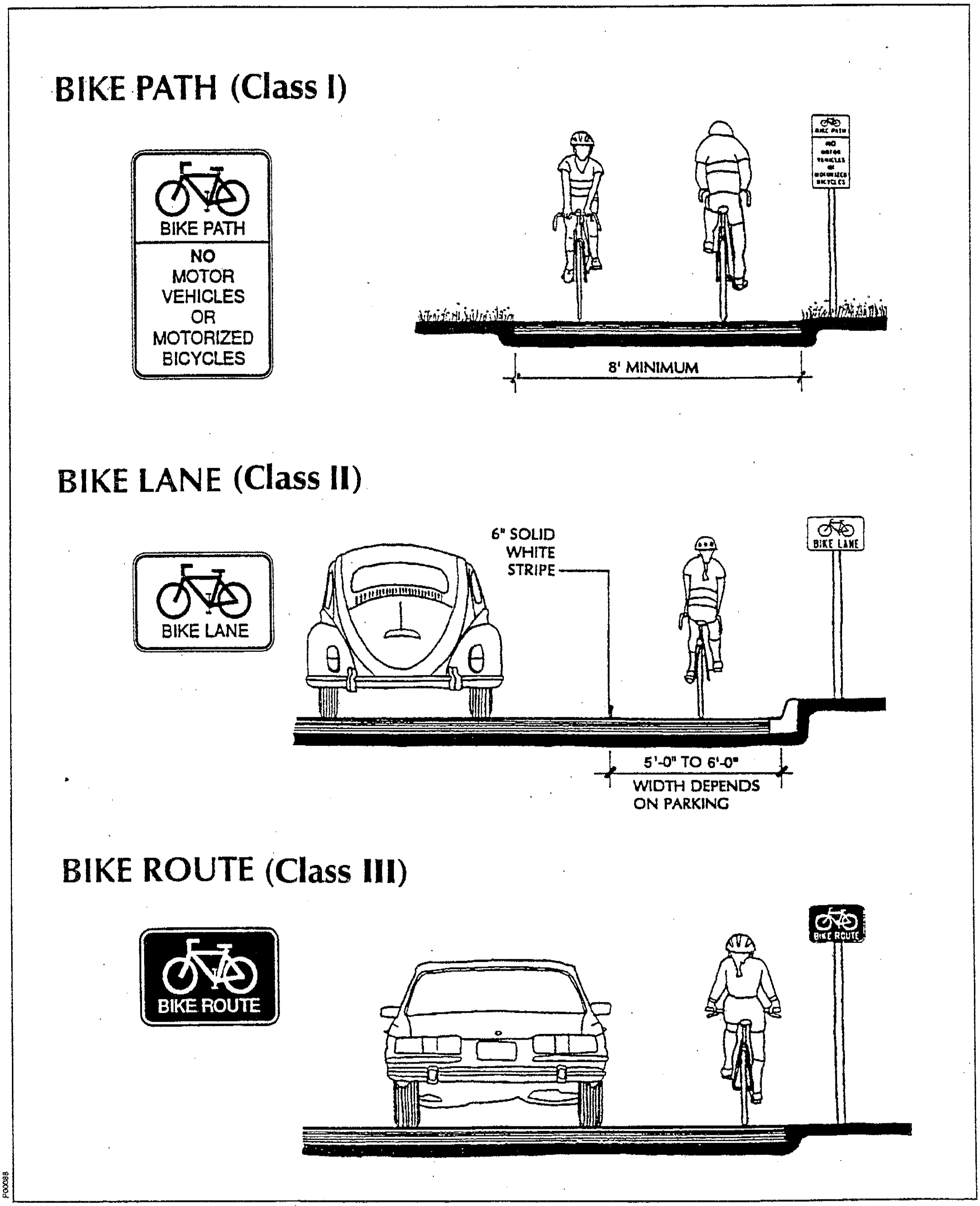


Figure 3
Bike Route Designations

TRUCK TRAFFIC

An efficient and effective goods movement system is essential to the economic livelihood of urban areas. Trucking dominates goods movement within and through regions. The City of Salinas' role as an agriculture processing and shipping center located on Highway 101 makes truck traffic an essential factor in evaluating the transportation system. The existing City's designated truck routes are shown on FIGURE 5. The designated truck routes currently form a ring around the City, with exception of Laurel Drive, which bisects the City. Designated truck routes along the outside boundaries of the City include Davis Road, Boronda Road, Freedom Boulevard, Williams Road, Bardin Road, East Alisal Street, Skyway Boulevard, Airport Boulevard, Hansen Street, Harkins Road, South Sanborn Road, and East/West Blanco Road. An internal east-west truck route connection is provided on East/West Laurel Drive.

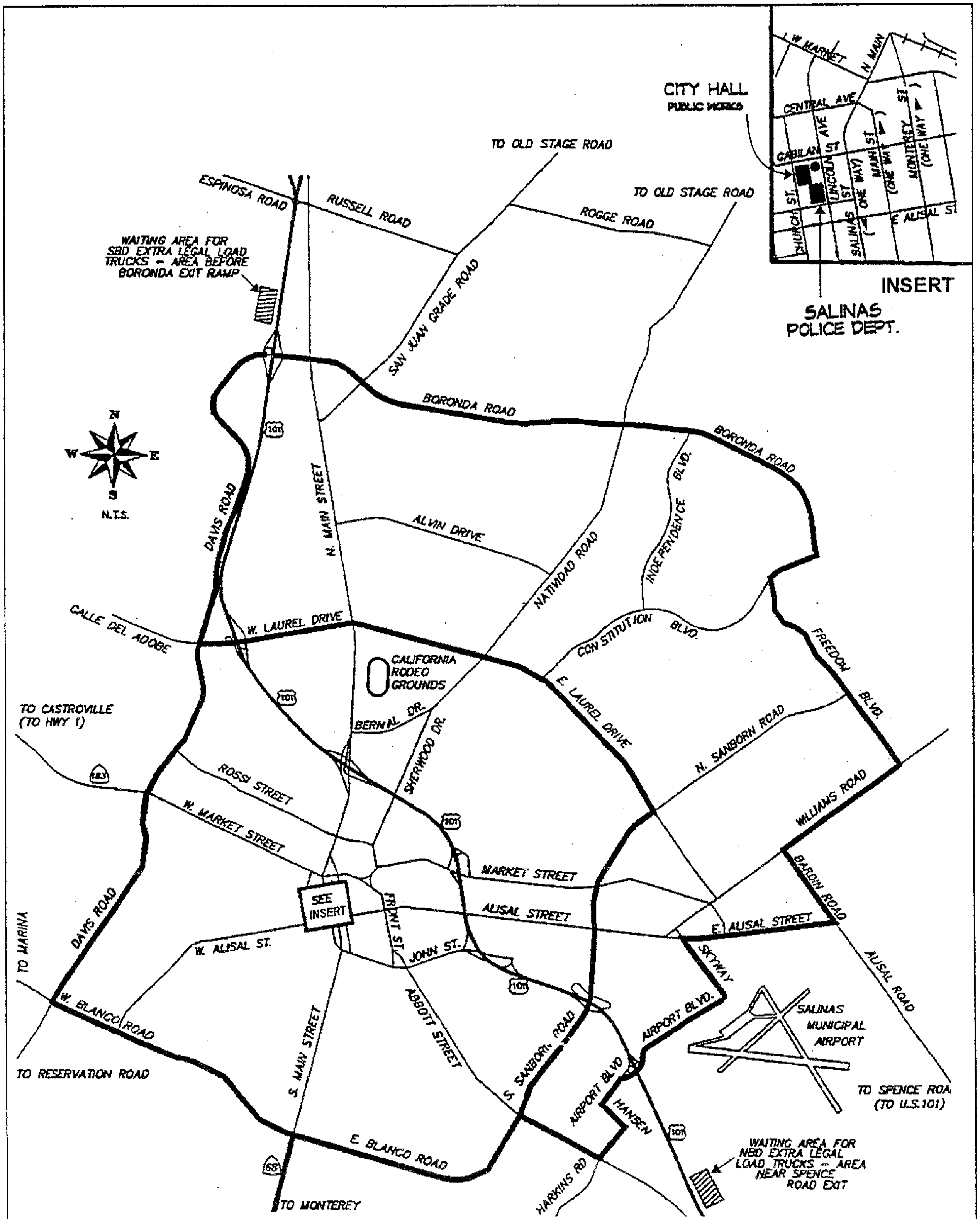
Generally Highway 101 and the City's designated truck routes serve the primary industrial areas of the City of Salinas, except for smaller pockets of light and general industrial developments, such as the western end of West Market Street. In regard to deficiencies in the existing truck routes, the vertical clearance at some of the main grade-separated interchanges along Highway 101 within the City cannot accommodate the passage of large trucks. This will be addressed when Boronda Road is extended from Constitution Boulevard to Williams Road in the summer of 2000.

The City's current truck routes avoid the primary residential areas, and minimize the potential for conflicts associated with heavy truck traffic through the City of Salinas. In the interest of avoiding the negative impacts associated with heavy truck traffic in urban communities, it is preferable that no changes to the existing truck route designations be made. Should major changes to the truck route designations be required in the future, it would be advisable to perform a detailed system evaluation prior to the implementation of such changes. The system evaluation would investigate the travel patterns, trends and costs of goods movement in the region, and the impacts of the proposed changes on the roadway facilities and abutting land uses.

AIR TRANSPORTATION

The Salinas Municipal Airport serves businesses and individuals as a general aviation airport. FIGURE 6 shows the location of the Salinas Municipal Airport and the boundaries of the "area of influence" surrounding the airport. In response to the need for accommodating large business jets, the airport's runway was extended. This runway extension did not require any changes to the airport's "area of influence".

The 1988 Salinas General Plan states detailed guiding policies concerning the airport's operational and capital improvements, the airport's noise abutment program, and the reservation of the airport's "area of influence". Other City policy focus could be on the areas of improved land management, environmental assessment of issues such as noise and air pollution and prevention practices, and connectivity and capacity of City roadways servicing the airport's facilities.



AUTHORIZED CITY OF SALINAS TRUCK ROUTES

SALINAS CITY HALL AND POLICE DEPARTMENT

DESIGNATED AREA FOR TRUCKS TO WAIT FOR SALINAS POLICE ESCORT

Figure 5
Designated Truck Routes

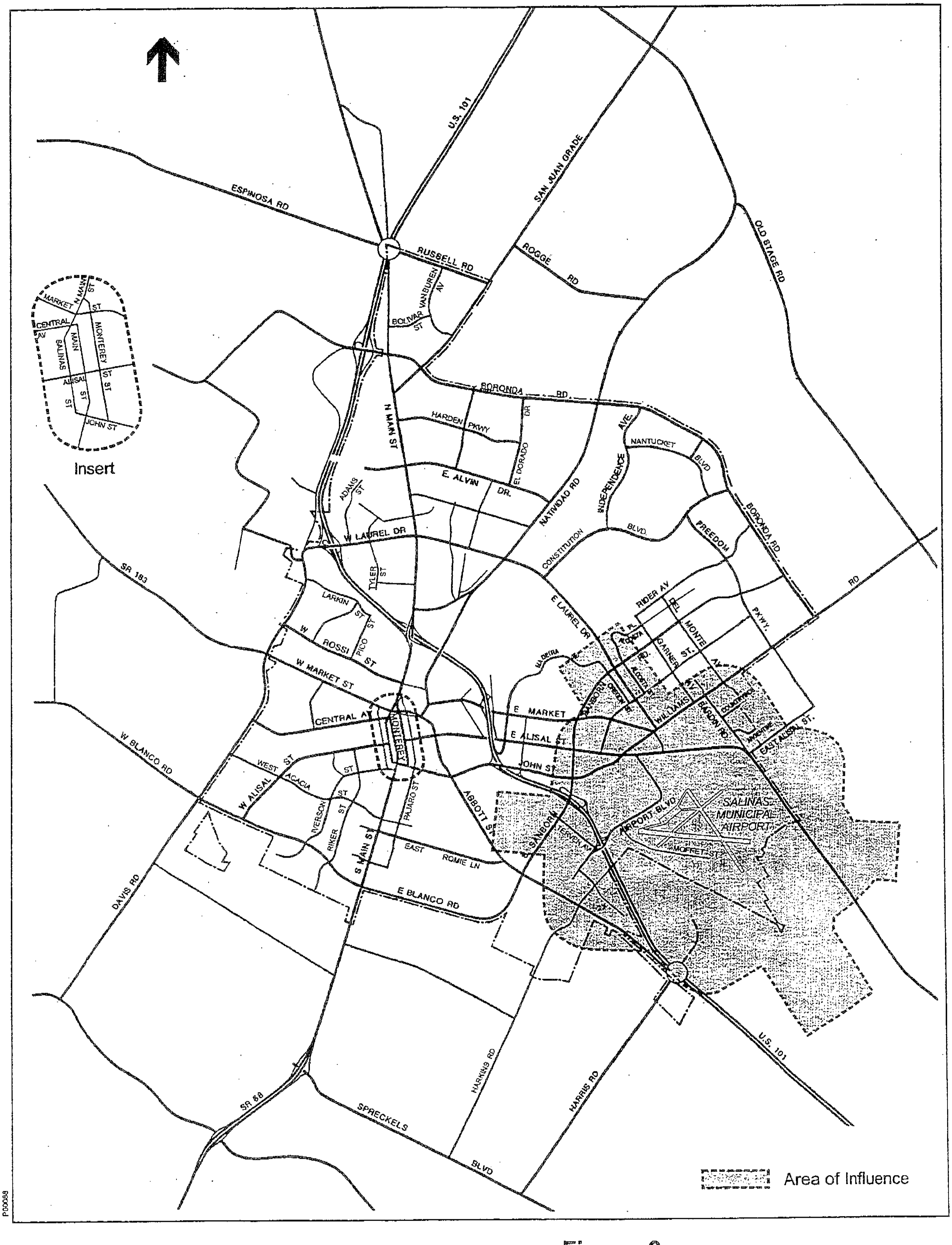


Figure 6
Airport Local Area of Influence

DKS Associates

APPENDIX A

Existing Intersection Operational Conditions During A.M. & P.M. Peak Hours

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #1 Abbot St/ Blanco Rd/Sanborn Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.648
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.8
Optimal Cycle: 53 Level Of Service: C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 1	1 0	1	1 1	1 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	219	350	98	124	339	134	156	391	444	215	504	210
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:	219	350	98	124	339	134	156	391	444	215	504	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	219	350	98	124	339	134	156	391	444	215	504	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	219	350	98	124	339	134	156	391	444	215	504	210
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.:	219	350	98	124	339	134	156	391	444	215	504	210
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.98	1.03	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.19	1.81	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2096	3350	1750	1750	3800	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.06	0.07	0.09	0.08	0.09	0.10	0.25	0.12	0.13	0.12
Crit Moves:	****				****				****	****		
Green Time:	16.1	16.1	16.1	13.8	13.8	13.8	23.4	39.2	39.2	19.0	34.8	34.8
Volume/Cap:	0.65	0.65	0.35	0.51	0.65	0.56	0.38	0.26	0.65	0.65	0.38	0.35
Delay/Veh:	31.0	31.0	28.6	30.8	32.5	32.7	24.8	15.7	20.4	31.5	18.7	18.5
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
ProgAdjFctr:	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:	31.0	31.0	28.6	30.8	32.5	32.7	24.8	15.7	20.4	31.5	18.7	18.5
DesignQueue:	10	17	5	6	17	7	7	14	16	10	19	8

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                    Level Of Service Computation Report
             1985 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Abbot St/ Blanco Rd/Sanborn Rd
********************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):         0.667
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):        27.4
Optimal Cycle:       55               Level Of Service:                 D+
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Split Phase      Split Phase       Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  1  1  0  1   1  1  1  0  1   1  0  2  0  1   1  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:     366  466   243   196  548   343   191  531   169   147  490   181
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:  366  466   243   196  548   343   191  531   169   147  490   181
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   366  466   243   196  548   343   191  531   169   147  490   181
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  366  466   243   196  548   343   191  531   169   147  490   181
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.:   366  466   243   196  548   343   191  531   169   147  490   181
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.98 1.03  0.97  0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97
Lanes:       1.36 1.64  1.00  1.00 2.00  1.00  1.00 2.00  1.00  1.00 2.00  1.00
Final Sat.:  2396 3050  1750  1750 3800  1750  1750 3800  1750  1750 3800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.15 0.15  0.14  0.11 0.14  0.20  0.11 0.14  0.10  0.08 0.13  0.10
Crit Moves:       ****                   ****  ****                   ****
Green Time:  22.9 22.9  22.9  29.4 29.4  29.4  16.4 22.3  22.3  13.4 19.3  19.3
Volume/Cap:  0.67 0.67  0.61  0.38 0.49  0.67  0.67 0.63  0.43  0.63 0.67  0.53
Delay/Veh:   27.6 27.6  28.1  21.4 22.3  25.9  33.8 27.7  25.9  34.7 30.0  28.9
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
ProgAdjFctr: 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  28.1  21.4 22.3  25.9  33.8 27.7  25.9  34.7 30.0  28.9
DesignQueue:   16   21    11     8   22    14     9   24     7     7   23     8
********************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #2 Abbot St/ Harkins Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.458
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	23.9
Optimal Cycle:	46	Level Of Service:	C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 2 0 1			1 0 1 1 0		
Volume Module: 7:30-8:30 AM												
Base Vol:	62	410	66	244	221	183	109	201	47	123	233	111
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:	62	410	66	244	221	183	109	201	47	123	233	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	410	66	244	221	183	109	201	47	123	233	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	410	66	244	221	183	109	201	47	123	233	111
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	410	66	244	221	183	109	201	47	123	233	111
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.04	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.34	0.66
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	1750	2505	1193
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.04	0.14	0.06	0.10	0.06	0.05	0.03	0.07	0.09	0.09
Crit Moves:		****		****			****				****	
Green Time:	7.0	23.6	23.6	30.5	47.1	47.1	13.6	10.0	10.0	23.9	20.3	20.3
Volume/Cap:	0.51	0.46	0.16	0.46	0.12	0.22	0.46	0.53	0.27	0.29	0.46	0.46
Delay/Veh:	36.9	25.1	23.1	21.8	11.3	11.9	31.2	33.6	31.8	23.8	26.9	26.9
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
ProgAdjFctr:	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:	36.9	25.1	23.1	21.8	11.3	11.9	31.2	33.6	31.8	23.8	26.9	26.9
DesignQueue:	3	18	3	10	7	6	5	10	2	5	11	5

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #2 Abbot St/ Harkins Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.536
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	25.6
Optimal Cycle:	46	Level Of Service:	D+

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	7 10 10	7 10 10	7 10 10	7 10 10
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 2 0 1	1 0 1 1 0

Volume Module: 4:00-5:00 PM	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Base Vol:	62	371	152	162	343	121	255	302	90	76	165	237
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:	62	371	152	162	343	121	255	302	90	76	165	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	371	152	162	343	121	255	302	90	76	165	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	371	152	162	343	121	255	302	90	76	165	237
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	371	152	162	343	121	255	302	90	76	165	237

Saturation Flow Module:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	1750	1900	1750

Capacity Analysis Module:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Vol/Sat:	0.04	0.10	0.09	0.09	0.09	0.07	0.15	0.08	0.05	0.04	0.09	0.14
Crit Moves:		****		****			****					****
Green Time:	14.6	18.2	18.2	17.3	20.9	20.9	27.2	30.9	30.9	21.6	25.3	25.3
Volume/Cap:	0.24	0.54	0.48	0.54	0.43	0.33	0.54	0.26	0.17	0.20	0.34	0.54
Delay/Veh:	28.8	28.8	28.7	30.1	26.4	25.8	24.5	19.8	19.2	24.4	23.3	25.1
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
ProgAdjFctr:	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:	28.8	28.8	28.7	30.1	26.4	25.8	24.5	19.8	19.2	24.4	23.3	25.1
DesignQueue:	3	17	7	8	15	5	11	12	3	3	7	10

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #3 Abbot St/Front St/John St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.637
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	23.2
Optimal Cycle:	52	Level Of Service:	C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0
Volume Module: 7:30-8:30 AM												
Base Vol:	71	264	206	40	564	17	64	315	115	505	550	45
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:	71	264	206	40	564	17	64	315	115	505	550	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	71	264	206	40	564	17	64	315	115	505	550	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	264	206	40	564	17	64	315	115	505	550	45
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.:	71	264	206	40	564	17	64	315	115	505	550	45
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.03	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.84	0.16
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	1750	3420	280
Capacity Analysis Module:												
Vol/Sat:	0.04	0.07	0.12	0.02	0.15	0.01	0.04	0.08	0.07	0.29	0.16	0.16
Crit Moves:	****				****			****		****		
Green Time:	7.0	23.1	23.1	7.0	23.1	23.1	7.0	12.9	12.9	45.0	50.9	50.9
Volume/Cap:	0.58	0.30	0.51	0.33	0.64	0.04	0.52	0.64	0.51	0.64	0.32	0.32
Delay/Veh:	39.0	24.2	26.4	34.2	27.5	22.7	37.3	33.4	32.4	17.4	11.0	11.0
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
ProgAdjFctr:	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	24.2	26.4	34.2	27.5	22.7	37.3	33.4	32.4	17.4	11.0	11.0
DesignQueue:	4	11	9	2	25	1	3	16	6	17	16	1

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #3 Abbot St/Front St/John St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.796
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	26.2
Optimal Cycle:	76	Level Of Service:	D+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 2 0 1			1 0 1 1 0		
Volume Module: 4:00-5:00 PM												
Base Vol:	173	634	563	78	400	21	90	515	93	348	538	60
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:	173	634	563	78	400	21	90	515	93	348	538	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	173	634	563	78	400	21	90	515	93	348	538	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	634	563	78	400	21	90	515	93	348	538	60
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.:	173	634	563	78	400	21	90	515	93	348	538	60
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.03	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.79	0.21
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	1750	3328	371
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.32	0.04	0.11	0.01	0.05	0.14	0.05	0.20	0.16	0.16
Crit Moves:			****	****				****		****		
Green Time:	22.6	39.7	39.7	7.0	24.1	24.1	7.0	16.7	16.7	24.6	34.3	34.3
Volume/Cap:	0.44	0.42	0.81	0.64	0.44	0.05	0.73	0.81	0.32	0.81	0.47	0.47
Delay/Veh:	25.8	16.7	25.4	41.5	24.7	22.2	48.0	35.9	28.0	34.7	19.8	19.8
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
ProgAdjFctr:	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:	25.8	16.7	25.4	41.5	24.7	22.2	48.0	35.9	28.0	34.7	19.8	19.8
DesignQueue:	8	22	20	4	17	1	5	25	4	15	20	2

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #4 Abbot St/ Romie Ln

Cycle (sec):	100		Critical Vol./Cap. (X):	0.376
Loss Time (sec):	12	(Y+R = 4 sec)	Average Delay (sec/veh):	18.2
Optimal Cycle:	46		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 1 0 1			0 0 1! 0 0		
Volume Module: 8:30-9:30 AM												
Base Vol:	291	448	16	50	388	103	62	4	180	41	3	3
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:	291	448	16	50	388	103	62	4	180	41	3	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	291	448	16	50	388	103	62	4	180	41	3	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	291	448	16	50	388	103	62	4	180	41	3	3
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.:	291	448	16	50	388	103	62	4	180	41	3	3
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	0.97	0.97
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	0.88	0.06	0.06
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1527	112	112
Capacity Analysis Module:												
Vol/Sat:	0.17	0.12	0.01	0.03	0.10	0.06	0.04	0.00	0.10	0.03	0.03	0.03
Crit Moves:	****				****		****				****	
Green Time:	42.7	61.9	61.9	7.0	26.2	26.2	9.1	19.1	19.1	10.0	10.0	10.0
Volume/Cap:	0.39	0.19	0.01	0.41	0.39	0.22	0.39	0.01	0.54	0.27	0.27	0.27
Delay/Veh:	15.1	6.3	5.6	35.1	23.2	22.0	27.7	24.9	29.1	31.8	31.8	31.8
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
ProgAdjFctr:	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:	15.1	6.3	5.6	35.1	23.2	22.0	27.7	24.9	29.1	31.8	31.8	31.8
DesignQueue:	10	10	0	3	16	4	3	0	8	2	0	0

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                      Level Of Service Computation Report
             1985 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #4 Abbot St/ Romie Ln
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):         0.403
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       18.0
Optimal Cycle:         46              Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Prot+Permit       Permitted
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:        1  0  2  0  1    1  0  2  0  1    1  0  1  0  1    0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 4:00-5:00 PM
Base Vol:     316  638     5    49  385    85    72    5   223    41   10     5
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:  316  638     5    49  385    85    72    5   223    41   10     5
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  638     5    49  385    85    72    5   223    41   10     5
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  316  638     5    49  385    85    72    5   223    41   10     5
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  638     5    49  385    85    72    5   223    41   10     5
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97  0.97 0.97  0.97
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  1.00 1.00  1.00  0.73 0.18  0.09
Final Sat.:  1750 3800  1750  1750 3800  1750  1750 1900  1750  1281  312   156
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.18 0.17  0.00  0.03 0.10  0.05  0.04 0.00  0.13  0.03 0.03  0.03
Crit Moves:  ****                  ****        ****                   ****
Green Time:  43.6 61.1  61.1   7.0 24.5  24.5   9.9 19.9  19.9  10.0 10.0  10.0
Volume/Cap:  0.41 0.27  0.00  0.40 0.41  0.20  0.41 0.01  0.64  0.32 0.32  0.32
Delay/Veh:   15.0  6.9   5.8  35.0 24.3  22.8  27.5 24.4  30.6  32.2 32.2  32.2
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
ProgAdjFctr: 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:  15.0  6.9   5.8  35.0 24.3  22.8  27.5 24.4  30.6  32.2 32.2  32.2
DesignQueue:   10   14     0     3   17     4     4    0    10     2    1     0
********************************************************************************
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #5 Acacia St/ Alisal St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.340
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.6
Optimal Cycle:	33	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 1 1 0			1 0 1 1 0			0 0 1! 0 0			0 0 1! 0 0		
Volume Module: 7:30-8:30 AM												
Base Vol:	54	420	46	40	224	28	50	165	88	28	108	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:	54	420	46	40	224	28	50	165	88	28	108	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:	54	420	46	40	224	28	50	165	88	28	108	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	420	46	40	224	28	50	165	88	28	108	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.:	54	420	46	40	224	28	50	165	88	28	108	25
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.03	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Lanes:	1.00	1.80	0.20	1.00	1.77	0.23	0.17	0.54	0.29	0.17	0.67	0.16
Final Sat.:	1750	3334	365	1750	3289	411	289	953	508	304	1174	272
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.02	0.07	0.07	0.17	0.17	0.17	0.09	0.09	0.09
Crit Moves:		****						****				
Green Time:	37.1	37.1	37.1	37.1	37.1	37.1	50.9	50.9	50.9	50.9	50.9	50.9
Volume/Cap:	0.08	0.34	0.34	0.06	0.18	0.18	0.34	0.34	0.34	0.18	0.18	0.18
Delay/Veh:	15.5	17.3	17.3	15.4	16.2	16.2	11.2	11.2	11.2	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
ProgAdjFctr:	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:	15.5	17.3	17.3	15.4	16.2	16.2	11.2	11.2	11.2	10.1	10.1	10.1
DesignQueue:	2	15	2	1	8	1	1	5	3	1	3	1

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                   Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #5 Acacia St/ Alisal St
******************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):        0.289
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       13.7
Optimal Cycle:         32               Level Of Service:                 B-
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  1  1  0   1  0  1  1  0   0  0  1! 0  0   0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      54  280    36    30  408    38    20  111    52    43  152    39
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:   54  280    36    30  408    38    20  111    52    43  152    39
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  280    36    30  408    38    20  111    52    43  152    39
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   54  280    36    30  408    38    20  111    52    43  152    39
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  280    36    30  408    38    20  111    52    43  152    39
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.03  1.00  0.97 1.03  1.00  0.97 0.97  0.97  0.97 0.97  0.97
Lanes:       1.00 1.77  0.23  1.00 1.82  0.18  0.11 0.61  0.28  0.18 0.65  0.17
Final Sat.:  1750 3278   421  1750 3385   315   191 1061   497   322 1137   292
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.09  0.09  0.02 0.12  0.12  0.10 0.10  0.10  0.13 0.13  0.13
Crit Moves:                         ****                              ****
Green Time:  41.7 41.7  41.7  41.7 41.7  41.7  46.3 46.3  46.3  46.3 46.3  46.3
Volume/Cap:  0.07 0.20  0.20  0.04 0.29  0.29  0.23 0.23  0.23  0.29 0.29  0.29
Delay/Veh:   13.3 14.1  14.1  13.1 14.7  14.7  12.3 12.3  12.3  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
ProgAdjFctr: 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 14.1  14.1  13.1 14.7  14.7  12.3 12.3  12.3  12.7 12.7  12.7
DesignQueue:    2    9     1     1   14     1     1    3     2     1    5     1
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #6 Acacia St/ Main St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.313
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	12.7
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 1	0	1 0	1 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module: 7:30-8:30 AM												
Base Vol:	54	548	13	9	572	59	62	53	129	5	46	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:	54	548	13	9	572	59	62	53	129	5	46	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:	54	548	13	9	572	59	62	53	129	5	46	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	548	13	9	572	59	62	53	129	5	46	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.:	54	548	13	9	572	59	62	53	129	5	46	11
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.03	1.00	1.00	1.00	0.97	0.97	0.97	0.97
Lanes:	1.00	1.95	0.05	1.00	1.81	0.19	0.54	0.46	1.00	0.08	0.74	0.18
Final Sat.:	1750	3614	86	1750	3354	346	970	830	1750	141	1298	310
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.01	0.17	0.17	0.06	0.06	0.07	0.04	0.04	0.04
Crit Moves:	****				****				****			
Green Time:	9.9	57.4	57.4	7.0	54.6	54.6	23.6	23.6	23.6	23.6	23.6	23.6
Volume/Cap:	0.31	0.26	0.26	0.07	0.31	0.31	0.27	0.27	0.31	0.15	0.15	0.15
Delay/Veh:	32.2	8.1	8.1	33.0	9.5	9.5	23.8	23.8	24.1	23.0	23.0	23.0
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
ProgAdjFctr:	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:	32.2	8.1	8.1	33.0	9.5	9.5	23.8	23.8	24.1	23.0	23.0	23.0
DesignQueue:	3	13	0	0	15	2	3	2	6	0	2	0

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-----------------------------------------------------------------------------
-----------------------------------------------------------------------------
                   Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #6 Acacia St/ Main St
*****************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.499
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):       13.4
Optimal Cycle:       41              Level Of Service:                 B-
*****************************************************************************
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected         Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    7   10    10     7   10    10     7   10    10     7   10    10
Lanes:       1  0  1  1  0    1  0  1  1  0    0  1  0  0  1    0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 4:00-5:00 PM
Base Vol:      88 1133    19    20  832    97   141   69   154    11   46    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:   88 1133    19    20  832    97   141   69   154    11   46    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:    88 1133    19    20  832    97   141   69   154    11   46    17
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   88 1133    19    20  832    97   141   69   154    11   46    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.:    88 1133    19    20  832    97   141   69   154    11   46    17
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.03  1.00  0.97 1.03  1.00  1.00 1.00  0.97  0.97 0.97  0.97
Lanes:       1.00 1.97  0.03  1.00 1.79  0.21  0.67 0.33  1.00  0.15 0.62  0.23
Final Sat.:  1750 3639    61  1750 3313   386  1209  591  1750   260 1088   402
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.31  0.31  0.01 0.25  0.25  0.12 0.12  0.09  0.04 0.04  0.04
Crit Moves:       ****        ****                  ****
Green Time:   7.0 58.9  58.9   7.0 58.9  58.9  22.1 22.1  22.1  22.1 22.1  22.1
Volume/Cap:  0.72 0.53  0.53  0.16 0.43  0.43  0.53 0.53  0.40  0.19 0.19  0.19
Delay/Veh:   46.6  9.5   9.5  33.3  8.6   8.6  27.2 27.2  25.7  24.1 24.1  24.1
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
ProgAdjFctr: 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  9.5   9.5  33.3  8.6   8.6  27.2 27.2  25.7  24.1 24.1  24.1
DesignQueue:    5   28     0     1   20     2     6    3     7     0    2     1
*****************************************************************************
```

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------------------------------------------------------------------------------
                      Level Of Service Computation Report
            1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #7 Acosta Pz/ Sanborn Rd
******************************************************************************
Cycle (sec):         100              Critical Vol./Cap. (X):         0.236
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):       13.1
Optimal Cycle:        39              Level Of Service:                  B-
******************************************************************************
Approach:     North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected         Permitted        Permitted
Rights:         Include          Include           Include          Include
Min. Green:    7   10    10    7   10    10    7   10    10    7   10    10
Lanes:       1  0  1  1  0   1  0  1  1  0   0  1  0  0  1   0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:     44  259    13    4  499    10    11    6    78    14    7     5
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:  44  259    13    4  499    10    11    6    78    14    7     5
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  259    13    4  499    10    11    6    78    14    7     5
Reduct Vol:    0    0     0    0    0     0     0    0     0     0    0     0
Reduced Vol:  44  259    13    4  499    10    11    6    78    14    7     5
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  259    13    4  499    10    11    6    78    14    7     5
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.03  1.00  0.97 1.03  1.00  1.00 1.00  0.97  1.00 1.00  0.97
Lanes:       1.00 1.90  0.10  1.00 1.96  0.04  0.65 0.35  1.00  0.67 0.33  1.00
Final Sat.:  1750 3523   177  1750 3627    73  1165  635  1750  1200  600  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.07  0.07  0.00 0.14  0.14  0.01 0.01  0.04  0.01 0.01  0.00
Crit Moves:  ****                   ****                    ****
Green Time:  10.7 40.6  40.6  28.4 58.4  58.4  18.9 18.9  18.9  18.9 18.9  18.9
Volume/Cap:  0.24 0.18  0.18  0.01 0.24  0.24  0.05 0.05  0.24  0.06 0.06  0.02
Delay/Veh:   31.2 14.5  14.5  19.5  7.6   7.6  25.2 25.2  26.2  25.3 25.3  25.1
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
ProgAdjFctr: 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:  31.2 14.5  14.5  19.5  7.6   7.6  25.2 25.2  26.2  25.3 25.3  25.1
DesignQueue:    2    9     0    0   12     0     0    0     4     1    0     0
******************************************************************************
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                    Level Of Service Computation Report
            1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #7 Acosta Pz/ Sanborn Rd
******************************************************************************
Cycle (sec):          100                Critical Vol./Cap. (X):        0.360
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        12.3
Optimal Cycle:         39                Level Of Service:                  B
******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:        1  0  1  1  0   1  0  1  1  0   0  1  0  0  1   0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:     178  922    23    12  616    22    20   18    95    34   39     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:  178  922    23    12  616    22    20   18    95    34   39     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:   178  922    23    12  616    22    20   18    95    34   39     8
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  178  922    23    12  616    22    20   18    95    34   39     8
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.:   178  922    23    12  616    22    20   18    95    34   39     8
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.03  1.00  0.97 1.03  1.00  1.00 1.00  0.97  1.00 1.00  0.97
Lanes:       1.00 1.95  0.05  1.00 1.93  0.07  0.53 0.47  1.00  0.47 0.53  1.00
Final Sat.:  1750 3610    90  1750 3572   128   947  853  1750   838  962  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.10 0.26  0.26  0.01 0.17  0.17  0.02 0.02  0.05  0.04 0.04  0.00
Crit Moves:       ****        ****                          ****
Green Time:  27.4 66.8  66.8   7.0 46.4  46.4  14.2 14.2  14.2  14.2 14.2  14.2
Volume/Cap:  0.37 0.38  0.38  0.10 0.37  0.37  0.15 0.15  0.38  0.29 0.29  0.03
Delay/Veh:   22.5  5.7   5.7  33.1 13.2  13.2  28.6 28.6  30.1  29.3 29.3  28.1
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
ProgAdjFctr: 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:  22.5  5.7   5.7  33.1 13.2  13.2  28.6 28.6  30.1  29.3 29.3  28.1
DesignQueue:    7   18     0     1   19     1     1    1     5     2    2     0
******************************************************************************
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #8 Adams St/ Laurel Dr

Cycle (sec):	100	Critical Vol./Cap. (X):	0.754
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	21.1
Optimal Cycle:	68	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Permitted	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	7	0	10	7	10	0	0	10	10
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 2 0 0			0 0 1 1 0		
Volume Module: 7:30-8:30 AM												
Base Vol:	0	0	0	38	0	452	242	703	0	0	971	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:	0	0	0	38	0	452	242	703	0	0	971	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:	0	0	0	38	0	452	242	703	0	0	971	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	38	0	452	242	703	0	0	971	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.:	0	0	0	38	0	452	242	703	0	0	971	17
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.03	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.96	0.04
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	0	3636	64
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.26	0.14	0.18	0.00	0.00	0.27	0.27
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	34.3	0.0	34.3	18.3	53.7	0.0	0.0	35.4	35.4
Volume/Cap:	0.00	0.00	0.00	0.06	0.00	0.75	0.75	0.34	0.00	0.00	0.75	0.75
Delay/Veh:	0.0	0.0	0.0	16.8	0.0	25.9	36.0	10.0	0.0	0.0	23.4	23.4
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
ProgAdjFctr:	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	16.8	0.0	25.9	36.0	10.0	0.0	0.0	23.4	23.4
DesignQueue:	0	0	0	1	0	18	11	19	0	0	37	1

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                     Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #8 Adams St/ Laurel Dr
*******************************************************************************
Cycle (sec):         100             Critical Vol./Cap. (X):        0.811
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):      19.4
Optimal Cycle:        80             Level Of Service:                 C
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected        Protected        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0     0     0    7     0    10    7    10     0    0    10    10
Lanes:        0  0  0  0  0   1  0  0  0  1   1  0  2  0  0   0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:       0     0     0   63     0   293   539 1302     0     0  833    47
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   63     0   293   539 1302     0     0  833    47
User Adj:    1.00  1.00  1.00 1.00  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00  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   63     0   293   539 1302     0     0  833    47
Reduct Vol:     0     0     0    0     0     0     0    0     0     0    0     0
Reduced Vol:    0     0     0   63     0   293   539 1302     0     0  833    47
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   63     0   293   539 1302     0     0  833    47
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800  1800  1800 1800  1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97  1.06  0.97 0.97  1.06  0.97  0.97 1.06  0.97  0.97 1.03  1.00
Lanes:       0.00  0.00  0.00 1.00  0.00  1.00  1.00 2.00  0.00  0.00 1.89  0.11
Final Sat.:     0     0     0 1750     0  1750  1750 3800     0     0 3502   198
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.00  0.00 0.04  0.00  0.17  0.31 0.34  0.00  0.00 0.24  0.24
Crit Moves:                               ****  ****                  ****
Green Time:   0.0   0.0   0.0 20.7   0.0  20.7  38.0 67.3   0.0   0.0 29.3  29.3
Volume/Cap:  0.00  0.00  0.00 0.17  0.00  0.81  0.81 0.51  0.00  0.00 0.81  0.81
Delay/Veh:    0.0   0.0   0.0 24.8   0.0  37.6  26.3  6.3   0.0   0.0 28.2  28.2
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
ProgAdjFctr: 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 24.8   0.0  37.6  26.3  6.3   0.0   0.0 28.2  28.2
DesignQueue:    0     0     0    3     0    13    20   26     0     0   35     2
*******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #9 Airport Blvd/ De La Torre/ 101 NB

Cycle (sec):	100	Critical Vol./Cap. (X):	0.530
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	20.3
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	0	1 0	0 1	0	0 1
Volume Module: 7:30-8:30 AM												
Base Vol:	33	38	22	51	16	64	157	508	24	21	149	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:	33	38	22	51	16	64	157	508	24	21	149	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:	33	38	22	51	16	64	157	508	24	21	149	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	38	22	51	16	64	157	508	24	21	149	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.:	33	38	22	51	16	64	157	508	24	21	149	100
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.00	1.00	1.00	1.00	0.97
Lanes:	0.46	0.54	1.00	0.76	0.24	1.00	1.00	0.95	0.05	0.12	0.88	1.00
Final Sat.:	837	963	1750	1370	430	1750	1750	1719	81	222	1578	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.01	0.04	0.04	0.04	0.09	0.30	0.30	0.09	0.09	0.06
Crit Moves:		****			****			****			****	
Green Time:	10.0	10.0	10.0	10.0	10.0	10.0	51.5	51.5	51.5	16.5	16.5	16.5
Volume/Cap:	0.39	0.39	0.13	0.37	0.37	0.37	0.17	0.57	0.57	0.57	0.57	0.35
Delay/Veh:	32.8	32.8	31.2	32.6	32.6	32.5	9.8	13.3	13.3	31.3	31.3	28.4
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
ProgAdjFctr:	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:	32.8	32.8	31.2	32.6	32.6	32.5	9.8	13.3	13.3	31.3	31.3	28.4
DesignQueue:	2	2	1	3	1	3	4	15	1	1	7	5

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
            1985 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #9 Airport Blvd/ De La Torre/ 101 NB
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap. (X):          0.673
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):         23.6
Optimal Cycle:        56               Level Of Service:                  C-
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase      Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:        0  1  0  0  1    0  1  0  0  1    1  0  0  1  0    0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      13   34    23    47   18    36   626  339    55    18  171   302
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:   13   34    23    47   18    36   626  339    55    18  171   302
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    13   34    23    47   18    36   626  339    55    18  171   302
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   13   34    23    47   18    36   626  339    55    18  171   302
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.:    13   34    23    47   18    36   626  339    55    18  171   302
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  1.00 1.00  0.97  1.00 1.00  0.97  0.97 1.00  1.00  1.00 1.00  0.97
Lanes:       0.28 0.72  1.00  0.72 0.28  1.00  1.00 0.86  0.14  0.10 0.90  1.00
Final Sat.:   498 1302  1750  1302  498  1750  1750 1549   251   171 1629  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.03  0.01  0.04 0.04  0.02  0.36 0.22  0.22  0.11 0.11  0.17
Crit Moves:       ****             ****        ****                         ****
Green Time:  10.0 10.0  10.0  10.0 10.0  10.0  45.9 45.9  45.9  22.1 22.1  22.1
Volume/Cap:  0.26 0.26  0.13  0.36 0.36  0.21  0.78 0.48  0.48  0.47 0.47  0.78
Delay/Veh:   31.8 31.8  31.2  32.5 32.5  31.5  20.8 14.6  14.6  26.4 26.4  34.6
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
ProgAdjFctr: 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:  31.8 31.8  31.2  32.5 32.5  31.5  20.8 14.6  14.6  26.4 26.4  34.6
DesignQueue:    1    2     1     2    1     2    21   11     2     1    8    14
********************************************************************************
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                      Level Of Service Computation Report
            1994 HCM Unsignalized Method (Base Volume Alternative)
***********************************************************************************
Intersection #10 Airport Blvd/ Moffet St
***********************************************************************************
Average Delay (sec/veh):       1.1          Worst Case Level Of Service:          B
***********************************************************************************
Approach:       North Bound       South Bound        East Bound        West Bound
Movement:     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled      Uncontrolled        Stop Sign         Stop Sign
Rights:           Include           Include            Include           Include
Lanes:        0  0  1  0  1     0  1  0  0  0     0  0  0  0  0     1  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:        0  157   426    88  138     0     0    0     0    69    0    15
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  157   426    88  138     0     0    0     0    69    0    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  157   426    88  138     0     0    0     0    69    0    15
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:      0  157   426    88  138     0     0    0     0    69    0    15
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%                0%                0%                0%
% Cycle/Cars:   xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
% Truck/Comb:   xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
PCE Adj:      1.10 1.00  1.00  1.10 1.00  1.00  1.10 1.10  1.10  1.10 1.10  1.10
Cycl/Car PCE:   xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Adj Vol.:        0  157   426    97  138     0     0    0     0    76    0    17
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx   2.1 xxxx xxxxx xxxxx xxxx xxxxx   3.4 xxxx   2.6
Critical Gp:xxxxx xxxx xxxxx   5.0 xxxx xxxxx xxxxx xxxx xxxxx   6.5 xxxx   5.5
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   583 xxxx xxxxx  xxxx xxxx xxxxx   383 xxxx   157
Potent Cap.: xxxx xxxx xxxxx   904 xxxx xxxxx  xxxx xxxx xxxxx   635 xxxx  1153
Adj Cap:     xxxx xxxx xxxxx  1.00 xxxx xxxxx  xxxx xxxx xxxxx  0.88 xxxx  1.00
Move Cap.:   xxxx xxxx xxxxx   904 xxxx xxxxx  xxxx xxxx xxxxx   561 xxxx  1153
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx   4.4 xxxx xxxxx xxxxx xxxx xxxxx   7.3 xxxx   3.2
LOS by Move:    *    *     *     A    *     *     *    *     *     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:        0.0               1.8               0.0               6.6
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-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
                  Level Of Service Computation Report
           1994 HCM Unsignalized Method (Base Volume Alternative)
*******************************************************************************
Intersection #10 Airport Blvd/ Moffet St
*******************************************************************************
Average Delay (sec/veh):      5.5         Worst Case Level Of Service:        C
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:      Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:          Include          Include          Include          Include
Lanes:        0  0  1  0  1   0  1  0  0  0   0  0  0  0  0   1  0  0  0  1
------------|----------------||----------------||----------------||----------------|
Volume Module: 5:00-6:00 PM
Base Vol:        0  266    53     5  187     0     0    0     0   316    0    68
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  266    53     5  187     0     0    0     0   316    0    68
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 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  266    53     5  187     0     0    0     0   316    0    68
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:      0  266    53     5  187     0     0    0     0   316    0    68
------------|----------------||----------------||----------------||----------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:    xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:    xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:      1.10 1.00  1.00  1.10 1.00  1.00  1.10 1.10  1.10  1.10 1.10  1.10
Cycl/Car PCE:    xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:    xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:        0  266    53     6  187     0     0    0     0   348    0    75
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx   2.1 xxxx xxxxx xxxxx xxxx xxxxx   3.4 xxxx   2.6
Critical Gp:xxxxx xxxx xxxxx   5.0 xxxx xxxxx xxxxx xxxx xxxxx   6.5 xxxx   5.5
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   319 xxxx xxxxx  xxxx xxxx xxxxx   458 xxxx   266
Potent Cap.: xxxx xxxx xxxxx  1208 xxxx xxxxx  xxxx xxxx xxxxx   575 xxxx  1015
Adj Cap:     xxxx xxxx xxxxx  1.00 xxxx xxxxx  xxxx xxxx xxxxx  0.99 xxxx  1.00
Move Cap.:   xxxx xxxx xxxxx  1208 xxxx xxxxx  xxxx xxxx xxxxx   572 xxxx  1015
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx   3.0 xxxx xxxxx xxxxx xxxx xxxxx  14.0 xxxx   3.8
LOS by Move:    *    *     *     A    *     *     *    *     *     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 xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:       0.0              0.1              0.0             12.2
```

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------------------------------------------------------------------------------
------------------------------------------------------------------------------
                     Level Of Service Computation Report
            1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #11 Airport Blvd/101 SB/Terven Ave
******************************************************************************
Cycle (sec):          100                Critical Vol./Cap. (X):        0.691
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        15.3
Optimal Cycle:         58                Level Of Service:                 C+
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  1  0  1   1  0  1  1  0   0  0  1! 0  0   0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:     136   62    27    15  102    60    35   27   271   292  665    82
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:  136   62    27    15  102    60    35   27   271   292  665    82
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   136   62    27    15  102    60    35   27   271   292  665    82
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  136   62    27    15  102    60    35   27   271   292  665    82
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.:   136   62    27    15  102    60    35   27   271   292  665    82
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.97  0.97 1.04  1.00  0.97 0.97  0.97  1.00 1.00  0.97
Lanes:       1.00 1.00  1.00  1.00 1.24  0.76  0.11 0.08  0.81  0.31 0.69  1.00
Final Sat.:  1750 1900  1750  1750 2329  1370   184  142  1424   549 1251  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.08 0.03  0.02  0.01 0.04  0.04  0.19 0.19  0.19  0.53 0.53  0.05
Crit Moves:       ****             ****                               ****
Green Time:  10.0 10.0  10.0  10.0 10.0  10.0  68.0 68.0  68.0  68.0 68.0  68.0
Volume/Cap:  0.78 0.33  0.15  0.09 0.44  0.44  0.28 0.28  0.28  0.78 0.78  0.07
Delay/Veh:   46.4 32.2  31.3  31.1 32.7  32.7   4.8  4.8   4.8  10.7 10.7   4.1
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
ProgAdjFctr: 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:  46.4 32.2  31.3  31.1 32.7  32.7   4.8  4.8   4.8  10.7 10.7   4.1
DesignQueue:    7    3     1     1    5     3     1    1     5     6   14     1
******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #11 Airport Blvd/101 SB/Terven Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.707
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 17.0
Optimal Cycle: 60 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 1 0 1			1 0 1 1 0			0 0 1! 0 0			0 1 0 0 1		
Volume Module: 4:00-5:00 PM												
Base Vol:	153	72	29	47	165	65	202	61	650	131	305	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:	153	72	29	47	165	65	202	61	650	131	305	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:	153	72	29	47	165	65	202	61	650	131	305	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	72	29	47	165	65	202	61	650	131	305	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.:	153	72	29	47	165	65	202	61	650	131	305	21
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.04	1.00	0.97	0.97	0.97	1.00	1.00	0.97
Lanes:	1.00	1.00	1.00	1.00	1.42	0.58	0.22	0.07	0.71	0.30	0.70	1.00
Final Sat.:	1750	1900	1750	1750	2654	1045	387	117	1246	541	1259	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.04	0.02	0.03	0.06	0.06	0.52	0.52	0.52	0.24	0.24	0.01
Crit Moves:		****			****			****				
Green Time:	11.2	11.2	11.2	10.0	10.0	10.0	66.8	66.8	66.8	66.8	66.8	66.8
Volume/Cap:	0.78	0.34	0.15	0.27	0.62	0.62	0.78	0.78	0.78	0.36	0.36	0.02
Delay/Veh:	45.0	31.5	30.5	31.8	35.1	35.1	11.2	11.2	11.2	5.6	5.6	4.2
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
ProgAdjFctr:	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:	45.0	31.5	30.5	31.8	35.1	35.1	11.2	11.2	11.2	5.6	5.6	4.2
DesignQueue:	8	4	1	2	8	3	4	1	14	3	6	0

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                     Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #12 Alisal St/ Blanco Rd
******************************************************************************
Cycle (sec):          100                Critical Vol./Cap. (X):        0.381
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        14.8
Optimal Cycle:         39                Level Of Service:                 B-
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Prot+Permit       Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0     0     0    7     0    10    7    10     0    0    10    10
Lanes:        0  0  0  0  0   1  0  0  0  1    1  0  2  0  0   0  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 PM
Base Vol:       0     0     0  146     0   167   220  488     0     0  433    94
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  146     0   167   220  488     0     0  433    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:     0     0     0  146     0   167   220  488     0     0  433    94
Reduct Vol:     0     0     0    0     0     0     0    0     0     0    0     0
Reduced Vol:    0     0     0  146     0   167   220  488     0     0  433    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.:     0     0     0  146     0   167   220  488     0     0  433    94
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800  1800  1800 1800  1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97  1.06  0.97 0.97  1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97
Lanes:       0.00  0.00  0.00 1.00  0.00  1.00  1.00 2.00  0.00  0.00 2.00  1.00
Final Sat.:     0     0     0 1750     0  1750  1750 3800     0     0 3800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.00  0.00 0.08  0.00  0.10  0.13 0.13  0.00  0.00 0.11  0.05
Crit Moves:                               ****  ****                 ****
Green Time:   0.0   0.0   0.0 25.1   0.0  25.1  33.0 62.9   0.0   0.0 29.9  29.9
Volume/Cap:  0.00  0.00  0.00 0.33  0.00  0.38  0.38 0.20  0.00  0.00 0.38  0.18
Delay/Veh:    0.0   0.0   0.0 23.5   0.0  23.9   7.1  6.0   0.0   0.0 21.2  19.7
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
ProgAdjFctr: 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 23.5   0.0  23.9   7.1  6.0   0.0   0.0 21.2  19.7
DesignQueue:    0     0     0    6     0     7     8   10     0     0   17     4
******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #12 Alisal St/ Blanco Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.485
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	15.1
Optimal Cycle:	40	Level Of Service:	C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	0	10	7	10	0	0	10	10
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 2 0 0			0 0 2 0 1		
Volume Module: 5:00-6:00 PM												
Base Vol:	0	0	0	141	0	228	195	508	0	0	703	223
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	141	0	228	195	508	0	0	703	223
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	141	0	228	195	508	0	0	703	223
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	141	0	228	195	508	0	0	703	223
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	141	0	228	195	508	0	0	703	223
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.13	0.11	0.13	0.00	0.00	0.18	0.13
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	26.9	0.0	26.9	23.0	61.1	0.0	0.0	38.2	38.2
Volume/Cap:	0.00	0.00	0.00	0.30	0.00	0.48	0.48	0.22	0.00	0.00	0.48	0.33
Delay/Veh:	0.0	0.0	0.0	22.2	0.0	24.0	8.9	6.6	0.0	0.0	18.0	16.8
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
ProgAdjFctr:	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	22.2	0.0	24.0	8.9	6.6	0.0	0.0	18.0	16.8
DesignQueue:	0	0	0	6	0	10	9	11	0	0	25	8

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #13 Alisal St/ Front St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.402
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.3
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 2 0 1			1 0 1 1 0		
Volume Module: 7:30-8:30 AM												
Base Vol:	46	295	73	114	539	70	71	395	64	109	429	106
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:	46	295	73	114	539	70	71	395	64	109	429	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	295	73	114	539	70	71	395	64	109	429	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	295	73	114	539	70	71	395	64	109	429	106
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	295	73	114	539	70	71	395	64	109	429	106
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.03	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.59	0.41
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	1750	2966	733
Capacity Analysis Module:												
Vol/Sat:	0.03	0.08	0.04	0.07	0.14	0.04	0.04	0.10	0.04	0.06	0.14	0.14
Crit Moves:	****				****		****				****	
Green Time:	7.0	24.8	24.8	17.3	35.1	35.1	10.0	38.9	38.9	7.0	35.8	35.8
Volume/Cap:	0.38	0.31	0.17	0.38	0.40	0.11	0.40	0.27	0.09	0.89	0.40	0.40
Delay/Veh:	34.7	23.4	22.5	28.1	18.7	16.7	32.9	15.9	14.7	69.0	18.4	18.4
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
ProgAdjFctr:	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	23.4	22.5	28.1	18.7	16.7	32.9	15.9	14.7	69.0	18.4	18.4
DesignQueue:	2	13	3	5	20	3	4	14	2	6	16	4

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #13 Alisal St/ Front St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.581
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 23.4
Optimal Cycle: 47 Level Of Service: C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0
Volume Module: 5:00-6:00 PM												
Base Vol:	73	567	130	170	324	77	143	592	53	68	475	204
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	567	130	170	324	77	143	592	53	68	475	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	567	130	170	324	77	143	592	53	68	475	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	567	130	170	324	77	143	592	53	68	475	204
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	567	130	170	324	77	143	592	53	68	475	204
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.04	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.38	0.62
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	1750	2588	1111
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.07	0.10	0.09	0.04	0.08	0.16	0.03	0.04	0.18	0.18
Crit Moves:		****		****			****				****	
Green Time:	17.4	25.7	25.7	16.7	24.9	24.9	14.1	38.6	38.6	7.0	31.6	31.6
Volume/Cap:	0.24	0.58	0.29	0.58	0.34	0.18	0.58	0.40	0.08	0.56	0.58	0.58
Delay/Veh:	27.1	25.3	22.8	31.3	23.5	22.4	33.1	17.1	14.8	38.2	22.3	22.3
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
ProgAdjFctr:	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:	27.1	25.3	22.8	31.3	23.5	22.4	33.1	17.1	14.8	38.2	22.3	22.3
DesignQueue:	3	24	5	8	14	3	7	21	2	4	19	8

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #14 Alisal St/ Hebbron Av

Cycle (sec):	100	Critical Vol./Cap. (X):	0.172
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	11.9
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1 0 0 1			0 1 0 0 1			1 0 2 0 1			1 0 2 0 1		
Volume Module: 7:30-8:30 AM												
Base Vol:	15	13	12	24	29	37	16	271	8	12	429	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:	15	13	12	24	29	37	16	271	8	12	429	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:	15	13	12	24	29	37	16	271	8	12	429	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	13	12	24	29	37	16	271	8	12	429	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.:	15	13	12	24	29	37	16	271	8	12	429	22
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.54	0.46	1.00	0.45	0.55	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	964	836	1750	815	985	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.03	0.03	0.02	0.01	0.07	0.00	0.01	0.11	0.01
Crit Moves:					****		****				****	
Green Time:	16.8	16.8	16.8	16.8	16.8	16.8	7.0	41.9	41.9	29.3	64.2	64.2
Volume/Cap:	0.09	0.09	0.04	0.18	0.18	0.13	0.13	0.17	0.01	0.02	0.18	0.02
Delay/Veh:	26.8	26.8	26.5	27.2	27.2	26.9	33.2	13.8	12.9	19.1	5.5	4.9
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
ProgAdjFctr:	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:	26.8	26.8	26.5	27.2	27.2	26.9	33.2	13.8	12.9	19.1	5.5	4.9
DesignQueue:	1	1	1	1	1	2	1	9	0	0	9	0

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                    Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #14 Alisal St/ Hebbron Av
*******************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):         0.325
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       11.2
Optimal Cycle:         39              Level Of Service:                  B
*******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:         0  1  0  0  1   0  1  0  0  1   1  0  2  0  1   1  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      31   61    33    54   27    53    89  803    68    42  602    75
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:   31   61    33    54   27    53    89  803    68    42  602    75
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    31   61    33    54   27    53    89  803    68    42  602    75
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   31   61    33    54   27    53    89  803    68    42  602    75
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   61    33    54   27    53    89  803    68    42  602    75
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  1.00 1.00  0.97  1.00 1.00  0.97  0.97 1.06  0.97  0.97 1.06  0.97
Lanes:       0.34 0.66  1.00  0.67 0.33  1.00  1.00 2.00  1.00  1.00 2.00  1.00
Final Sat.:   607 1193  1750  1200  600  1750  1750 3800  1750  1750 3800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.05  0.02  0.04 0.05  0.03  0.05 0.21  0.04  0.02 0.16  0.04
Crit Moves:       ****                              ****        ****
Green Time:  15.7 15.7  15.7  15.7 15.7  15.7   7.0 64.9  64.9   7.4 65.3  65.3
Volume/Cap:  0.33 0.33  0.12  0.29 0.29  0.19  0.73 0.33  0.06  0.33 0.24  0.07
Delay/Veh:   28.7 28.7  27.5  28.4 28.4  27.9  47.3  6.0   4.9  33.9  5.4   4.8
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
ProgAdjFctr: 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:  28.7 28.7  27.5  28.4 28.4  27.9  47.3  6.0   4.9  33.9  5.4   4.8
DesignQueue:    1    3     2     3    1     3     5   17     1     2   12     1
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #15 Alisal St/ Homestead Av

Cycle (sec):	100	Critical Vol./Cap. (X):	0.279
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	13.2
Optimal Cycle:	32	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	0 0	1	0 1	0 0	1	0 1	1 0	1	0 1	1 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	44	91	18	100	119	121	51	408	16	20	238	156
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:	44	91	18	100	119	121	51	408	16	20	238	156
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	91	18	100	119	121	51	408	16	20	238	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	91	18	100	119	121	51	408	16	20	238	156
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	91	18	100	119	121	51	408	16	20	238	156
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.03	0.97	1.00	1.03	0.97
Lanes:	0.33	0.67	1.00	0.46	0.54	1.00	0.23	1.77	1.00	0.16	1.84	1.00
Final Sat.:	587	1213	1750	822	978	1750	411	3289	1750	287	3413	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.01	0.12	0.12	0.07	0.12	0.12	0.01	0.07	0.07	0.09
Crit Moves:					****			****				
Green Time:	43.6	43.6	43.6	43.6	43.6	43.6	44.4	44.4	44.4	44.4	44.4	44.4
Volume/Cap:	0.17	0.17	0.02	0.28	0.28	0.16	0.28	0.28	0.02	0.16	0.16	0.20
Delay/Veh:	13.1	13.1	12.2	13.8	13.8	13.0	13.4	13.4	11.8	12.6	12.6	12.9
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
ProgAdjFctr:	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	12.2	13.8	13.8	13.0	13.4	13.4	11.8	12.6	12.6	12.9
DesignQueue:	1	3	1	3	4	4	2	13	0	1	7	5

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                    Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #15 Alisal St/ Homestead Av
******************************************************************************
Cycle (sec):         100              Critical Vol./Cap. (X):        0.329
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):      14.0
Optimal Cycle:        32              Level Of Service:                 B-
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:    7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        0  1  0  0  1   0  1  0  0  1   0  1  1  0  1   0  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      51  165    14   122  155   139    91  298    31    30  456   238
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:   51  165    14   122  155   139    91  298    31    30  456   238
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  165    14   122  155   139    91  298    31    30  456   238
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   51  165    14   122  155   139    91  298    31    30  456   238
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  165    14   122  155   139    91  298    31    30  456   238
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  1.00 1.00  0.97  1.00 1.00  0.97  1.00 1.04  0.97  1.00 1.03  0.97
Lanes:       0.24 0.76  1.00  0.44 0.56  1.00  0.48 1.52  1.00  0.13 1.87  1.00
Final Sat.:   425 1375  1750   793 1007  1750   865 2834  1750   228 3471  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.12 0.12  0.01  0.15 0.15  0.08  0.11 0.11  0.02  0.13 0.13  0.14
Crit Moves:                        ****                                     ****
Green Time:  46.7 46.7  46.7  46.7 46.7  46.7  41.3 41.3  41.3  41.3 41.3  41.3
Volume/Cap:  0.26 0.26  0.02  0.33 0.33  0.17  0.25 0.25  0.04  0.32 0.32  0.33
Delay/Veh:   12.3 12.3  10.9  12.8 12.8  11.7  14.7 14.7  13.3  15.1 15.1  15.3
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
ProgAdjFctr: 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:  12.3 12.3  10.9  12.8 12.8  11.7  14.7 14.7  13.3  15.1 15.1  15.3
DesignQueue:    2    5     0     4    5     4     3   10     1     1   15     8
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                  Level Of Service Computation Report
         1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #16 Alisal St/ John St/ Williams Rd
******************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.273
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):      17.4
Optimal Cycle:       46              Level Of Service:                 C
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected         Permitted        Protected        Protected
Rights:          Include           Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10     0
Lanes:        1  0  1  1  0   1  1  0  0  1   1  0  1  1  0   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      24  138   112     4  250   141    66  118    10    95  109     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:   24  138   112     4  250   141    66  118    10    95  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:    24  138   112     4  250   141    66  118    10    95  109     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   24  138   112     4  250   141    66  118    10    95  109     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.:    24  138   112     4  250   141    66  118    10    95  109     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.05  1.00  0.97 1.06  0.97  0.97 1.03  1.00  0.97 1.06  0.97
Lanes:       1.00 1.08  0.92  1.00 1.00  1.00  1.00 1.84  0.16  1.00 1.00  1.00
Final Sat.:  1750 2041  1657  1750 1900  1750  1750 3411   289  1750 1900  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.07  0.07  0.00 0.13  0.08  0.04 0.03  0.03  0.05 0.06  0.00
Crit Moves:  ****                  ****        ****                    ****
Green Time:   7.0 54.0  54.0  47.0 47.0  47.0  13.5 20.0  20.0  14.0 20.5   0.0
Volume/Cap:  0.20 0.13  0.13  0.00 0.28  0.17  0.28 0.17  0.17  0.39 0.28  0.00
Delay/Veh:   33.4  8.6   8.6  10.7 12.3  11.6  29.7 25.2  25.2  30.3 25.6   0.0
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
ProgAdjFctr: 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:  33.4  8.6   8.6  10.7 12.3  11.6  29.7 25.2  25.2  30.3 25.6   0.0
DesignQueue:    1    4     3     0    8     4     3    5     0     5    5     0
******************************************************************************
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #16 Alisal St/ John St/ Williams Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.457
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.6
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Permitted			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:		1 0 1 1 0			1 1 0 0 1			1 0 1 1 0			1 0 1 0 1	
Volume Module: 4:00-5:00 PM												
Base Vol:	29	390	208	7	269	246	220	195	27	142	225	3
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	390	208	7	269	246	220	195	27	142	225	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	390	208	7	269	246	220	195	27	142	225	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	390	208	7	269	246	220	195	27	142	225	3
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	390	208	7	269	246	220	195	27	142	225	3
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.04	1.00	0.97	1.06	0.97	0.97	1.03	1.00	0.97	1.06	0.97
Lanes:	1.00	1.29	0.71	1.00	1.00	1.00	1.00	1.75	0.25	1.00	1.00	1.00
Final Sat.:	1750	2412	1286	1750	1900	1750	1750	3250	450	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.16	0.00	0.14	0.14	0.13	0.06	0.06	0.08	0.12	0.00
Crit Moves:	****				****		****				****	
Green Time:	7.0	36.7	36.7	29.7	29.7	29.7	26.4	10.0	10.0	41.3	24.9	24.9
Volume/Cap:	0.24	0.44	0.44	0.01	0.48	0.47	0.48	0.60	0.60	0.20	0.48	0.01
Delay/Veh:	33.6	18.3	18.3	18.8	22.3	22.4	24.2	34.7	34.7	14.3	24.9	21.5
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
ProgAdjFctr:	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:	33.6	18.3	18.3	18.8	22.3	22.4	24.2	34.7	34.7	14.3	24.9	21.5
DesignQueue:	2	14	8	0	11	10	9	10	1	5	10	0

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #17 Alisal St/ Monterey St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.310
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.7
Optimal Cycle:	39	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	0	0	0	7	10	0	0	10	10
Lanes:	0 1	2	0 1	0 0	0	0 0	1 0	2	0 0	0 0	1	1 0
Volume Module: 7:30-8:30 AM												
Base Vol:	33	177	36	0	0	0	199	406	0	0	407	43
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:	33	177	36	0	0	0	199	406	0	0	407	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	33	177	36	0	0	0	199	406	0	0	407	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	177	36	0	0	0	199	406	0	0	407	43
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.:	33	177	36	0	0	0	199	406	0	0	407	43
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.04	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.03	1.00
Lanes:	0.49	2.51	1.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.80	0.20
Final Sat.:	880	4719	1750	0	0	0	1750	3800	0	0	3346	354
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.02	0.00	0.00	0.00	0.11	0.11	0.00	0.00	0.12	0.12
Crit Moves:		****					****				****	
Green Time:	12.1	12.1	12.1	0.0	0.0	0.0	36.7	75.9	0.0	0.0	39.2	39.2
Volume/Cap:	0.31	0.31	0.17	0.00	0.00	0.00	0.31	0.14	0.00	0.00	0.31	0.31
Delay/Veh:	30.6	30.6	30.0	0.0	0.0	0.0	17.3	2.5	0.0	0.0	16.0	16.0
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
ProgAdjFctr:	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	30.6	30.0	0.0	0.0	0.0	17.3	2.5	0.0	0.0	16.0	16.0
DesignQueue:	2	9	2	0	0	0	7	6	0	0	14	1

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #17 Alisal St/ Monterey St

Cycle (sec):	100		Critical Vol./Cap. (X):	0.472
Loss Time (sec):	12	(Y+R = 4 sec)	Average Delay (sec/veh):	18.7
Optimal Cycle:	39		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	0	0	0	7	10	0	0	10	10
Lanes:	0 1	2 0	1	0 0	0 0	0	1 0	2 0	0	0 0	1 1	0
Volume Module: 5:00-6:00 PM												
Base Vol:	88	711	154	0	0	0	223	496	0	0	451	86
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:	88	711	154	0	0	0	223	496	0	0	451	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	711	154	0	0	0	223	496	0	0	451	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	711	154	0	0	0	223	496	0	0	451	86
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	711	154	0	0	0	223	496	0	0	451	86
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.04	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.03	1.00
Lanes:	0.34	2.66	1.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.67	0.33
Final Sat.:	617	4982	1750	0	0	0	1750	3800	0	0	3107	592
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.09	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.15	0.15
Crit Moves:		****					****				****	
Green Time:	30.2	30.2	30.2	0.0	0.0	0.0	27.0	57.8	0.0	0.0	30.8	30.8
Volume/Cap:	0.47	0.47	0.29	0.00	0.00	0.00	0.47	0.23	0.00	0.00	0.47	0.47
Delay/Veh:	21.7	21.7	20.4	0.0	0.0	0.0	23.8	7.8	0.0	0.0	21.6	21.6
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
ProgAdjFctr:	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	20.4	0.0	0.0	0.0	23.8	7.8	0.0	0.0	21.6	21.6
DesignQueue:	4	29	6	0	0	0	9	12	0	0	18	3

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #18 Alisal St/ Sanborn Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.392
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.7
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	101	194	55	61	451	100	68	149	44	150	225	44
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:	101	194	55	61	451	100	68	149	44	150	225	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	101	194	55	61	451	100	68	149	44	150	225	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	194	55	61	451	100	68	149	44	150	225	44
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	194	55	61	451	100	68	149	44	150	225	44
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.03	1.00	0.97	1.04	1.00	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	1.00	1.63	0.37	1.00	1.53	0.47	1.00	2.00	1.00
Final Sat.:	1750	3800	1750	1750	3028	671	1750	2856	843	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.05	0.03	0.03	0.15	0.15	0.04	0.05	0.05	0.09	0.06	0.03
Crit Moves:	****				****			****		****		
Green Time:	14.7	31.0	31.0	21.7	38.0	38.0	14.5	13.3	13.3	21.9	20.7	20.7
Volume/Cap:	0.39	0.16	0.10	0.16	0.39	0.39	0.27	0.39	0.39	0.39	0.29	0.12
Delay/Veh:	29.8	19.0	18.7	24.1	17.2	17.2	29.0	30.4	30.4	25.7	25.4	24.5
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
ProgAdjFctr:	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:	29.8	19.0	18.7	24.1	17.2	17.2	29.0	30.4	30.4	25.7	25.4	24.5
DesignQueue:	5	8	2	3	16	4	3	7	2	7	10	2

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

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Intersection #18 Alisal St/ Sanborn Rd

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.566
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 25.3
Optimal Cycle: 46 Level Of Service: D+

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module: 4:00-5:00 PM												
Base Vol:	217	514	166	97	349	138	253	460	123	142	373	86
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:	217	514	166	97	349	138	253	460	123	142	373	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	514	166	97	349	138	253	460	123	142	373	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	514	166	97	349	138	253	460	123	142	373	86
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.:	217	514	166	97	349	138	253	460	123	142	373	86
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.04	1.00	0.97	1.04	1.00	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	1.00	1.42	0.58	1.00	1.57	0.43	1.00	2.00	1.00
Final Sat.:	1750	3800	1750	1750	2651	1048	1750	2919	780	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.14	0.09	0.06	0.13	0.13	0.14	0.16	0.16	0.08	0.10	0.05
Crit Moves:	****				****		****				****	
Green Time:	21.9	38.1	38.1	7.0	23.2	23.2	25.5	28.3	28.3	14.6	17.3	17.3
Volume/Cap:	0.57	0.35	0.25	0.79	0.57	0.57	0.57	0.56	0.56	0.56	0.57	0.28
Delay/Veh:	27.9	16.9	16.1	53.8	26.4	26.4	25.9	23.7	23.7	32.2	29.7	27.5
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
ProgAdjFctr:	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:	27.9	16.9	16.1	53.8	26.4	26.4	25.9	23.7	23.7	32.2	29.7	27.5
DesignQueue:	10	18	6	5	15	6	11	19	5	7	18	4

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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #19 Alisal St/ Salinas St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.347
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.2
Optimal Cycle:	33	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	10	10	0	10	10	7	10	0
Lanes:	0 0	0	0 0	0 1	1	1 0	0 0	1	1 0	0 1	1	0 0
Volume Module: 7:30-8:30 AM												
Base Vol:	0	0	0	118	703	131	0	411	80	67	423	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:	0	0	0	118	703	131	0	411	80	67	423	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:	0	0	0	118	703	131	0	411	80	67	423	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	118	703	131	0	411	80	67	423	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.:	0	0	0	118	703	131	0	411	80	67	423	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	1.00	1.03	1.00	0.97	1.03	1.00	1.00	1.03	0.97
Lanes:	0.00	0.00	0.00	0.38	2.20	0.42	0.00	1.67	0.33	0.28	1.72	0.00
Final Sat.:	0	0	0	682	4061	757	0	3097	603	506	3194	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.17	0.17	0.00	0.13	0.13	0.13	0.13	0.00
Crit Moves:					****		****				****	
Green Time:	0.0	0.0	0.0	49.9	49.9	49.9	0.0	38.1	38.1	38.1	38.1	0.0
Volume/Cap:	0.00	0.00	0.00	0.35	0.35	0.35	0.00	0.35	0.35	0.35	0.35	0.00
Delay/Veh:	0.0	0.0	0.0	11.6	11.6	11.6	0.0	16.8	16.8	16.8	16.8	0.0
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
ProgAdjFctr:	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	11.6	11.6	11.6	0.0	16.8	16.8	16.8	16.8	0.0
DesignQueue:	0	0	0	3	20	4	0	15	3	2	15	0

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #19 Alisal St/ Salinas St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.401
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	18.8
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	10	10	0	10	10	7	10	0
Lanes:	0 0	0	0 0	0 1	1	1 0	0 0	1	1 0	0 1	1	0 0
Volume Module: 5:00-6:00 PM												
Base Vol:	0	0	0	121	630	120	0	638	83	93	518	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:	0	0	0	121	630	120	0	638	83	93	518	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:	0	0	0	121	630	120	0	638	83	93	518	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	121	630	120	0	638	83	93	518	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.:	0	0	0	121	630	120	0	638	83	93	518	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	1.00	1.03	1.00	0.97	1.03	1.00	1.00	1.03	0.97
Lanes:	0.00	0.00	0.00	0.42	2.16	0.42	0.00	1.76	0.24	0.31	1.69	0.00
Final Sat.:	0	0	0	764	3978	758	0	3274	426	563	3136	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.16	0.16	0.00	0.19	0.19	0.17	0.17	0.00
Crit Moves:					****			****				
Green Time:	0.0	0.0	0.0	26.9	26.9	26.9	0.0	61.1	61.1	28.0	28.0	0.0
Volume/Cap:	0.00	0.00	0.00	0.59	0.59	0.59	0.00	0.32	0.32	0.59	0.59	0.00
Delay/Veh:	0.0	0.0	0.0	24.6	24.6	24.6	0.0	7.2	7.2	24.2	24.2	0.0
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
ProgAdjFctr:	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	24.6	24.6	24.6	0.0	7.2	7.2	24.2	24.2	0.0
DesignQueue:	0	0	0	5	27	5	0	15	2	4	22	0

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #20 Alisal St/ Wood St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.195
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.7
Optimal Cycle:	39	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 0 1! 0 0			0 1 0 0 1			1 0 1 1 0			1 0 1 1 0		
Volume Module: 7:30-8:30 AM												
Base Vol:	39	19	49	12	26	8	5	274	16	19	392	6
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:	39	19	49	12	26	8	5	274	16	19	392	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	19	49	12	26	8	5	274	16	19	392	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	19	49	12	26	8	5	274	16	19	392	6
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.:	39	19	49	12	26	8	5	274	16	19	392	6
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	0.97	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.03	1.00
Lanes:	0.36	0.18	0.46	0.32	0.68	1.00	1.00	1.89	0.11	1.00	1.97	0.03
Final Sat.:	638	311	801	568	1232	1750	1750	3496	204	1750	3644	56
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.02	0.02	0.00	0.00	0.08	0.08	0.01	0.11	0.11
Crit Moves:		****					****				****	
Green Time:	29.4	29.4	29.4	29.4	29.4	29.4	7.0	34.5	34.5	24.1	51.6	51.6
Volume/Cap:	0.21	0.21	0.21	0.07	0.07	0.02	0.04	0.23	0.23	0.04	0.21	0.21
Delay/Veh:	20.2	20.2	20.2	19.4	19.4	19.1	33.0	17.7	17.7	22.1	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
ProgAdjFctr:	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:	20.2	20.2	20.2	19.4	19.4	19.1	33.0	17.7	17.7	22.1	10.0	10.0
DesignQueue:	2	1	2	0	1	0	0	10	1	1	11	0

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                     Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #20 Alisal St/ Wood St
*******************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):        0.425
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):       12.3
Optimal Cycle:       39               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        0  0  1! 0  0   0  1  0  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      60   36    90   42   19    16   10  850    33   51  573    30
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   36    90   42   19    16   10  850    33   51  573    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:    60   36    90   42   19    16   10  850    33   51  573    30
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   60   36    90   42   19    16   10  850    33   51  573    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.:    60   36    90   42   19    16   10  850    33   51  573    30
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800 1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment:  0.97 0.97  0.97 1.00 1.00  0.97 0.97 1.03  1.00 0.97 1.03  1.00
Lanes:       0.32 0.19  0.49 0.69 0.31  1.00 1.00 1.92  0.08 1.00 1.90  0.10
Final Sat.:   565  339   847 1239  561  1750 1750 3562   138 1750 3516   184
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.11 0.11  0.11 0.03 0.03  0.01 0.01 0.24  0.24 0.03 0.16  0.16
Crit Moves:       ****                            ****          ****
Green Time:  25.0 25.0  25.0 25.0 25.0  25.0  7.0 56.0  56.0  7.0 56.0  56.0
Volume/Cap:  0.43 0.43  0.43 0.14 0.14  0.04 0.08 0.43  0.43 0.42 0.29  0.29
Delay/Veh:   24.4 24.4  24.4 22.2 22.2  21.6 33.1  9.7   9.7 35.2  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
ProgAdjFctr: 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:  24.4 24.4  24.4 22.2 22.2  21.6 33.1  9.7   9.7 35.2  8.8   8.8
DesignQueue:    3    2     4    2    1     1    1   22     1    3   15     1
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                       Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #21 Alvin Dr/ Main St
*******************************************************************************
Cycle (sec):         100                Critical Vol./Cap. (X):          0.249
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):          22.4
Optimal Cycle:        46                Level Of Service:                    C
*******************************************************************************
Approach:     North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    7   10    10    7   10    10    7   10    10    7   10    10
Lanes:       1  0  2  1  0   2  0  3  0  1   1  0  2  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 8:30-9:30 AM
Base Vol:      35  319   129    67  447    55    80   89    45   166   86    85
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:   35  319   129    67  447    55    80   89    45   166   86    85
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  319   129    67  447    55    80   89    45   166   86    85
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   35  319   129    67  447    55    80   89    45   166   86    85
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.:    35  319   129    67  447    55    80   89    45   166   86    85
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.05  1.00  0.88 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97
Lanes:       1.00 2.10  0.90  2.00 3.00  1.00  1.00 2.00  1.00  1.00 1.00  1.00
Final Sat.:  1750 3985  1612  3150 5700  1750  1750 3800  1750  1750 1900  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.08  0.08  0.02 0.08  0.03  0.05 0.02  0.03  0.09 0.05  0.05
Crit Moves:  ****                    ****                    ****  ****
Green Time:   8.0 23.3  23.3  16.3 31.5  31.5  20.0 10.3  10.3  38.1 28.5  28.5
Volume/Cap:  0.25 0.34  0.34  0.13 0.25  0.10  0.23 0.23  0.25  0.25 0.16  0.17
Delay/Veh:   33.0 24.4  24.4  27.2 19.4  18.4  25.6 31.3  31.5  16.1 20.4  20.4
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
ProgAdjFctr: 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:  33.0 24.4  24.4  27.2 19.4  18.4  25.6 31.3  31.5  16.1 20.4  20.4
DesignQueue:    2   14     6     3   17     2     4    4     2     6    3     3
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                      Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #21 Alvin Dr/ Main St
******************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):         0.504
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        22.2
Optimal Cycle:         46               Level Of Service:                   C
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  2  1  0   2  0  3  0  1   1  0  2  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      96  826   241   178  981   157   192  232    59   237  171   219
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  826   241   178  981   157   192  232    59   237  171   219
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  826   241   178  981   157   192  232    59   237  171   219
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   96  826   241   178  981   157   192  232    59   237  171   219
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  826   241   178  981   157   192  232    59   237  171   219
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.05  1.00  0.88 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97
Lanes:       1.00 2.30  0.70  2.00 3.00  1.00  1.00 2.00  1.00  1.00 1.00  1.00
Final Sat.:  1750 4333  1264  3150 5700  1750  1750 3800  1750  1750 1900  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.19  0.19  0.06 0.17  0.09  0.11 0.06  0.03  0.14 0.09  0.13
Crit Moves:       ****        ****                   ****       ****
Green Time:   7.0 37.8  37.8  11.2 42.0  42.0  18.2 12.1  12.1  26.9 20.8  20.8
Volume/Cap:  0.78 0.50  0.50  0.50 0.41  0.21  0.60 0.50  0.28  0.50 0.43  0.60
Delay/Veh:   52.8 18.3  18.3  32.7 15.5  14.1  30.8 32.0  30.6  24.3 26.7  29.3
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
ProgAdjFctr: 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:  52.8 18.3  18.3  32.7 15.5  14.1  30.8 32.0  30.6  24.3 26.7  29.3
DesignQueue:    5   30     9     9   33     5     9   12     3    10    8    10
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #22 Alvin Dr/ Natividad Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.479
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	20.0
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	0	0	10	10	7	0	10	0	0	0
Lanes:	1 0	3 0	0	0 0	2 1	0	2 0	0 0	1	0 0	0 0	0
Volume Module: 7:30-8:30 AM												
Base Vol:	221	245	0	0	697	72	60	0	276	0	0	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:	221	245	0	0	697	72	60	0	276	0	0	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	245	0	0	697	72	60	0	276	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	245	0	0	697	72	60	0	276	0	0	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.:	221	245	0	0	697	72	60	0	276	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.04	1.00	0.88	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	3.00	0.00	0.00	2.71	0.29	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	5700	0	0	5075	524	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.04	0.00	0.00	0.14	0.14	0.02	0.00	0.16	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	26.4	55.1	0.0	0.0	28.7	28.7	32.9	0.0	32.9	0.0	0.0	0.0
Volume/Cap:	0.48	0.08	0.00	0.00	0.48	0.48	0.06	0.00	0.48	0.00	0.00	0.00
Delay/Veh:	24.2	8.0	0.0	0.0	22.6	22.6	17.4	0.0	20.8	0.0	0.0	0.0
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
ProgAdjFctr:	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:	24.2	8.0	0.0	0.0	22.6	22.6	17.4	0.0	20.8	0.0	0.0	0.0
DesignQueue:	9	6	0	0	29	3	2	0	11	0	0	0

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #22 Alvin Dr/ Natividad Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.575
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 18.9
Optimal Cycle: 46 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	0	0	10	10	7	0	10	0	0	0
Lanes:	1 0	3	0 0	0 0	2	1 0	2 0	0	0 1	0 0	0	0 0
Volume Module: 5:00-6:00 PM												
Base Vol:	398	670	0	0	471	98	177	0	309	0	0	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:	398	670	0	0	471	98	177	0	309	0	0	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:	398	670	0	0	471	98	177	0	309	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	398	670	0	0	471	98	177	0	309	0	0	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.:	398	670	0	0	471	98	177	0	309	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.04	1.00	0.88	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	3.00	0.00	0.00	2.46	0.54	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	5700	0	0	4634	964	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.12	0.00	0.00	0.10	0.10	0.06	0.00	0.18	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	39.6	57.3	0.0	0.0	17.7	17.7	30.7	0.0	30.7	0.0	0.0	0.0
Volume/Cap:	0.57	0.21	0.00	0.00	0.57	0.57	0.18	0.00	0.57	0.00	0.00	0.00
Delay/Veh:	18.8	7.9	0.0	0.0	29.3	29.3	19.3	0.0	23.3	0.0	0.0	0.0
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
ProgAdjFctr:	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:	18.8	7.9	0.0	0.0	29.3	29.3	19.3	0.0	23.3	0.0	0.0	0.0
DesignQueue:	14	16	0	0	22	5	7	0	12	0	0	0

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                    Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #23 Bardin Rd/ Williams Rd
*******************************************************************************
Cycle (sec):         100              Critical Vol./Cap. (X):         0.285
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):       17.8
Optimal Cycle:        39              Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  1  0  1   1  0  0  1  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:     100    3   192   14    6    25    8  308    95  143  489    15
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:  100    3   192   14    6    25    8  308    95  143  489    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:   100    3   192   14    6    25    8  308    95  143  489    15
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  100    3   192   14    6    25    8  308    95  143  489    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.:   100    3   192   14    6    25    8  308    95  143  489    15
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800 1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment:  0.97 1.06  0.97 0.97 1.00  1.00 0.97 1.04  1.00 0.97 1.03  1.00
Lanes:       1.00 1.00  1.00 1.00 0.19  0.81 1.00 1.52  0.48 1.00 1.94  0.06
Final Sat.:  1750 1900  1750 1750  348  1452 1750 2827   872 1750 3590   110
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.00  0.11 0.01 0.02  0.02 0.00 0.11  0.11 0.08 0.14  0.14
Crit Moves:             ****                 ****                   ****
Green Time:  36.1 36.1  36.1 36.1 36.1  36.1  7.0 29.6  29.6 22.2 44.9  44.9
Volume/Cap:  0.16 0.00  0.30 0.02 0.05  0.05 0.07 0.37  0.37 0.37 0.30  0.30
Delay/Veh:   16.4 15.5  17.5 15.6 15.8  15.8 33.0 21.2  21.2 25.3 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
ProgAdjFctr: 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:  16.4 15.5  17.5 15.6 15.8  15.8 33.0 21.2  21.2 25.3 13.4  13.4
DesignQueue:    4    0     7    0    0     1    0   12     4    6   16     0
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #23 Bardin Rd/ Williams Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.375
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.9
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 1 0 1			1 0 0 1 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: 5:00-6:00 PM												
Base Vol:	186	14	205	19	16	35	46	391	109	136	408	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:	186	14	205	19	16	35	46	391	109	136	408	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:	186	14	205	19	16	35	46	391	109	136	408	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	14	205	19	16	35	46	391	109	136	408	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.:	186	14	205	19	16	35	46	391	109	136	408	20
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.00	1.00	0.97	1.04	1.00	0.97	1.03	1.00
Lanes:	1.00	1.00	1.00	1.00	0.31	0.69	1.00	1.55	0.45	1.00	1.90	0.10
Final Sat.:	1750	1900	1750	1750	565	1235	1750	2893	806	1750	3527	173
Capacity Analysis Module:												
Vol/Sat:	0.11	0.01	0.12	0.01	0.03	0.03	0.03	0.14	0.14	0.08	0.12	0.12
Crit Moves:			****					****		****		
Green Time:	31.2	31.2	31.2	31.2	31.2	31.2	7.0	36.0	36.0	20.7	49.8	49.8
Volume/Cap:	0.34	0.02	0.38	0.03	0.09	0.09	0.38	0.38	0.38	0.38	0.23	0.23
Delay/Veh:	20.3	18.1	20.6	18.2	18.5	18.5	34.7	18.1	18.1	26.2	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
ProgAdjFctr:	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:	20.3	18.1	20.6	18.2	18.5	18.5	34.7	18.1	18.1	26.2	10.9	10.9
DesignQueue:	7	1	8	1	1	1	2	14	4	6	12	1

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #24 Bernal Dr/ Natividad Rd/ Sherwood Dr

Cycle (sec):	100	Critical Vol./Cap. (X):	0.447
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	11.6
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 1	0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module: 7:30-8:30 AM												
Base Vol:	26	491	8	13	1053	304	177	5	83	21	7	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	491	8	13	1053	0	177	5	83	21	7	10
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	491	8	13	1053	0	177	5	83	21	7	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	491	8	13	1053	0	177	5	83	21	7	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	26	491	8	13	1053	0	177	5	83	21	7	10
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	1.00	1.00	0.97	0.97	0.97	0.97
Lanes:	1.00	1.97	0.03	1.00	2.00	1.00	0.97	0.03	1.00	0.56	0.18	0.26
Final Sat.:	1750	3641	59	1750	3800	1750	1751	49	1750	967	322	461
Capacity Analysis Module:												
Vol/Sat:	0.01	0.13	0.13	0.01	0.28	0.00	0.10	0.10	0.05	0.02	0.02	0.02
Crit Moves:	****				****			****				
Green Time:	7.0	59.3	59.3	7.0	59.3	0.0	21.7	21.7	21.7	21.7	21.7	21.7
Volume/Cap:	0.21	0.23	0.23	0.11	0.47	0.00	0.47	0.47	0.22	0.10	0.10	0.10
Delay/Veh:	33.5	7.3	7.3	33.1	8.8	0.0	26.6	26.6	24.5	23.8	23.8	23.8
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
ProgAdjFctr:	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:	33.5	7.3	7.3	33.1	8.8	0.0	26.6	26.6	24.5	23.8	23.8	23.8
DesignQueue:	1	11	0	1	26	0	8	0	4	1	0	0

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #24 Bernal Dr/ Natividad Rd/ Sherwood Dr

Cycle (sec):	100		Critical Vol./Cap. (X):	0.546
Loss Time (sec):	12	(Y+R = 4 sec)	Average Delay (sec/veh):	17.0
Optimal Cycle:	44		Level Of Service:	C+

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Permitted	Permitted
Rights:	Include	Ignore	Include	Include
Min. Green:	7 10 10	7 10 10	7 10 10	7 10 10
Lanes:	1 0 1 1 0	1 0 2 0 1	0 1 0 0 1	0 0 1! 0 0

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Volume Module: 5:00-6:00 PM												
Base Vol:	161	1116	23	10	668	355	276	25	89	11	15	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	1116	23	10	668	0	276	25	89	11	15	28
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	1116	23	10	668	0	276	25	89	11	15	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1116	23	10	668	0	276	25	89	11	15	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	161	1116	23	10	668	0	276	25	89	11	15	28
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	1.00	1.00	0.97	0.97	0.97	0.97
Lanes:	1.00	1.96	0.04	1.00	2.00	1.00	0.92	0.08	1.00	0.20	0.28	0.52
Final Sat.:	1750	3625	75	1750	3800	1750	1650	150	1750	356	486	907
Capacity Analysis Module:												
Vol/Sat:	0.09	0.31	0.31	0.01	0.18	0.00	0.17	0.17	0.05	0.03	0.03	0.03
Crit Moves:		****		****				****				
Green Time:	20.4	52.5	52.5	7.0	39.1	0.0	28.5	28.5	28.5	28.5	28.5	28.5
Volume/Cap:	0.45	0.59	0.59	0.08	0.45	0.00	0.59	0.59	0.18	0.11	0.11	0.11
Delay/Veh:	27.1	12.7	12.7	33.1	17.3	0.0	24.6	24.6	20.5	20.0	20.0	20.0
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
ProgAdjFctr:	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:	27.1	12.7	12.7	33.1	17.3	0.0	24.6	24.6	20.5	20.0	20.0	20.0
DesignQueue:	7	32	1	1	24	0	11	1	4	0	1	1

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------------------------------------------------------------------------------
------------------------------------------------------------------------------
                    Level Of Service Computation Report
          1994 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #25 Bernal Dr/ Rosarita Dr
******************************************************************************
Average Delay (sec/veh):       1.1        Worst Case Level Of Service:       B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  0  0  0   1  0  0  0  1   1  0  1  0  0   0  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:        0    0     0   27    0   100   28  191     0    0  311    12
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   27    0   100   28  191     0    0  311    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:      0    0     0   27    0   100   28  191     0    0  311    12
Reduct Vol:      0    0     0    0    0     0    0    0     0    0    0     0
Final Vol.:      0    0     0   27    0   100   28  191     0    0  311    12
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:      1.10 1.10  1.10 1.10 1.10  1.10 1.10 1.00  1.00 1.10 1.00  1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:        0    0     0   30    0   110   31  191     0    0  311    12
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx   3.4 xxxx   2.6   2.1 xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx xxxxx   6.5 xxxx   5.5   5.0 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   530 xxxx   311   323 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   522 xxxx   963  1203 xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx xxxxx  0.97 xxxx  1.00  1.00 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   509 xxxx   963  1203 xxxx xxxxx  xxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx   7.5 xxxx   4.2   3.1 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:       0.0              4.9              0.4              0.0
```

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-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           1994 HCM Unsignalized Method (Base Volume Alternative)
*******************************************************************************
Intersection #25 Bernal Dr/ Rosarita Dr
*******************************************************************************
Average Delay (sec/veh):       1.1          Worst Case Level Of Service:      C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:       Stop Sign        Stop Sign        Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  0  0  0    1  0  0  0  1    1  0  1  0  0    0  0  1  0  1
------------|----------------||----------------||----------------||----------------|
Volume Module: 5:00-6:00 PM
Base Vol:        0    0     0    16    0    68   142  392     0     0  401    29
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    16    0    68   142  392     0     0  401    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:      0    0     0    16    0    68   142  392     0     0  401    29
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:      0    0     0    16    0    68   142  392     0     0  401    29
------------|----------------||----------------||----------------||----------------|
Adjusted Volume Module:
Grade:              0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:      1.10 1.10  1.10  1.10 1.10  1.10  1.10 1.00  1.00  1.10 1.00  1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:        0    0     0    18    0    75   156  392     0     0  401    29
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx    3.4 xxxx   2.6   2.1 xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx xxxxx    6.5 xxxx   5.5   5.0 xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    935 xxxx   401   430 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx    304 xxxx   867  1069 xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx xxxxx   0.85 xxxx  1.00  1.00 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx    260 xxxx   867  1069 xxxx xxxxx  xxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx   14.8 xxxx   4.5   3.9 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:       0.0              6.5              1.1              0.0
```

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-------------------------------------------------------------------------------
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                   Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #26 Blanco Rd/ Davis Rd
*******************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):        0.682
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       24.5
Optimal Cycle:         57               Level Of Service:                C-
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:        1  0  1  1  0   1  0  1  0  1   2  0  1  1  0   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      18  193    28   192  244   485   351  510    20    23  382   162
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  193    28   192  244   485   351  510    20    23  382   162
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  193    28   192  244   485   351  510    20    23  382   162
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   18  193    28   192  244   485   351  510    20    23  382   162
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  193    28   192  244   485   351  510    20    23  382   162
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.03  1.00  0.97 1.06  0.97  0.88 1.03  1.00  0.97 1.06  0.97
Lanes:       1.00 1.74  0.26  1.00 1.00  1.00  2.00 1.92  0.08  1.00 1.00  1.00
Final Sat.:  1750 3231   469  1750 1900  1750  3150 3560   140  1750 1900  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.06  0.06  0.11 0.13  0.28  0.11 0.14  0.14  0.01 0.20  0.09
Crit Moves:  ****                        ****  ****                   ****
Green Time:   7.0 10.0  10.0  35.1 38.1  38.1  15.3 35.9  35.9   7.0 27.6  27.6
Volume/Cap:  0.15 0.60  0.60  0.31 0.34  0.73  0.73 0.40  0.40  0.19 0.73  0.34
Delay/Veh:   33.2 34.6  34.6  18.1 16.8  22.9  34.5 18.3  18.3  33.4 28.4  22.1
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
ProgAdjFctr: 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:  33.2 34.6  34.6  18.1 16.8  22.9  34.5 18.3  18.3  33.4 28.4  22.1
DesignQueue:    1   10     1     7    9    18    17   19     1     1   16     7
*******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #26 Blanco Rd/ Davis Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.829
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	30.8
Optimal Cycle:	84	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 1	0	1 0	1 0	1	2 0	1 1	0	1 0	1 0	1
Volume Module: 5:00-6:00 PM												
Base Vol:	16	310	68	214	216	424	661	464	34	28	510	402
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:	16	310	68	214	216	424	661	464	34	28	510	402
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	16	310	68	214	216	424	661	464	34	28	510	402
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	310	68	214	216	424	661	464	34	28	510	402
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.:	16	310	68	214	216	424	661	464	34	28	510	402
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	0.88	1.03	1.00	0.97	1.06	0.97
Lanes:	1.00	1.63	0.37	1.00	1.00	1.00	2.00	1.86	0.14	1.00	1.00	1.00
Final Sat.:	1750	3034	665	1750	1900	1750	3150	3447	253	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.10	0.12	0.11	0.24	0.21	0.13	0.13	0.02	0.27	0.23
Crit Moves:	****					****	****				****	
Green Time:	7.0	15.6	15.6	18.7	27.2	27.2	23.6	46.8	46.8	7.0	30.2	30.2
Volume/Cap:	0.13	0.66	0.66	0.66	0.42	0.89	0.89	0.29	0.29	0.23	0.89	0.76
Delay/Veh:	33.2	32.1	32.1	31.9	23.0	39.5	37.2	12.5	12.5	33.6	36.5	28.5
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
ProgAdjFctr:	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:	33.2	32.1	32.1	31.9	23.0	39.5	37.2	12.5	12.5	33.6	36.5	28.5
DesignQueue:	1	15	3	10	9	18	29	14	1	1	21	17

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                      Level Of Service Computation Report
             1985 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #27 Blanco Rd/ Los Olivos
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap. (X):         0.290
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):         10.1
Optimal Cycle:        39               Level Of Service:                   B
********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted         Protected        Protected
Rights:          Include          Include           Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:        0  1  0  0  1    0  1  0  0  1    1  0  2  0  1    1  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      37   31    48    92   10    17     7  704     9    23  470    45
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:   37   31    48    92   10    17     7  704     9    23  470    45
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    37   31    48    92   10    17     7  704     9    23  470    45
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   37   31    48    92   10    17     7  704     9    23  470    45
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.:    37   31    48    92   10    17     7  704     9    23  470    45
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  1.00 1.00  0.97  1.00 1.00  0.97  0.97 1.06  0.97  0.97 1.06  0.97
Lanes:       0.54 0.46  1.00  0.90 0.10  1.00  1.00 2.00  1.00  1.00 2.00  1.00
Final Sat.:   979  821  1750  1624  176  1750  1750 3800  1750  1750 3800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.04  0.03  0.06 0.06  0.01  0.00 0.19  0.01  0.01 0.12  0.03
Crit Moves:                        ****             ****        ****
Green Time:  19.0 19.0  19.0  19.0 19.0  19.0   7.0 62.0  62.0   7.0 62.0  62.0
Volume/Cap:  0.20 0.20  0.14  0.30 0.30  0.05  0.06 0.30  0.01  0.19 0.20  0.04
Delay/Veh:   26.0 26.0  25.7  26.6 26.6  25.2  33.0  6.7   5.5  33.4  6.3   5.6
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
ProgAdjFctr: 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:  26.0 26.0  25.7  26.6 26.6  25.2  33.0  6.7   5.5  33.4  6.3   5.6
DesignQueue:    2    1     2     4    0     1     0   16     0     1   10     1
********************************************************************************
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #27 Blanco Rd/ Los Olivos

Cycle (sec):	100	Critical Vol./Cap. (X):	0.358
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	9.5
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:		0 1 0 0 1			0 1 0 0 1			1 0 2 0 1			1 0 2 0 1	
Volume Module: 5:00-6:00 PM												
Base Vol:	36	27	46	67	36	20	21	613	29	56	933	86
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:	36	27	46	67	36	20	21	613	29	56	933	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	27	46	67	36	20	21	613	29	56	933	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	27	46	67	36	20	21	613	29	56	933	86
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	27	46	67	36	20	21	613	29	56	933	86
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.57	0.43	1.00	0.65	0.35	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1029	771	1750	1171	629	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.03	0.06	0.06	0.01	0.01	0.16	0.02	0.03	0.25	0.05
Crit Moves:					****		****				****	
Green Time:	15.3	15.3	15.3	15.3	15.3	15.3	7.0	65.7	65.7	7.0	65.7	65.7
Volume/Cap:	0.23	0.23	0.17	0.37	0.37	0.07	0.17	0.25	0.03	0.46	0.37	0.07
Delay/Veh:	28.3	28.3	28.0	29.3	29.3	27.6	33.3	5.3	4.5	35.8	6.0	4.7
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
ProgAdjFctr:	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:	28.3	28.3	28.0	29.3	29.3	27.6	33.3	5.3	4.5	35.8	6.0	4.7
DesignQueue:	2	1	2	3	2	1	1	12	1	3	19	2

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                    Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #28 Blanco Rd/ Main St
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap. (X):          0.725
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):          28.3
Optimal Cycle:         63                Level Of Service:                    D
********************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:        1  0  2  0  1    1  0  2  0  1    1  0  2  0  1    2  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      162  591   553    89  403    88   207  573   179   379  292    68
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:   162  591   553    89  403    88   207  573   179   379  292    68
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    162  591   553    89  403    88   207  573   179   379  292    68
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   162  591   553    89  403    88   207  573   179   379  292    68
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.:    162  591   553    89  403    88   207  573   179   379  292    68
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:   0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97  0.88 1.03  1.00
Lanes:        1.00 2.00  1.00  1.00 2.00  1.00  1.00 2.00  1.00  2.00 1.61  0.39
Final Sat.:   1750 3800  1750  1750 3800  1750  1750 3800  1750  3150 3001   699
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.09 0.16  0.32  0.05 0.11  0.05  0.12 0.15  0.10  0.12 0.10  0.10
Crit Moves:              ****  ****                  ****        ****
Green Time:   23.6 43.6  43.6   7.0 27.0  27.0  27.4 20.8  20.8  16.6 10.0  10.0
Volume/Cap:   0.39 0.36  0.72  0.72 0.39  0.19  0.43 0.72  0.49  0.72 0.97  0.97
Delay/Veh:    24.8 14.4  20.1  47.1 22.8  21.3  23.1 30.4  27.4  33.5 63.6  63.6
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
ProgAdjFctr:  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:   24.8 14.4  20.1  47.1 22.8  21.3  23.1 30.4  27.4  33.5 63.6  63.6
DesignQueue:     7   19    19     5   17     4     9   26     8    18   15     3
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #28 Blanco Rd/ Main St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.752
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	33.2
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 2 0 1			2 0 1 1 0		
Volume Module: 5:00-6:00 PM												
Base Vol:	221	511	339	111	739	223	298	380	173	609	489	143
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:	221	511	339	111	739	223	298	380	173	609	489	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	511	339	111	739	223	298	380	173	609	489	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	511	339	111	739	223	298	380	173	609	489	143
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.:	221	511	339	111	739	223	298	380	173	609	489	143
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.88	1.04	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.53	0.47
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	3150	2862	837
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.19	0.06	0.19	0.13	0.17	0.10	0.10	0.19	0.17	0.17
Crit Moves:	****				****		****				****	
Green Time:	16.8	35.6	35.6	7.0	25.9	25.9	22.6	10.0	10.0	35.4	22.7	22.7
Volume/Cap:	0.75	0.38	0.54	0.91	0.75	0.49	0.75	1.00	0.99	0.55	0.75	0.75
Delay/Veh:	37.2	18.3	20.3	72.4	28.2	24.7	32.8	69.7	83.1	20.1	30.1	30.1
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
ProgAdjFctr:	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	18.3	20.3	72.4	28.2	24.7	32.8	69.7	83.1	20.1	30.1	30.1
DesignQueue:	11	19	13	6	32	9	13	20	9	23	22	6

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                      Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #29 Blanco Rd/ Riker St
******************************************************************************
Cycle (sec):         100               Critical Vol./Cap. (X):         0.316
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):          9.4
Optimal Cycle:        39               Level Of Service:                   B
******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:      7   10    10    7   10    10    7   10    10    7   10    10
Lanes:         0  1  0  0  1   0  1  0  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:       32   25    53   68    9    38   54  842     6   11  470    46
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:    32   25    53   68    9    38   54  842     6   11  470    46
User Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:      1.00 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   25    53   68    9    38   54  842     6   11  470    46
Reduct Vol:      0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    32   25    53   68    9    38   54  842     6   11  470    46
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   25    53   68    9    38   54  842     6   11  470    46
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1800 1800  1800 1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment:   1.00 1.00  0.97 1.00 1.00  0.97 0.97 1.03  1.00 0.97 1.03  1.00
Lanes:        0.56 0.44  1.00 0.88 0.12  1.00 1.00 1.99  0.01 1.00 1.82  0.18
Final Sat.:   1011  789  1750 1590  210  1750 1750 3674    26 1750 3370   330
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.03 0.03  0.03 0.04 0.04  0.02 0.03 0.23  0.23 0.01 0.14  0.14
Crit Moves:                        ****              ****        ****
Green Time:   12.7 12.7  12.7 12.7 12.7  12.7  7.0 68.3  68.3  7.0 68.3  68.3
Volume/Cap:   0.25 0.25  0.24 0.34 0.34  0.17 0.44 0.34  0.34 0.09 0.20  0.20
Delay/Veh:    30.0 30.0  29.9 30.6 30.6  29.6 35.6  5.0   5.0 33.1  4.5   4.5
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
ProgAdjFctr:  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:   30.0 30.0  29.9 30.6 30.6  29.6 35.6  5.0   5.0 33.1  4.5   4.5
DesignQueue:     2    1     3    3    0     2    3   16     0    1    9     1
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #29 Blanco Rd/ Riker St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.398
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	11.1
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module: 5:00-6:00 PM												
Base Vol:	41	42	31	68	48	106	46	648	26	50	908	52
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:	41	42	31	68	48	106	46	648	26	50	908	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	42	31	68	48	106	46	648	26	50	908	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	42	31	68	48	106	46	648	26	50	908	52
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	42	31	68	48	106	46	648	26	50	908	52
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.03	1.00
Lanes:	0.49	0.51	1.00	0.59	0.41	1.00	1.00	1.92	0.08	1.00	1.89	0.11
Final Sat.:	889	911	1750	1055	745	1750	1750	3557	143	1750	3499	200
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.02	0.06	0.06	0.06	0.03	0.18	0.18	0.03	0.26	0.26
Crit Moves:					****		****				****	
Green Time:	16.1	16.1	16.1	16.1	16.1	16.1	7.0	64.9	64.9	7.0	64.9	64.9
Volume/Cap:	0.29	0.29	0.11	0.40	0.40	0.38	0.38	0.28	0.28	0.41	0.40	0.40
Delay/Veh:	28.2	28.2	27.2	29.1	29.1	28.9	34.7	5.7	5.7	35.1	6.4	6.4
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
ProgAdjFctr:	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:	28.2	28.2	27.2	29.1	29.1	28.9	34.7	5.7	5.7	35.1	6.4	6.4
DesignQueue:	2	2	1	3	2	5	2	13	1	3	19	1

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #30 Boronda Rd/ Dartmouth Wy

Cycle (sec):	100	Critical Vol./Cap. (X):	0.340
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	4.6
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Split Phase	Split Phase	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 1 0 1	1 0 2 0 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	0	10	0	0	0	0	10	10	7	10	0
Volume Module: 7:30-8:30 AM												
Base Vol:	29	0	20	0	0	0	0	540	14	7	629	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:	29	0	20	0	0	0	0	540	14	7	629	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	20	0	0	0	0	540	14	7	629	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	0	20	0	0	0	0	540	14	7	629	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.:	29	0	20	0	0	0	0	540	14	7	629	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	1750	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.28	0.01	0.00	0.17	0.00
Crit Moves:			****					****		****		
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	0.0	71.0	71.0	7.0	78.0	0.0
Volume/Cap:	0.17	0.00	0.11	0.00	0.00	0.00	0.00	0.40	0.01	0.06	0.21	0.00
Delay/Veh:	31.3	0.0	31.1	0.0	0.0	0.0	0.0	4.6	3.2	33.0	2.2	0.0
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
ProgAdjFctr:	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:	31.3	0.0	31.1	0.0	0.0	0.0	0.0	4.6	3.2	33.0	2.2	0.0
DesignQueue:	1	0	1	0	0	0	0	9	0	0	8	0

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                      Level Of Service Computation Report
               1985 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #30 Boronda Rd/ Dartmouth Wy
*********************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):         0.660
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        7.1
Optimal Cycle:         54              Level Of Service:                   B
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     7    0    10    0    0     0    0   10    10    7   10     0
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  1  0  1   1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      23    0    20    0    0     0    0 1066    54   15  809     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    20    0    0     0    0 1066    54   15  809     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    20    0    0     0    0 1066    54   15  809     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   23    0    20    0    0     0    0 1066    54   15  809     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.:    23    0    20    0    0     0    0 1066    54   15  809     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800 1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment:  0.97 1.06  0.97 0.97 1.06  0.97 0.97 1.06  0.97 0.97 1.06  0.97
Lanes:       1.00 0.00  1.00 0.00 0.00  0.00 0.00 1.00  1.00 1.00 2.00  0.00
Final Sat.:  1750    0  1750    0    0     0    0 1900  1750 1750 3800     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.00  0.01 0.00 0.00  0.00 0.00 0.56  0.03 0.01 0.21  0.00
Crit Moves:             ****                      ****      ****
Green Time:  10.0  0.0  10.0  0.0  0.0   0.0  0.0 71.0  71.0  7.0 78.0   0.0
Volume/Cap:  0.13 0.00  0.11 0.00 0.00  0.00 0.00 0.79  0.04 0.12 0.27  0.00
Delay/Veh:   31.2  0.0  31.1  0.0  0.0   0.0  0.0  9.6   3.3 33.2  2.3   0.0
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
ProgAdjFctr: 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:  31.2  0.0  31.1  0.0  0.0   0.0  0.0  9.6   3.3 33.2  2.3   0.0
DesignQueue:    1    0     1    0    0     0    0   20     1    1   10     0
*********************************************************************************
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #31 Boronda Rd/ Independence Blvd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.442
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.3
Optimal Cycle:	37	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Permitted			Permitted	
Rights:		Include			Include			Include			Include	
Min. Green:	7	0	10	0	0	0	0	10	10	7	10	0
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	1	0 1	1 0	1	0 0
Volume Module: 7:30-8:30 AM												
Base Vol:	332	0	71	0	0	0	0	245	349	26	330	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:	332	0	71	0	0	0	0	245	349	26	330	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:	332	0	71	0	0	0	0	245	349	26	330	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	332	0	71	0	0	0	0	245	349	26	330	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.:	332	0	71	0	0	0	0	245	349	26	330	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.19	0.00	0.04	0.00	0.00	0.00	0.00	0.13	0.20	0.01	0.17	0.00
Crit Moves:	****								****			
Green Time:	42.9	0.0	42.9	0.0	0.0	0.0	0.0	45.1	45.1	45.1	45.1	0.0
Volume/Cap:	0.44	0.00	0.09	0.00	0.00	0.00	0.00	0.29	0.44	0.03	0.39	0.00
Delay/Veh:	15.6	0.0	12.9	0.0	0.0	0.0	0.0	13.2	14.6	11.6	14.0	0.0
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
ProgAdjFctr:	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:	15.6	0.0	12.9	0.0	0.0	0.0	0.0	13.2	14.6	11.6	14.0	0.0
DesignQueue:	11	0	2	0	0	0	0	8	11	1	11	0

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #31 Boronda Rd/ Independence Blvd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.378
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	7.5
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Permitted			Permitted	
Rights:		Include			Include			Include			Include	
Min. Green:	7	0	10	0	0	0	0	10	10	7	10	0
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module: 5:00-6:00 PM												
Base Vol:	139	0	16	0	0	0	0	614	198	6	394	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:	139	0	16	0	0	0	0	614	198	6	394	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:	139	0	16	0	0	0	0	614	198	6	394	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	0	16	0	0	0	0	614	198	6	394	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.:	139	0	16	0	0	0	0	614	198	6	394	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.01	0.00	0.00	0.00	0.00	0.32	0.11	0.00	0.21	0.00
Crit Moves:			****					****				
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	0.0	78.0	78.0	78.0	78.0	0.0
Volume/Cap:	0.79	0.00	0.09	0.00	0.00	0.00	0.00	0.41	0.15	0.00	0.27	0.00
Delay/Veh:	48.0	0.0	31.1	0.0	0.0	0.0	0.0	2.8	2.1	1.8	2.3	0.0
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
ProgAdjFctr:	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:	48.0	0.0	31.1	0.0	0.0	0.0	0.0	2.8	2.1	1.8	2.3	0.0
DesignQueue:	7	0	1	0	0	0	0	8	2	0	5	0

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #32 Boronda Rd/ Main St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.677
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	24.8
Optimal Cycle:	56	Level Of Service:	C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	1 1	0	1 0	2 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	170	85	14	39	96	573	165	331	170	14	616	74
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:	170	85	14	39	96	573	165	331	170	14	616	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	85	14	39	96	573	165	331	170	14	616	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	85	14	39	96	573	165	331	170	14	616	74
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.:	170	85	14	39	96	573	165	331	170	14	616	74
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.88	1.06	0.97	0.97	1.06	0.97	0.88	1.04	1.00	0.97	1.06	0.97
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	1.30	0.70	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	2444	1255	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.02	0.01	0.02	0.03	0.33	0.05	0.14	0.14	0.01	0.16	0.04
Crit Moves:	****					****	****				****	
Green Time:	8.0	33.1	33.1	23.2	48.4	48.4	7.7	24.7	24.7	7.0	23.9	23.9
Volume/Cap:	0.68	0.07	0.02	0.10	0.05	0.68	0.68	0.55	0.55	0.11	0.68	0.18
Delay/Veh:	38.9	17.4	17.1	22.9	10.4	16.6	39.1	25.5	25.5	33.2	27.7	23.0
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
ProgAdjFctr:	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	17.4	17.1	22.9	10.4	16.6	39.1	25.5	25.5	33.2	27.7	23.0
DesignQueue:	9	3	1	2	3	18	9	14	7	1	27	3

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #32 Boronda Rd/ Main St

Cycle (sec):	100		Critical Vol./Cap. (X):	0.796
Loss Time (sec):	12	(Y+R = 4 sec)	Average Delay (sec/veh):	30.0
Optimal Cycle:	76		Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	1 1	0	1 0	2 0	1
Volume Module: 5:00-6:00 PM												
Base Vol:	647	289	71	128	219	344	415	737	256	52	444	141
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:	647	289	71	128	219	344	415	737	256	52	444	141
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	647	289	71	128	219	344	415	737	256	52	444	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	647	289	71	128	219	344	415	737	256	52	444	141
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.:	647	289	71	128	219	344	415	737	256	52	444	141
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.88	1.06	0.97	0.97	1.06	0.97	0.88	1.04	1.00	0.97	1.06	0.97
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	1.47	0.53	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	2745	954	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.21	0.08	0.04	0.07	0.06	0.20	0.13	0.27	0.27	0.03	0.12	0.08
Crit Moves:	****					****		****		****		
Green Time:	24.8	10.0	10.0	38.6	23.7	23.7	20.9	32.4	32.4	7.0	18.5	18.5
Volume/Cap:	0.83	0.76	0.41	0.19	0.24	0.83	0.63	0.83	0.83	0.42	0.63	0.43
Delay/Veh:	32.2	39.3	32.9	15.5	23.5	36.5	28.8	27.2	27.2	35.3	29.9	28.0
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
ProgAdjFctr:	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:	32.2	39.3	32.9	15.5	23.5	36.5	28.8	27.2	27.2	35.3	29.9	28.0
DesignQueue:	28	15	4	4	9	15	19	30	10	3	21	7

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #33 Boronda Rd/ McKinnon St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.482
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.3
Optimal Cycle:	40	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	0	10	0	0	0	0	10	10	7	10	0
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	1	0 1	1 0	1	0 0
Volume Module: 7:30-8:30 AM												
Base Vol:	349	0	87	0	0	0	0	427	327	109	383	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:	349	0	87	0	0	0	0	427	327	109	383	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:	349	0	87	0	0	0	0	427	327	109	383	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	349	0	87	0	0	0	0	427	327	109	383	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.:	349	0	87	0	0	0	0	427	327	109	383	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.20	0.00	0.05	0.00	0.00	0.00	0.00	0.22	0.19	0.06	0.20	0.00
Crit Moves:	****							****				
Green Time:	41.4	0.0	41.4	0.0	0.0	0.0	0.0	46.6	46.6	46.6	46.6	0.0
Volume/Cap:	0.48	0.00	0.12	0.00	0.00	0.00	0.00	0.48	0.40	0.13	0.43	0.00
Delay/Veh:	16.7	0.0	13.7	0.0	0.0	0.0	0.0	14.3	13.5	11.5	13.8	0.0
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
ProgAdjFctr:	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:	16.7	0.0	13.7	0.0	0.0	0.0	0.0	14.3	13.5	11.5	13.8	0.0
DesignQueue:	12	0	3	0	0	0	0	13	10	3	12	0

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                   Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #33 Boronda Rd/ McKinnon St
*****************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):         0.530
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):       11.6
Optimal Cycle:       43              Level Of Service:                   B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:     7     0    10    0     0     0    0    10    10    7    10     0
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  1  0  1   1  0  1  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:     265     0   133     0     0     0     0   598   487   105   535     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:  265     0   133     0     0     0     0   598   487   105   535     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:   265     0   133     0     0     0     0   598   487   105   535     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:  265     0   133     0     0     0     0   598   487   105   535     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.:   265     0   133     0     0     0     0   598   487   105   535     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800
Adjustment:  0.97  1.06  0.97  0.97  1.06  0.97  0.97  1.06  0.97  0.97  1.06  0.97
Lanes:       1.00  0.00  1.00  0.00  0.00  0.00  0.00  1.00  1.00  1.00  1.00  0.00
Final Sat.:  1750     0  1750     0     0     0     0  1900  1750  1750  1900     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.15  0.00  0.08  0.00  0.00  0.00  0.00  0.31  0.28  0.06  0.28  0.00
Crit Moves:  ****                                      ****
Green Time:  28.6   0.0  28.6   0.0   0.0   0.0   0.0  59.4  59.4  59.4  59.4   0.0
Volume/Cap:  0.53  0.00  0.27  0.00  0.00  0.00  0.00  0.53  0.47  0.10  0.47  0.00
Delay/Veh:   23.7   0.0  21.0   0.0   0.0   0.0   0.0   9.5   8.9   6.7   9.0   0.0
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
ProgAdjFctr: 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:  23.7   0.0  21.0   0.0   0.0   0.0   0.0   9.5   8.9   6.7   9.0   0.0
DesignQueue:   11     0     5     0     0     0     0    15    12     2    13     0
*****************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #34 Boronda Rd/ Natividad Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.286
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	19.9
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	1 0	1	1 0	0 1	0
Volume Module: 7:30-8:30 AM												
Base Vol:	81	60	43	35	72	13	15	155	103	42	219	51
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	60	43	35	72	13	15	155	103	42	219	51
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	60	43	35	72	13	15	155	103	42	219	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	60	43	35	72	13	15	155	103	42	219	51
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	60	43	35	72	13	15	155	103	42	219	51
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.00	1.00	0.97	1.06	0.97	0.97	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.85	0.15	1.00	1.00	1.00	1.00	0.81	0.19
Final Sat.:	1750	1900	1750	1750	1525	275	1750	1900	1750	1750	1460	340
Capacity Analysis Module:												
Vol/Sat:	0.05	0.03	0.02	0.02	0.05	0.05	0.01	0.08	0.06	0.02	0.15	0.15
Crit Moves:	****				****		****				****	
Green Time:	15.4	18.3	18.3	12.8	15.7	15.7	7.0	33.5	33.5	23.4	49.9	49.9
Volume/Cap:	0.30	0.17	0.13	0.16	0.30	0.30	0.12	0.24	0.18	0.10	0.30	0.30
Delay/Veh:	28.7	26.2	26.0	29.5	28.5	28.5	33.2	18.4	17.9	22.8	11.3	11.3
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
ProgAdjFctr:	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:	28.7	26.2	26.0	29.5	28.5	28.5	33.2	18.4	17.9	22.8	11.3	11.3
DesignQueue:	4	3	2	2	3	1	1	6	4	2	6	1

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #34 Boronda Rd/ Natividad Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.583
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	23.2
Optimal Cycle:	47	Level Of Service:	C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:		1 0 1 0 1			1 0 0 1 0			1 0 1 0 1			1 0 0 1 0	
Volume Module: 5:00-6:00 PM												
Base Vol:	204	112	121	164	132	32	28	478	177	94	364	52
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:	204	112	121	164	132	32	28	478	177	94	364	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	204	112	121	164	132	32	28	478	177	94	364	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	112	121	164	132	32	28	478	177	94	364	52
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.:	204	112	121	164	132	32	28	478	177	94	364	52
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.00	1.00	0.97	1.06	0.97	0.97	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.80	0.20	1.00	1.00	1.00	1.00	0.88	0.12
Final Sat.:	1750	1900	1750	1750	1449	351	1750	1900	1750	1750	1575	225
Capacity Analysis Module:												
Vol/Sat:	0.12	0.06	0.07	0.09	0.09	0.09	0.02	0.25	0.10	0.05	0.23	0.23
Crit Moves:	****				****			****		****		
Green Time:	20.0	10.0	10.0	25.6	15.6	15.6	7.0	43.2	43.2	9.2	45.4	45.4
Volume/Cap:	0.58	0.59	0.69	0.37	0.58	0.58	0.23	0.58	0.23	0.58	0.51	0.51
Delay/Veh:	29.3	36.1	40.5	23.4	32.0	32.0	33.6	17.2	13.7	36.9	15.2	15.2
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
ProgAdjFctr:	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:	29.3	36.1	40.5	23.4	32.0	32.0	33.6	17.2	13.7	36.9	15.2	15.2
DesignQueue:	9	6	6	7	6	2	1	16	6	5	12	2

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #35 Boronda Rd/ San Juan Grade Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.380
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	20.9
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	58	90	16	145	150	264	71	366	48	27	419	68
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:	58	90	16	145	150	264	71	366	48	27	419	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	90	16	145	150	264	71	366	48	27	419	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	90	16	145	150	264	71	366	48	27	419	68
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	90	16	145	150	264	71	366	48	27	419	68
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.03	1.00	0.97	1.06	0.97
Lanes:	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	3800	1750	1750	3271	429	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.05	0.01	0.08	0.04	0.15	0.04	0.11	0.11	0.02	0.11	0.04
Crit Moves:	****					****	****				****	
Green Time:	8.7	10.0	10.0	38.4	39.6	39.6	10.7	32.6	32.6	7.0	29.0	29.0
Volume/Cap:	0.38	0.47	0.09	0.22	0.10	0.38	0.38	0.34	0.34	0.22	0.38	0.13
Delay/Veh:	33.5	33.7	31.1	15.8	14.4	16.5	32.3	19.5	19.5	33.5	21.7	19.9
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
ProgAdjFctr:	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:	33.5	33.7	31.1	15.8	14.4	16.5	32.3	19.5	19.5	33.5	21.7	19.9
DesignQueue:	3	5	1	5	5	9	4	14	2	1	17	3

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #35 Boronda Rd/ San Juan Grade Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.555
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	24.7
Optimal Cycle:	46	Level Of Service:	C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 1 0 1			1 0 2 0 1			1 0 1 1 0			1 0 2 0 1		
Volume Module: 5:00-6:00 PM												
Base Vol:	131	238	61	197	165	127	153	712	91	59	441	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:	131	238	61	197	165	127	153	712	91	59	441	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:	131	238	61	197	165	127	153	712	91	59	441	205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	238	61	197	165	127	153	712	91	59	441	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.:	131	238	61	197	165	127	153	712	91	59	441	205
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.03	1.00	0.97	1.06	0.97
Lanes:	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.77	0.23	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	3800	1750	1750	3280	419	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.13	0.03	0.11	0.04	0.07	0.09	0.22	0.22	0.03	0.12	0.12
Crit Moves:		****		****				****		****		
Green Time:	32.4	22.3	22.3	20.0	10.0	10.0	19.5	38.6	38.6	7.0	26.1	26.1
Volume/Cap:	0.23	0.56	0.16	0.56	0.43	0.73	0.45	0.56	0.56	0.48	0.44	0.45
Delay/Veh:	18.8	27.5	23.8	28.9	32.7	42.5	27.6	18.7	18.7	36.3	23.7	24.0
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
ProgAdjFctr:	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:	18.8	27.5	23.8	28.9	32.7	42.5	27.6	18.7	18.7	36.3	23.7	24.0
DesignQueue:	5	11	3	9	8	6	7	26	3	3	19	9

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #36 Boronda Rd/ 101 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.663
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 7.4
Optimal Cycle: 55 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	0	10	0	0	0	7	10	0	0	10	10
Lanes:	0 1	0 0	2	0 0	0 0	0	1 0	2 0	0	0 0	1 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	12	0	232	0	0	0	29	546	0	0	968	318
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:	12	0	232	0	0	0	29	546	0	0	968	318
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	0	232	0	0	0	29	546	0	0	968	318
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	0	232	0	0	0	29	546	0	0	968	318
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	0	232	0	0	0	29	546	0	0	968	318
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.88	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	0.00	2.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.00	1.00
Final Sat.:	1800	0	3150	0	0	0	1750	3800	0	0	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.07	0.00	0.00	0.00	0.02	0.14	0.00	0.00	0.51	0.18
Crit Moves:			****								****	
Green Time:	11.1	0.0	11.1	0.0	0.0	0.0	76.9	76.9	0.0	0.0	76.9	76.9
Volume/Cap:	0.06	0.00	0.66	0.00	0.00	0.00	0.02	0.19	0.00	0.00	0.66	0.24
Delay/Veh:	30.2	0.0	35.6	0.0	0.0	0.0	2.1	2.4	0.0	0.0	4.9	2.5
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
ProgAdjFctr:	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:	30.2	0.0	35.6	0.0	0.0	0.0	2.1	2.4	0.0	0.0	4.9	2.5
DesignQueue:	1	0	12	0	0	0	0	7	0	0	14	4

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                   Level Of Service Computation Report
           1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #36 Boronda Rd/ 101 NB Ramps
*******************************************************************************
Cycle (sec):        100                Critical Vol./Cap. (X):         0.922
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):         20.5
Optimal Cycle:      121                Level Of Service:                   C
*******************************************************************************
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Permitted        Permitted        Permitted        Permitted
Rights:         Include          Include          Include          Include
Min. Green:    7   10    10    0    0     0    7   10     0    0   10    10
Lanes:       0  1  0  0  2    0  0  0  0  0    1  0  2  0  0    0  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5;00-6:00 PM
Base Vol:      21    4   956    0    0     0   126 1295     0    0  965   569
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    4   956    0    0     0   126 1295     0    0  965   569
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 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    4   956    0    0     0   126 1295     0    0  965   569
Reduct Vol:     0    0     0    0    0     0     0    0     0    0    0     0
Reduced Vol:   21    4   956    0    0     0   126 1295     0    0  965   569
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.:    21    4   956    0    0     0   126 1295     0    0  965   569
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800 1800 1800  1800  1800 1800  1800 1800 1800  1800
Adjustment:  1.00 1.00  0.88 0.97 1.06  0.97  0.97 1.06  0.97 0.97 1.06  0.97
Lanes:       0.84 0.16  2.00 0.00 0.00  0.00  1.00 2.00  0.00 0.00 1.00  1.00
Final Sat.:  1512  288  3150    0    0     0  1750 3800     0    0 1900  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.01  0.30 0.00 0.00  0.00  0.07 0.34  0.00 0.00 0.51  0.33
Crit Moves:             ****                                        ****
Green Time:  32.9 32.9  32.9  0.0  0.0   0.0  55.1 55.1   0.0  0.0 55.1  55.1
Volume/Cap:  0.04 0.04  0.92 0.00 0.00  0.00  0.13 0.62  0.00 0.00 0.92  0.59
Delay/Veh:   17.3 17.3  34.0  0.0  0.0   0.0   8.3 12.0   0.0  0.0 25.0  12.1
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
ProgAdjFctr: 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:  17.3 17.3  34.0  0.0  0.0   0.0   8.3 12.0   0.0  0.0 25.0  12.1
DesignQueue:    1    0    38    0    0     0     3   36     0    0   28    15
*******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #37 Boronda Rd/ 101 SB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	0.611
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	13.4
Optimal Cycle:	49	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	10	10	0	10	10	0	10	10
Lanes:	0 0	0 0	0	1 1	0 0	1	0 0	2 0	1	0 0	1 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	0	0	0	444	1	59	0	110	8	0	230	722
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	444	1	59	0	110	8	0	230	722
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	444	1	59	0	110	8	0	230	722
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	444	1	59	0	110	8	0	230	722
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	444	1	59	0	110	8	0	230	722
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.99	1.00	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	0.00	0.00	1.99	0.01	1.00	0.00	2.00	1.00	0.00	1.00	1.00
Final Sat.:	0	0	0	3542	8	1750	0	3800	1750	0	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.13	0.03	0.00	0.03	0.00	0.00	0.12	0.41
Crit Moves:					****							****
Green Time:	0.0	0.0	0.0	20.5	20.5	20.5	0.0	67.5	67.5	0.0	67.5	67.5
Volume/Cap:	0.00	0.00	0.00	0.61	0.61	0.16	0.00	0.04	0.01	0.00	0.18	0.61
Delay/Veh:	0.0	0.0	0.0	28.5	28.5	24.9	0.0	4.1	4.0	0.0	4.6	7.5
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
ProgAdjFctr:	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	28.5	28.5	24.9	0.0	4.1	4.0	0.0	4.6	7.5
DesignQueue:	0	0	0	20	0	3	0	2	0	0	4	14

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                     Level Of Service Computation Report
            1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #37 Boronda Rd/ 101 SB Ramps
*******************************************************************************
Cycle (sec):          100             Critical Vol./Cap. (X):        0.712
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):      16.8
Optimal Cycle:         61             Level Of Service:                C+
*******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:         Permitted        Permitted         Permitted         Permitted
Rights:           Include          Include           Include           Include
Min. Green:     0     0     0    7    10    10     0    10    10     0    10    10
Lanes:         0  0  0  0  0    1  1  0  0  1     0  0  2  0  1     0  0  1  0  1
------------|----------------||----------------||----------------||----------------|
Volume Module: 5:00-6:00 PM
Base Vol:       0     0     0   997     4    63     0   425     9     0   338   603
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   997     4    63     0   425     9     0   338   603
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  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   997     4    63     0   425     9     0   338   603
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    0     0     0   997     4    63     0   425     9     0   338   603
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   997     4    63     0   425     9     0   338   603
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800
Adjustment:  0.97  1.06  0.97  0.99  1.00  0.97  0.97  1.06  0.97  0.97  1.06  0.97
Lanes:       0.00  0.00  0.00  1.99  0.01  1.00  0.00  2.00  1.00  0.00  1.00  1.00
Final Sat.:     0     0     0  3536    14  1750     0  3800  1750     0  1900  1750
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.00  0.00  0.28  0.28  0.04  0.00  0.11  0.01  0.00  0.18  0.34
Crit Moves:                          ****                                      ****
Green Time:   0.0   0.0   0.0  39.6  39.6  39.6   0.0  48.4  48.4   0.0  48.4  48.4
Volume/Cap:  0.00  0.00  0.00  0.71  0.71  0.09  0.00  0.23  0.01  0.00  0.37  0.71
Delay/Veh:    0.0   0.0   0.0  20.5  20.5  14.4   0.0  11.4  10.2   0.0  12.4  17.4
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
ProgAdjFctr: 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  20.5  20.5  14.4   0.0  11.4  10.2   0.0  12.4  17.4
DesignQueue:    0     0     0    36     0     2     0    13     0     0    10    19
*******************************************************************************
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #38 Calle del Adobe/ Laurel Dr/ Davis Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.702
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	24.3
Optimal Cycle:	60	Level Of Service:	C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 2 0 2			2 0 1 1 0			1 0 1 1 0			2 0 2 0 1		
Volume Module: 7:30-8:30 AM												
Base Vol:	27	152	760	85	256	34	23	259	5	877	362	99
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:	27	152	760	85	256	34	23	259	5	877	362	99
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	152	760	85	256	34	23	259	5	877	362	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	152	760	85	256	34	23	259	5	877	362	99
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	152	760	85	256	34	23	259	5	877	362	99
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.88	0.88	1.03	1.00	0.97	1.03	1.00	0.88	1.06	0.97
Lanes:	1.00	2.00	2.00	2.00	1.76	0.24	1.00	1.96	0.04	2.00	2.00	1.00
Final Sat.:	1750	3800	3150	3150	3266	434	1750	3630	70	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.24	0.03	0.08	0.08	0.01	0.07	0.07	0.28	0.10	0.06
Crit Moves:			****	****				****		****		
Green Time:	16.5	33.0	33.0	7.0	23.5	23.5	19.8	10.0	10.0	38.0	28.3	28.3
Volume/Cap:	0.09	0.12	0.73	0.39	0.33	0.33	0.07	0.71	0.71	0.73	0.34	0.20
Delay/Veh:	26.9	17.8	24.4	34.4	24.2	24.2	24.8	37.5	37.5	21.9	21.7	20.8
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
ProgAdjFctr:	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:	26.9	17.8	24.4	34.4	24.2	24.2	24.8	37.5	37.5	21.9	21.7	20.8
DesignQueue:	1	6	30	4	11	1	1	13	0	32	15	4

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #38 Calle del Adobe/ Laurel Dr/ Davis Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.952
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	35.1
Optimal Cycle:	140	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 0	2	2 0	1 1	0	1 0	1 1	0	2 0	2 0	1
Volume Module: 5:00-6:00 PM												
Base Vol:	32	460	1235	342	374	38	32	251	14	836	305	339
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:	32	460	1235	342	374	38	32	251	14	836	305	339
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	460	1235	342	374	38	32	251	14	836	305	339
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	460	1235	342	374	38	32	251	14	836	305	339
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	460	1235	342	374	38	32	251	14	836	305	339
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.88	0.88	1.03	1.00	0.97	1.03	1.00	0.88	1.06	0.97
Lanes:	1.00	2.00	2.00	2.00	1.81	0.19	1.00	1.89	0.11	2.00	2.00	1.00
Final Sat.:	1750	3800	3150	3150	3358	341	1750	3504	195	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.12	0.39	0.11	0.11	0.11	0.02	0.07	0.07	0.27	0.08	0.19
Crit Moves:			****	****				****		****		
Green Time:	7.0	39.9	39.9	11.1	44.0	44.0	7.0	10.0	10.0	27.0	30.0	30.0
Volume/Cap:	0.26	0.30	0.98	0.98	0.25	0.25	0.26	0.72	0.72	0.98	0.27	0.65
Delay/Veh:	33.7	15.6	38.5	66.3	13.4	13.4	33.7	37.6	37.6	47.4	20.3	25.0
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
ProgAdjFctr:	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:	33.7	15.6	38.5	66.3	13.4	13.4	33.7	37.6	37.6	47.4	20.3	25.0
DesignQueue:	2	16	45	17	12	1	2	13	1	36	12	14

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                       Level Of Service Computation Report
             1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #39 Constitution Blvd/ Laurel Dr
*******************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):         0.276
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        13.8
Optimal Cycle:         36               Level Of Service:                  B-
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Permitted
Rights:          Include          Ignore           Include          Include
Min. Green:     0    0     0    7    0    10    7   10     0    0   10    10
Lanes:        0  0  0  0  0   2  0  0  0  1   2  0  2  0  0   0  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:       0    0     0  148    0   614  275  446     0    0  412    97
Growth Adj:  1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  148    0     0  275  446     0    0  412    97
User Adj:    1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  148    0     0  275  446     0    0  412    97
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  148    0     0  275  446     0    0  412    97
PCE Adj:     1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  148    0     0  275  446     0    0  412    97
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800 1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment:  0.97 1.06  0.97 0.88 1.06  0.97 0.88 1.06  0.97 0.97 1.06  0.97
Lanes:       0.00 0.00  0.00 2.00 0.00  1.00 2.00 2.00  0.00 0.00 2.00  1.00
Final Sat.:     0    0     0 3150    0  1750 3150 3800     0    0 3800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.05 0.00  0.00 0.09 0.12  0.00 0.00 0.11  0.06
Crit Moves:                  ****             ****                  ****
Green Time:   0.0  0.0   0.0 17.0  0.0   0.0 31.7 71.0   0.0  0.0 39.3  39.3
Volume/Cap:  0.00 0.00  0.00 0.28 0.00  0.00 0.28 0.17  0.00 0.00 0.28  0.14
Delay/Veh:    0.0  0.0   0.0 27.5  0.0   0.0 19.5  3.6   0.0  0.0 15.7  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
ProgAdjFctr: 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 27.5  0.0   0.0 19.5  3.6   0.0  0.0 15.7  14.8
DesignQueue:    0    0     0    7    0     0   11    7     0    0   14     3
*******************************************************************************
```

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------------------------------------------------------------------------------
------------------------------------------------------------------------------
                     Level Of Service Computation Report
             1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #39 Constitution Blvd/ Laurel Dr
******************************************************************************
Cycle (sec):         100                Critical Vol./Cap. (X):        0.502
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):        12.8
Optimal Cycle:        41                Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Permitted
Rights:          Include          Ignore           Include          Include
Min. Green:     0     0     0    7     0    10    7    10     0    0    10    10
Lanes:        0  0  0  0  0   2  0  0  0  1   2  0  2  0  0   0  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:       0     0     0   92     0   461  693   783     0    0   733   121
Growth Adj:  1.00  1.00  1.00 1.00  1.00  0.00 1.00  1.00  1.00 1.00  1.00  1.00
Initial Bse:    0     0     0   92     0     0  693   783     0    0   733   121
User Adj:    1.00  1.00  1.00 1.00  1.00  0.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00 1.00  1.00  0.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Volume:     0     0     0   92     0     0  693   783     0    0   733   121
Reduct Vol:     0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:    0     0     0   92     0     0  693   783     0    0   733   121
PCE Adj:     1.00  1.00  1.00 1.00  1.00  0.00 1.00  1.00  1.00 1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00 1.00  1.00  0.00 1.00  1.00  1.00 1.00  1.00  1.00
Final Vol.:     0     0     0   92     0     0  693   783     0    0   733   121
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800  1800
Adjustment:  0.97  1.06  0.97 0.88  1.06  0.97 0.88  1.06  0.97 0.97  1.06  0.97
Lanes:       0.00  0.00  0.00 2.00  0.00  1.00 2.00  2.00  0.00 0.00  2.00  1.00
Final Sat.:     0     0     0 3150     0  1750 3150  3800     0    0  3800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.00  0.00 0.03  0.00  0.00 0.22  0.21  0.00 0.00  0.19  0.07
Crit Moves:                   ****             ****                   ****
Green Time:   0.0   0.0   0.0  7.0   0.0   0.0 43.2  81.0   0.0  0.0  37.8  37.8
Volume/Cap:  0.00  0.00  0.00 0.42  0.00  0.00 0.51  0.25  0.00 0.00  0.51  0.18
Delay/Veh:    0.0   0.0   0.0 34.6   0.0   0.0 16.0   1.7   0.0  0.0  18.4  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
ProgAdjFctr: 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 34.6   0.0   0.0 16.0   1.7   0.0  0.0  18.4  15.8
DesignQueue:    0     0     0    5     0     0   23     9     0    0    27     4
******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #40 Curtis St/ Main St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.186
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	13.9
Optimal Cycle:	39	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 1	0	1 0	2 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module: 8:30-9:30 AM												
Base Vol:	43	478	12	15	562	12	17	14	64	26	29	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:	43	478	12	15	562	12	17	14	64	26	29	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	478	12	15	562	12	17	14	64	26	29	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	478	12	15	562	12	17	14	64	26	29	16
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.:	43	478	12	15	562	12	17	14	64	26	29	16
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.04	1.00	0.97	1.04	1.00	1.00	1.00	0.97	1.00	1.00	0.97
Lanes:	1.00	2.92	0.08	1.00	2.93	0.07	0.55	0.45	1.00	0.47	0.53	1.00
Final Sat.:	1750	5463	137	1750	5483	117	987	813	1750	851	949	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.09	0.01	0.10	0.10	0.02	0.02	0.04	0.03	0.03	0.01
Crit Moves:	****				****				****			
Green Time:	13.2	40.2	40.2	28.1	55.1	55.1	19.7	19.7	19.7	19.7	19.7	19.7
Volume/Cap:	0.19	0.22	0.22	0.03	0.19	0.19	0.09	0.09	0.19	0.16	0.16	0.05
Delay/Veh:	29.4	14.9	14.9	19.8	8.5	8.5	25.0	25.0	25.5	25.3	25.3	24.8
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
ProgAdjFctr:	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:	29.4	14.9	14.9	19.8	8.5	8.5	25.0	25.0	25.5	25.3	25.3	24.8
DesignQueue:	2	16	0	1	14	0	1	1	3	1	1	1

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #40 Curtis St/ Main St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.345
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	12.2
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Permitted			Permitted	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 2 1 0			1 0 2 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module: 5:00-6:00 PM												
Base Vol:	79	1070	37	84	1066	35	68	44	106	57	44	70
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:	79	1070	37	84	1066	35	68	44	106	57	44	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	1070	37	84	1066	35	68	44	106	57	44	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	1070	37	84	1066	35	68	44	106	57	44	70
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.:	79	1070	37	84	1066	35	68	44	106	57	44	70
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.04	1.00	0.97	1.04	1.00	1.00	1.00	0.97	1.00	1.00	0.97
Lanes:	1.00	2.90	0.10	1.00	2.90	0.10	0.61	0.39	1.00	0.56	0.44	1.00
Final Sat.:	1750	5413	187	1750	5422	178	1093	707	1750	1016	784	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.20	0.05	0.20	0.20	0.06	0.06	0.06	0.06	0.06	0.04
Crit Moves:	****				****			****				
Green Time:	13.1	63.0	63.0	7.0	56.9	56.9	18.0	18.0	18.0	18.0	18.0	18.0
Volume/Cap:	0.35	0.31	0.31	0.69	0.35	0.35	0.35	0.35	0.34	0.31	0.31	0.22
Delay/Veh:	30.5	6.5	6.5	44.3	8.8	8.8	27.5	27.5	27.4	27.2	27.2	26.7
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
ProgAdjFctr:	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	6.5	6.5	44.3	8.8	8.8	27.5	27.5	27.4	27.2	27.2	26.7
DesignQueue:	4	23	1	4	27	1	3	2	5	3	2	3

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                     Level Of Service Computation Report
          1994 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #41 Davis Rd/ Larkin St
******************************************************************************
Average Delay (sec/veh):      7.8        Worst Case Level Of Service:       F
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:          Include          Include         Include          Include
Lanes:        1  0  1  1  0   1  0  1  1  0   0  0  1! 0  0   1  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:       2  823    18    62 1141     0     0    0     0    42    0   149
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:    2  823    18    62 1141     0     0    0     0    42    0   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:     2  823    18    62 1141     0     0    0     0    42    0   149
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     2  823    18    62 1141     0     0    0     0    42    0   149
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.00  1.00  1.10 1.00  1.00  1.10 1.10  1.10  1.10 1.10  1.10
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:       2  823    18    68 1141     0     0    0     0    46    0   164
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  2.1 xxxx xxxxx   2.1 xxxx xxxxx xxxxx xxxx xxxxx   3.4 xxxx   2.6
Critical Gp:  5.5 xxxx xxxxx   5.5 xxxx xxxxx xxxxx xxxx xxxxx   7.0 xxxx   5.5
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1141 xxxx xxxxx   841 xxxx xxxxx  xxxx xxxx xxxxx  2037 xxxx   421
Potent Cap.:  418 xxxx xxxxx   606 xxxx xxxxx  xxxx xxxx xxxxx    53 xxxx   848
Adj Cap:     1.00 xxxx xxxxx  1.00 xxxx xxxxx  xxxx xxxx xxxxx  0.88 xxxx  1.00
Move Cap.:    418 xxxx xxxxx   606 xxxx xxxxx  xxxx xxxx xxxxx    47 xxxx   848
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:  8.6 xxxx xxxxx   6.6 xxxx xxxxx xxxxx xxxx xxxxx 353.6 xxxx   5.2
LOS by Move:    B    *     *     B    *     *     *    *     *     F    *     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:      0.0              0.4              0.0             81.8
```

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-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
            1994 HCM Unsignalized Method (Base Volume Alternative)
*******************************************************************************
Intersection #41 Davis Rd/ Larkin St
*******************************************************************************
Average Delay (sec/veh): OVERFLOW          Worst Case Level Of Service:       F
*******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign         Stop Sign
Rights:           Include          Include          Include           Include
Lanes:        1  0  1  1  0   1  0  1  1  0   0  0  1! 0  0   1  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:        1 1612    75   213 1154     0     0     0     0    24     0   162
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 1612    75   213 1154     0     0     0     0    24     0   162
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 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 1612    75   213 1154     0     0     0     0    24     0   162
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
Final Vol.:      1 1612    75   213 1154     0     0     0     0    24     0   162
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%                0%
% Cycle/Cars:    xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:    xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:      1.10 1.00  1.00  1.10 1.00  1.00  1.10 1.10  1.10  1.10 1.10  1.10
Cycl/Car PCE:    xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:    xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:        1 1612    75   234 1154     0     0     0     0    26     0   178
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:   2.1 xxxx xxxxx   2.1 xxxx xxxxx xxxxx xxxx xxxxx   3.4 xxxx   2.6
Critical Gp:   5.5 xxxx xxxxx   5.5 xxxx xxxxx xxxxx xxxx xxxxx   7.0 xxxx   5.5
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1154 xxxx xxxxx  1687 xxxx xxxxx  xxxx xxxx xxxxx  3018 xxxx   844
Potent Cap.:  412 xxxx xxxxx   213 xxxx xxxxx  xxxx xxxx xxxxx    12 xxxx   518
Adj Cap:     1.00 xxxx xxxxx  1.00 xxxx xxxxx  xxxx xxxx xxxxx  0.00 xxxx  1.00
Move Cap.:    412 xxxx xxxxx   213 xxxx xxxxx  xxxx xxxx xxxxx     0 xxxx   518
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:  8.8 xxxx xxxxx 191.2 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.1
LOS by Move:    B    *     *     F    *     *     *    *     *     F    *     C
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:        0.0              32.3              0.0            xxxxxx
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #42 Davis Rd/ Post Dr

Cycle (sec):	100	Critical Vol./Cap. (X):	0.410
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	18.5
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 1	0	1 0	2 0	1	1 1	0 0	1	0 1	0 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	178	700	19	55	779	44	115	17	173	24	7	58
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:	178	700	19	55	779	44	115	17	173	24	7	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	178	700	19	55	779	44	115	17	173	24	7	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	700	19	55	779	44	115	17	173	24	7	58
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.:	178	700	19	55	779	44	115	17	173	24	7	58
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.04	1.00	0.97	1.06	0.97	0.98	1.00	0.97	1.00	1.00	0.97
Lanes:	1.00	2.92	0.08	1.00	2.00	1.00	1.75	0.25	1.00	0.77	0.23	1.00
Final Sat.:	1750	5452	148	1750	3800	1750	3093	457	1750	1394	406	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.13	0.13	0.03	0.20	0.03	0.04	0.04	0.10	0.02	0.02	0.03
Crit Moves:	****				****			****			****	
Green Time:	19.6	52.0	52.0	7.0	39.4	39.4	19.0	19.0	19.0	10.0	10.0	10.0
Volume/Cap:	0.52	0.25	0.25	0.45	0.52	0.06	0.20	0.20	0.52	0.17	0.17	0.33
Delay/Veh:	28.5	10.1	10.1	35.7	17.8	14.3	25.9	25.9	28.8	31.4	31.4	32.3
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
ProgAdjFctr:	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:	28.5	10.1	10.1	35.7	17.8	14.3	25.9	25.9	28.8	31.4	31.4	32.3
DesignQueue:	8	19	1	3	28	1	5	1	8	1	0	3

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #42 Davis Rd/ Post Dr

Cycle (sec):	100	Critical Vol./Cap. (X):	0.683
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	23.6
Optimal Cycle:	57	Level Of Service:	C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 1	0	1 0	2 0	1	1 1	0 0	1	0 1	0 0	1
Volume Module: 5:00-6:00 PM												
Base Vol:	226	1296	19	131	900	38	134	31	201	122	24	210
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:	226	1296	19	131	900	38	134	31	201	122	24	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	226	1296	19	131	900	38	134	31	201	122	24	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	226	1296	19	131	900	38	134	31	201	122	24	210
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.:	226	1296	19	131	900	38	134	31	201	122	24	210
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.04	1.00	0.97	1.06	0.97	0.98	1.00	0.97	1.00	1.00	0.97
Lanes:	1.00	2.96	0.04	1.00	2.00	1.00	1.63	0.37	1.00	0.84	0.16	1.00
Final Sat.:	1750	5519	81	1750	3800	1750	2883	667	1750	1504	296	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.23	0.23	0.07	0.24	0.02	0.05	0.05	0.11	0.08	0.08	0.12
Crit Moves:	****				****				****			****
Green Time:	18.9	40.6	40.6	13.0	34.7	34.7	16.8	16.8	16.8	17.6	17.6	17.6
Volume/Cap:	0.68	0.58	0.58	0.58	0.68	0.06	0.28	0.28	0.68	0.46	0.46	0.68
Delay/Veh:	32.6	17.8	17.8	33.8	22.3	16.6	27.6	27.6	34.0	28.9	28.9	33.5
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
ProgAdjFctr:	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:	32.6	17.8	17.8	33.8	22.3	16.6	27.6	27.6	34.0	28.9	28.9	33.5
DesignQueue:	11	46	1	6	35	1	6	1	10	6	1	10

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #43 Davis Rd/ Rossi St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.547
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	13.7
Optimal Cycle:	44	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	10	10	7	10	0	0	0	0	7	0	10
Lanes:	0 0 2 0 1			1 0 2 0 0			0 0 0 0 0			2 0 0 0 1		
Volume Module: 7:30-8:30 AM												
Base Vol:	0	876	238	92	1251	0	0	0	0	479	0	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:	0	876	238	92	1251	0	0	0	0	479	0	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:	0	876	238	92	1251	0	0	0	0	479	0	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	876	238	92	1251	0	0	0	0	479	0	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.:	0	876	238	92	1251	0	0	0	0	479	0	108
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.88	1.06	0.97
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	3800	1750	1750	3800	0	0	0	0	3150	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.14	0.05	0.33	0.00	0.00	0.00	0.00	0.15	0.00	0.06
Crit Moves:	****				****					****		
Green Time:	0.0	53.2	53.2	7.0	60.2	0.0	0.0	0.0	0.0	27.8	0.0	27.8
Volume/Cap:	0.00	0.43	0.26	0.75	0.55	0.00	0.00	0.00	0.00	0.55	0.00	0.22
Delay/Veh:	0.0	10.9	9.7	49.4	9.2	0.0	0.0	0.0	0.0	23.9	0.0	21.1
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
ProgAdjFctr:	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	10.9	9.7	49.4	9.2	0.0	0.0	0.0	0.0	23.9	0.0	21.1
DesignQueue:	0	24	6	5	30	0	0	0	0	20	0	4

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                       Level Of Service Computation Report
               1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #43 Davis Rd/ Rossi St
*******************************************************************************
Cycle (sec):         100                Critical Vol./Cap. (X):         0.596
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):         10.3
Optimal Cycle:        48                Level Of Service:                   B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Protected        Protected         Protected        Protected
Rights:           Include          Include           Include          Include
Min. Green:     0    10    10    7    10     0    0     0     0    7     0    10
Lanes:        0  0  2  0  1    1  0  2  0  0    0  0  0  0  0    2  0  0  0  1
------------|----------------||----------------||----------------||----------------|
Volume Module: 5:00-6:00 PM
Base Vol:       0 1463   386    92   929     0     0     0     0   253     0   152
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 1463   386    92   929     0     0     0     0   253     0   152
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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 1463   386    92   929     0     0     0     0   253     0   152
Reduct Vol:     0    0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    0 1463   386    92   929     0     0     0     0   253     0   152
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 1463   386    92   929     0     0     0     0   253     0   152
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97  0.88 1.06  0.97
Lanes:       0.00 2.00  1.00  1.00 2.00  0.00  0.00 0.00  0.00  2.00 0.00  1.00
Final Sat.:     0 3800  1750  1750 3800     0     0     0     0  3150     0  1750
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.38  0.22  0.05 0.24  0.00  0.00 0.00  0.00  0.08 0.00  0.09
Crit Moves:       ****        ****                                            ****
Green Time:   0.0 64.6  64.6   8.8 73.4   0.0   0.0  0.0   0.0  14.6  0.0  14.6
Volume/Cap:  0.00 0.60  0.34  0.60 0.33  0.00  0.00 0.00  0.00  0.55 0.00  0.60
Delay/Veh:    0.0  8.0   6.2  37.7  3.6   0.0   0.0  0.0   0.0  31.3  0.0  33.1
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
ProgAdjFctr: 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  8.0   6.2  37.7  3.6   0.0   0.0  0.0   0.0  31.3  0.0  33.1
DesignQueue:    0   32     8     5   15     0     0     0     0    12     0     7
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                    Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #44 Davis Rd/ Westridge Pkwy
******************************************************************************
Cycle (sec):         100             Critical Vol./Cap. (X):         0.113
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):       9.6
Optimal Cycle:        39             Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10     0    0   10    10    7    0    10    0    0     0
Lanes:        1  0  2  0  0   0  0  2  0  1   2  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      30   87     0    0  244    25    4    0    31    0    0     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:   30   87     0    0  244    25    4    0    31    0    0     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:    30   87     0    0  244    25    4    0    31    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   30   87     0    0  244    25    4    0    31    0    0     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.:    30   87     0    0  244    25    4    0    31    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800 1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment:  0.97 1.06  0.97 0.97 1.06  0.97 0.88 1.06  0.97 0.97 1.06  0.97
Lanes:       1.00 2.00  0.00 0.00 2.00  1.00 2.00 0.00  1.00 0.00 0.00  0.00
Final Sat.:  1750 3800     0    0 3800  1750 3150    0  1750    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.02  0.00 0.00 0.06  0.01 0.00 0.00  0.02 0.00 0.00  0.00
Crit Moves:  ****                 ****                      ****
Green Time:  15.2 72.3   0.0  0.0 57.0  57.0 15.7  0.0  15.7  0.0  0.0   0.0
Volume/Cap:  0.11 0.03  0.00 0.00 0.11  0.03 0.01 0.00  0.11 0.00 0.00  0.00
Delay/Veh:   27.8  3.0   0.0  0.0  7.5   7.1 27.0  0.0  27.5  0.0  0.0   0.0
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
ProgAdjFctr: 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:  27.8  3.0   0.0  0.0  7.5   7.1 27.0  0.0  27.5  0.0  0.0   0.0
DesignQueue:    1    1     0    0    6     1    0    0     1    0    0     0
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #44 Davis Rd/ Westridge Pkwy

Cycle (sec):	100		Critical Vol./Cap. (X):	0.312
Loss Time (sec):	12	(Y+R = 4 sec)	Average Delay (sec/veh):	17.4
Optimal Cycle:	39		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	0	0	10	10	7	0	10	0	0	0
Lanes:	1 0	2 0	0	0 0	2 0	1	2 0	0 0	1	0 0	0 0	0
Volume Module: 4:00-5:00 PM												
Base Vol:	150	330	0	0	317	95	104	0	185	0	0	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:	150	330	0	0	317	95	104	0	185	0	0	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:	150	330	0	0	317	95	104	0	185	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	330	0	0	317	95	104	0	185	0	0	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.:	150	330	0	0	317	95	104	0	185	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.88	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	3800	0	0	3800	1750	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.00	0.00	0.08	0.05	0.03	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	27.4	54.2	0.0	0.0	26.7	26.7	33.8	0.0	33.8	0.0	0.0	0.0
Volume/Cap:	0.31	0.16	0.00	0.00	0.31	0.20	0.10	0.00	0.31	0.00	0.00	0.00
Delay/Veh:	22.0	8.8	0.0	0.0	22.3	21.6	17.2	0.0	18.7	0.0	0.0	0.0
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
ProgAdjFctr:	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	8.8	0.0	0.0	22.3	21.6	17.2	0.0	18.7	0.0	0.0	0.0
DesignQueue:	6	9	0	0	13	4	4	0	7	0	0	0

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                  Level Of Service Computation Report
         1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #45 Del Monte Ave/ Sanborn Rd
*******************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):          0.159
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        13.9
Optimal Cycle:         32              Level Of Service:                  B-
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    7   10    10    7   10    10     7   10    10     7   10    10
Lanes:       1  0  0  1  0   1  0  0  1  0    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      53   83    17     9   93   106    65   58    40    27  103     5
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:   53   83    17     9   93   106    65   58    40    27  103     5
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    53   83    17     9   93   106    65   58    40    27  103     5
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   53   83    17     9   93   106    65   58    40    27  103     5
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.:    53   83    17     9   93   106    65   58    40    27  103     5
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.00  1.00  0.97 1.00  1.00  0.97 1.05  1.00  0.97 1.03  1.00
Lanes:       1.00 0.83  0.17  1.00 0.47  0.53  1.00 1.16  0.84  1.00 1.90  0.10
Final Sat.:  1750 1494   306  1750  841   959  1750 2189  1509  1750 3529   171
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.06  0.06  0.01 0.11  0.11  0.04 0.03  0.03  0.02 0.03  0.03
Crit Moves:                        ****                              ****
Green Time:  69.6 69.6  69.6  69.6 69.6  69.6  18.4 18.4  18.4  18.4 18.4  18.4
Volume/Cap:  0.04 0.08  0.08  0.01 0.16  0.16  0.20 0.14  0.14  0.08 0.16  0.16
Delay/Veh:    3.6  3.7   3.7   3.5  3.9   3.9  26.3 26.0  26.0  25.7 26.1  26.1
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
ProgAdjFctr: 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:   3.6  3.7   3.7   3.5  3.9   3.9  26.3 26.0  26.0  25.7 26.1  26.1
DesignQueue:    1    1     0     0    2     2     3    3     2     1    5     0
*******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #45 Del Monte Ave/ Sanborn Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.387
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.2
Optimal Cycle:	35	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Permitted			Permitted	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 0 1 0			1 0 0 1 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: 5:00-6:00 PM												
Base Vol:	127	238	41	11	203	152	251	271	163	67	128	13
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:	127	238	41	11	203	152	251	271	163	67	128	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:	127	238	41	11	203	152	251	271	163	67	128	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	127	238	41	11	203	152	251	271	163	67	128	13
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.:	127	238	41	11	203	152	251	271	163	67	128	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.00	1.00	0.97	1.00	1.00	0.97	1.04	1.00	0.97	1.03	1.00
Lanes:	1.00	0.85	0.15	1.00	0.57	0.43	1.00	1.23	0.77	1.00	1.81	0.19
Final Sat.:	1750	1535	265	1750	1029	771	1750	2309	1389	1750	3359	341
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.16	0.01	0.20	0.20	0.14	0.12	0.12	0.04	0.04	0.04
Crit Moves:					****		****					
Green Time:	50.9	50.9	50.9	50.9	50.9	50.9	37.1	37.1	37.1	37.1	37.1	37.1
Volume/Cap:	0.14	0.30	0.30	0.01	0.39	0.39	0.39	0.32	0.32	0.10	0.10	0.10
Delay/Veh:	9.9	10.9	10.9	9.2	11.5	11.5	17.8	17.1	17.1	15.7	15.7	15.7
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
ProgAdjFctr:	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	10.9	10.9	9.2	11.5	11.5	17.8	17.1	17.1	15.7	15.7	15.7
DesignQueue:	4	7	1	0	6	4	9	10	6	2	5	0

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #46 Del Monte Ave/ Williams Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.245
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	10.3
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	2	0 1	1 0	2	0 1
Volume Module: 7:30-8:30 AM												
Base Vol:	25	6	15	95	5	137	91	448	11	5	521	110
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	6	15	95	5	137	91	448	11	5	521	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	6	15	95	5	137	91	448	11	5	521	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	6	15	95	5	137	91	448	11	5	521	110
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	6	15	95	5	137	91	448	11	5	521	110
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.81	0.19	1.00	0.95	0.05	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1452	348	1750	1710	90	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.06	0.06	0.08	0.05	0.12	0.01	0.00	0.14	0.06
Crit Moves:						****					****	
Green Time:	32.0	32.0	32.0	32.0	32.0	32.0	56.0	56.0	56.0	56.0	56.0	56.0
Volume/Cap:	0.05	0.05	0.03	0.17	0.17	0.24	0.09	0.21	0.01	0.01	0.24	0.11
Delay/Veh:	17.9	17.9	17.7	18.6	18.6	19.1	7.8	8.3	7.4	7.4	8.5	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
ProgAdjFctr:	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:	17.9	17.9	17.7	18.6	18.6	19.1	7.8	8.3	7.4	7.4	8.5	7.8
DesignQueue:	1	0	1	4	0	5	2	11	0	0	13	3

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #46 Del Monte Ave/ Williams Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.284
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	11.2
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module: 5:00-6:00 PM												
Base Vol:	19	9	9	53	11	178	260	340	32	15	330	83
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	9	9	53	11	178	260	340	32	15	330	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	9	9	53	11	178	260	340	32	15	330	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	9	9	53	11	178	260	340	32	15	330	83
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	9	9	53	11	178	260	340	32	15	330	83
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.68	0.32	1.00	0.83	0.17	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1221	579	1750	1491	309	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.04	0.04	0.10	0.15	0.09	0.02	0.01	0.09	0.05
Crit Moves:						****	****					
Green Time:	35.8	35.8	35.8	35.8	35.8	35.8	52.2	52.2	52.2	52.2	52.2	52.2
Volume/Cap:	0.04	0.04	0.01	0.10	0.10	0.28	0.28	0.17	0.04	0.02	0.17	0.09
Delay/Veh:	15.9	15.9	15.8	16.3	16.3	17.5	10.2	9.5	8.8	8.7	9.5	9.1
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
ProgAdjFctr:	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:	15.9	15.9	15.8	16.3	16.3	17.5	10.2	9.5	8.8	8.7	9.5	9.1
DesignQueue:	1	0	0	2	0	7	7	9	1	0	9	2

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                      Level Of Service Computation Report
           1985 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #47 Elvee Dr/ Sanborn Rd/ US 101 SB Ramps
*********************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):           0.678
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):         14.0
Optimal Cycle:         57              Level Of Service:                   B-
*********************************************************************************
Approach:       North Bound       South Bound       East Bound        West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|-----------------||-----------------||-----------------||-----------------|
Control:         Protected         Permitted         Permitted         Permitted
Rights:           Include           Include           Include           Include
Min. Green:     0    10    10     7    10     0     7     0    10     0     0     0
Lanes:        0  0  1  1  0    1  0  2  0  0    0  1  0  0  1    0  0  0  0  0
------------|-----------------||-----------------||-----------------||-----------------|
Volume Module: 7:30-8:30 AM
Base Vol:       0   652    43   146  1384     0   121     0   407     0     0     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:    0   652    43   146  1384     0   121     0   407     0     0     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:     0   652    43   146  1384     0   121     0   407     0     0     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    0   652    43   146  1384     0   121     0   407     0     0     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.:     0   652    43   146  1384     0   121     0   407     0     0     0
------------|-----------------||-----------------||-----------------||-----------------|
Saturation Flow Module:
Sat/Lane:    1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800
Adjustment:  0.97  1.03  1.00  0.97  1.06  0.97  1.00  1.00  0.97  0.97  1.06  0.97
Lanes:       0.00  1.87  0.13  1.00  2.00  0.00  1.00  0.00  1.00  0.00  0.00  0.00
Final Sat.:     0  3471   229  1750  3800     0  1800     0  1750     0     0     0
------------|-----------------||-----------------||-----------------||-----------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.19  0.19  0.08  0.36  0.00  0.07  0.00  0.23  0.00  0.00  0.00
Crit Moves:  ****                    ****                    ****
Green Time:   0.0  53.7  53.7  53.7  53.7   0.0  34.3   0.0  34.3   0.0   0.0   0.0
Volume/Cap:  0.00  0.35  0.35  0.16  0.68  0.00  0.20  0.00  0.68  0.00  0.00  0.00
Delay/Veh:    0.0  10.1  10.1   8.9  13.5   0.0  17.6   0.0  23.5   0.0   0.0   0.0
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
ProgAdjFctr: 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  10.1  10.1   8.9  13.5   0.0  17.6   0.0  23.5   0.0   0.0   0.0
DesignQueue:    0    18     1     4    39     0     4     0    16     0     0     0
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                    Level Of Service Computation Report
            1985 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #47 Elvee Dr/ Sanborn Rd/ US 101 SB Ramps
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):         0.535
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       19.8
Optimal Cycle:         87              Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Permitted        Permitted        Permitted
Rights:         Include          Include          Include          Include
Min. Green:    0   10    10    7   10     0    7    0    10    0    0     0
Lanes:        0  0  1  1  0   1  0  2  0  0   0  1  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 4:00-5:00 PM
Base Vol:      0 1096    55   189 1015     0   287    0   205     0    0     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:   0 1096    55   189 1015     0   287    0   205     0    0     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:    0 1096    55   189 1015     0   287    0   205     0    0     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0 1096    55   189 1015     0   287    0   205     0    0     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.:    0 1096    55   189 1015     0   287    0   205     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.03  1.00  0.97 1.06  0.97  1.00 1.00  0.97  0.97 1.06  0.97
Lanes:       0.00 1.90  0.10  1.00 2.00  0.00  1.00 0.00  1.00  0.00 0.00  0.00
Final Sat.:    0 3523   177  1750 3800     0  1800    0  1750     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.31  0.31  0.11 0.27  0.00  0.16 0.00  0.12  0.00 0.00  0.00
Crit Moves:       ****                         ****
Green Time:   0.0 69.0  69.0  31.9 31.9   0.0  19.0  0.0  19.0   0.0  0.0   0.0
Volume/Cap:  0.00 0.45  0.45  0.34 0.84  0.00  0.84 0.00  0.62  0.00 0.00  0.00
Delay/Veh:    0.0  5.4   5.4  19.9 27.9   0.0  41.1  0.0  30.6   0.0  0.0   0.0
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
ProgAdjFctr: 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  5.4   5.4  19.9 27.9   0.0  41.1  0.0  30.6   0.0  0.0   0.0
DesignQueue:    0   21     1     7   41     0    13    0     9     0    0     0
********************************************************************************
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #48 Front St/ Market St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.477
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	16.5
Optimal Cycle:	39	Level Of Service:	C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	10	10	7	10	0	0	0	0	7	0	10
Lanes:	0 0	3 0	1	2 0	2 0	0	0 0	0 0	0	1 0	0 0	2
Volume Module: 7:30-8:30 AM												
Base Vol:	0	547	223	610	886	0	0	0	0	141	0	312
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	547	223	610	886	0	0	0	0	141	0	312
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	547	223	610	886	0	0	0	0	141	0	312
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	547	223	610	886	0	0	0	0	141	0	312
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	547	223	610	886	0	0	0	0	141	0	312
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.88
Lanes:	0.00	3.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Final Sat.:	0	5700	1750	3150	3800	0	0	0	0	1750	0	3150
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.13	0.19	0.23	0.00	0.00	0.00	0.00	0.08	0.00	0.10
Crit Moves:			****	****								****
Green Time:	0.0	26.7	26.7	40.6	67.3	0.0	0.0	0.0	0.0	20.7	0.0	20.7
Volume/Cap:	0.00	0.36	0.48	0.48	0.35	0.00	0.00	0.00	0.00	0.39	0.00	0.48
Delay/Veh:	0.0	22.7	24.0	16.9	5.3	0.0	0.0	0.0	0.0	26.3	0.0	26.9
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
ProgAdjFctr:	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	22.7	24.0	16.9	5.3	0.0	0.0	0.0	0.0	26.3	0.0	26.9
DesignQueue:	0	23	9	21	17	0	0	0	0	6	0	14

```
---------------------------------------------------------------------------------
---------------------------------------------------------------------------------
                       Level Of Service Computation Report
                1985 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #48 Front St/ Market St
*********************************************************************************
Cycle (sec):          100                Critical Vol./Cap. (X):         0.576
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):         19.9
Optimal Cycle:         46                Level Of Service:                   C
*********************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|-----------------||---------------||---------------||---------------|
Control:         Permitted        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    10    10     7    10     0     0     0     0     7     0    10
Lanes:         0  0  3  0  1   2  0  2  0  0   0  0  0  0  0   1  0  0  0  2
------------|-----------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:       0   996   190   400   631     0     0     0     0   283     0   646
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   996   190   400   631     0     0     0     0   283     0   646
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  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   996   190   400   631     0     0     0     0   283     0   646
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    0   996   190   400   631     0     0     0     0   283     0   646
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   996   190   400   631     0     0     0     0   283     0   646
------------|-----------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800
Adjustment:  0.97  1.06  0.97  0.88  1.06  0.97  0.97  1.06  0.97  0.97  1.06  0.88
Lanes:       0.00  3.00  1.00  2.00  2.00  0.00  0.00  0.00  0.00  1.00  0.00  2.00
Final Sat.:     0  5700  1750  3150  3800     0     0     0     0  1750     0  3150
------------|-----------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.17  0.11  0.13  0.17  0.00  0.00  0.00  0.00  0.16  0.00  0.21
Crit Moves:        ****        ****                                             ****
Green Time:   0.0  30.3  30.3  22.0  52.4   0.0   0.0   0.0   0.0  35.6   0.0  35.6
Volume/Cap:  0.00  0.58  0.36  0.58  0.32  0.00  0.00  0.00  0.00  0.45  0.00  0.58
Delay/Veh:    0.0  22.7  20.9  27.3  10.4   0.0   0.0   0.0   0.0  19.2   0.0  20.4
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
ProgAdjFctr: 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  22.7  20.9  27.3  10.4   0.0   0.0   0.0   0.0  19.2   0.0  20.4
DesignQueue:    0    40     8    18    17     0     0     0     0    11     0    24
*********************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #49 Garner Ave/ Sanborn Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.245
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.7
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module: 7:30-8:30 AM												
Base Vol:	54	50	21	6	69	181	51	150	29	13	294	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:	54	50	21	6	69	181	51	150	29	13	294	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:	54	50	21	6	69	181	51	150	29	13	294	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	50	21	6	69	181	51	150	29	13	294	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.:	54	50	21	6	69	181	51	150	29	13	294	14
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.03	1.00
Lanes:	0.52	0.48	1.00	0.08	0.92	1.00	1.00	1.67	0.33	1.00	1.91	0.09
Final Sat.:	935	865	1750	144	1656	1750	1750	3100	599	1750	3532	168
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.01	0.04	0.04	0.10	0.03	0.05	0.05	0.01	0.08	0.08
Crit Moves:						****	****				****	
Green Time:	42.2	42.2	42.2	42.2	42.2	42.2	11.9	27.0	27.0	18.9	33.9	33.9
Volume/Cap:	0.14	0.14	0.03	0.10	0.10	0.25	0.25	0.18	0.18	0.04	0.25	0.25
Delay/Veh:	13.5	13.5	12.9	13.3	13.3	14.2	30.5	21.3	21.3	25.2	18.1	18.1
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
ProgAdjFctr:	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:	13.5	13.5	12.9	13.3	13.3	14.2	30.5	21.3	21.3	25.2	18.1	18.1
DesignQueue:	2	2	1	0	2	6	3	6	1	1	11	1

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                  Level Of Service Computation Report
         1985 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #49 Garner Ave/ Sanborn Rd
*****************************************************************************
Cycle (sec):         100            Critical Vol./Cap. (X):          0.517
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):       19.9
Optimal Cycle:        42            Level Of Service:                    C
*****************************************************************************
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    7   10    10    7   10    10    7   10    10    7   10    10
Lanes:       0  1  0  0  1   0  1  0  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      66  216   112    33  132   289   319  459    90    52  350    49
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  216   112    33  132   289   319  459    90    52  350    49
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  216   112    33  132   289   319  459    90    52  350    49
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   66  216   112    33  132   289   319  459    90    52  350    49
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  216   112    33  132   289   319  459    90    52  350    49
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  1.00 1.00  0.97  1.00 1.00  0.97  0.97 1.03  1.00  0.97 1.03  1.00
Lanes:       0.23 0.77  1.00  0.20 0.80  1.00  1.00 1.66  0.34  1.00 1.75  0.25
Final Sat.:   421 1379  1750   360 1440  1750  1750 3093   606  1750 3245   454
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.16 0.16  0.06  0.09 0.09  0.17  0.18 0.15  0.15  0.03 0.11  0.11
Crit Moves:                               ****  ****                  ****
Green Time:  31.9 31.9  31.9  31.9 31.9  31.9  35.2 49.1  49.1   7.0 20.8  20.8
Volume/Cap:  0.49 0.49  0.20  0.29 0.29  0.52  0.52 0.30  0.30  0.42 0.52  0.52
Delay/Veh:   21.4 21.4  18.8  19.5 19.5  21.8  20.1 11.6  11.6  35.3 27.2  27.2
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
ProgAdjFctr: 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:  21.4 21.4  18.8  19.5 19.5  21.8  20.1 11.6  11.6  35.3 27.2  27.2
DesignQueue:    3    9     4     1    5    11    12   14     3     3   16     2
*****************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #50 Harden Pkwy/ Harden Ranch Driveway

Cycle (sec):	100	Critical Vol./Cap. (X):	0.158
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	19.3
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: 8:30-9:30 AM												
Base Vol:	67	27	28	28	44	37	57	67	21	66	94	41
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:	67	27	28	28	44	37	57	67	21	66	94	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	27	28	28	44	37	57	67	21	66	94	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	27	28	28	44	37	57	67	21	66	94	41
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	27	28	28	44	37	57	67	21	66	94	41
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	1.04	1.00	0.97	1.04	1.00
Lanes:	0.55	0.22	0.23	0.26	0.40	0.34	1.00	1.51	0.49	1.00	1.38	0.62
Final Sat.:	961	387	402	450	706	594	1750	2816	883	1750	2575	1123
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.06	0.06	0.06	0.03	0.02	0.02	0.04	0.04	0.04
Crit Moves:		****					****				****	
Green Time:	44.2	44.2	44.2	44.2	44.2	44.2	20.7	25.8	25.8	18.0	23.1	23.1
Volume/Cap:	0.16	0.16	0.16	0.14	0.14	0.14	0.16	0.09	0.09	0.21	0.16	0.16
Delay/Veh:	12.7	12.7	12.7	12.6	12.6	12.6	24.7	21.5	21.5	26.6	23.3	23.3
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
ProgAdjFctr:	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:	12.7	12.7	12.7	12.6	12.6	12.6	24.7	21.5	21.5	26.6	23.3	23.3
DesignQueue:	2	1	1	1	1	1	3	3	1	3	4	2

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                    Level Of Service Computation Report
            1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #50 Harden Pkwy/ Harden Ranch Driveway
*******************************************************************************
Cycle (sec):         100             Critical Vol./Cap. (X):          0.344
Loss Time (sec):      12  (Y+R =  4 sec) Average Delay (sec/veh):      22.7
Optimal Cycle:        39             Level Of Service:                    C
*******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:       L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:      7    10    10    7    10    10    7    10    10    7    10    10
Lanes:          0  0  1! 0  0   0  0  1! 0  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      126    58    82    68    79   118   149   214    53   128   177    66
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:   126    58    82    68    79   118   149   214    53   128   177    66
User Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    126    58    82    68    79   118   149   214    53   128   177    66
Reduct Vol:      0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   126    58    82    68    79   118   149   214    53   128   177    66
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.:    126    58    82    68    79   118   149   214    53   128   177    66
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800
Adjustment:   0.97  0.97  0.97  0.97  0.97  0.97  0.97  1.03  1.00  0.97  1.04  1.00
Lanes:        0.47  0.22  0.31  0.26  0.30  0.44  1.00  1.59  0.41  1.00  1.44  0.56
Final Sat.:    829   382   539   449   522   779  1750  2965   734  1750  2694  1005
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.15  0.15  0.15  0.15  0.15  0.15  0.09  0.07  0.07  0.07  0.07  0.07
Crit Moves:         ****                          ****                    ****
Green Time:   44.2  44.2  44.2  44.2  44.2  44.2  24.7  10.0  10.0  33.8  19.1  19.1
Volume/Cap:   0.34  0.34  0.34  0.34  0.34  0.34  0.34  0.72  0.72  0.22  0.34  0.34
Delay/Veh:    14.1  14.1  14.1  14.1  14.1  14.1  23.7  37.8  37.8  18.0  26.7  26.7
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
ProgAdjFctr:  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:   14.1  14.1  14.1  14.1  14.1  14.1  23.7  37.8  37.8  18.0  26.7  26.7
DesignQueue:     4     2     3     2     3     4     6    11     3     5     8     3
*******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #51 Harden Pkwy/ Main St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.122
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	16.8
Optimal Cycle:	49	Level Of Service:	C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 3 0 1			1 0 3 0 1			1 0 1 0 1			1 0 1 0 1		
Volume Module: 8:30-9:30 AM												
Base Vol:	51	243	58	58	274	13	37	26	35	86	31	64
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:	51	243	58	58	274	13	37	26	35	86	31	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	243	58	58	274	13	37	26	35	86	31	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	243	58	58	274	13	37	26	35	86	31	64
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	243	58	58	274	13	37	26	35	86	31	64
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.04	0.03	0.03	0.05	0.01	0.02	0.01	0.02	0.05	0.02	0.04
Crit Moves:	****				****			****			****	
Green Time:	23.9	37.3	37.3	26.1	39.5	39.5	17.4	17.4	17.4	40.3	40.3	40.3
Volume/Cap:	0.12	0.11	0.09	0.13	0.12	0.02	0.12	0.08	0.12	0.12	0.04	0.09
Delay/Veh:	22.7	15.6	15.5	21.5	14.6	14.0	26.5	26.3	26.5	14.2	13.8	14.0
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
ProgAdjFctr:	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	15.6	15.5	21.5	14.6	14.0	26.5	26.3	26.5	14.2	13.8	14.0
DesignQueue:	2	9	2	2	9	0	2	1	2	3	1	2

```
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                      Level Of Service Computation Report
             1985 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #51 Harden Pkwy/ Main St
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):         0.495
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        36.5
Optimal Cycle:         49               Level Of Service:                   D
********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
-------------|-----------------||-----------------||-----------------||-----------------|
Control:         Protected         Protected        Split Phase      Split Phase
Rights:            Include           Include          Include          Include
Min. Green:      7   10    10     7   10    10     7   10    10     7   10    10
Lanes:         1  0  3  0  1   1  0  3  0  1   1  0  1  0  1   1  0  1  0  1
-------------|-----------------||-----------------||-----------------||-----------------|
Volume Module: 5:00-6:00 PM
Base Vol:      196  570   162   180  581    64    58  105   175   213  109   129
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:   196  570   162   180  581    64    58  105   175   213  109   129
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    196  570   162   180  581    64    58  105   175   213  109   129
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   196  570   162   180  581    64    58  105   175   213  109   129
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.:    196  570   162   180  581    64    58  105   175   213  109   129
-------------|-----------------||-----------------||-----------------||-----------------|
Saturation Flow Module:
Sat/Lane:     1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:   0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97
Lanes:        1.00 3.00  1.00  1.00 3.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Sat.:   1750 5700  1750  1750 5700  1750  1750 1900  1750  1750 1900  1750
-------------|-----------------||-----------------||-----------------||-----------------|
Capacity Analysis Module:
Vol/Sat:      0.11 0.10  0.09  0.10 0.10  0.04  0.03 0.06  0.10  0.12 0.06  0.07
Crit Moves:   ****                    ****                    ****  ****
Green Time:   22.6 10.0  10.0  33.2 20.6  20.6  20.2 20.2  20.2  24.6 24.6  24.6
Volume/Cap:   0.50 1.00  0.93  0.31 0.50  0.18  0.16 0.27  0.50  0.50 0.23  0.30
Delay/Veh:    26.4 63.2  67.4  19.0 27.0  24.9  25.0 25.7  27.8  25.4 23.0  23.5
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
ProgAdjFctr:  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:   26.4 63.2  67.4  19.0 27.0  24.9  25.0 25.7  27.8  25.4 23.0  23.5
DesignQueue:     9   29     8     7   26     3     3    5     8     9    5     6
********************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #52 Harkins Rd/ Schilling Pl

Cycle (sec):	100	Critical Vol./Cap. (X):	0.514
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	21.8
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	1 0	1	0 1	0 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	36	60	2	38	279	470	256	33	203	1	7	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:	36	60	2	38	279	470	256	33	203	1	7	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:	1.00	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	60	2	38	279	470	256	33	203	1	7	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	60	2	38	279	470	256	33	203	1	7	16
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	60	2	38	279	470	256	33	203	1	7	16
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.04	0.97	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	0.97
Lanes:	0.77	1.23	1.00	0.12	0.88	1.00	0.89	0.11	1.00	0.12	0.88	1.00
Final Sat.:	1387	2311	1750	216	1584	1800	1594	206	1750	225	1575	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.00	0.18	0.18	0.26	0.16	0.16	0.12	0.00	0.00	0.01
Crit Moves:		****				****		****			****	
Green Time:	10.0	10.0	10.0	42.1	42.1	42.1	25.9	25.9	25.9	10.0	10.0	10.0
Volume/Cap:	0.26	0.26	0.01	0.42	0.42	0.62	0.62	0.62	0.45	0.04	0.04	0.09
Delay/Veh:	31.7	31.7	30.8	15.6	15.6	17.9	26.7	26.7	24.1	30.9	30.9	31.1
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
ProgAdjFctr:	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:	31.7	31.7	30.8	15.6	15.6	17.9	26.7	26.7	24.1	30.9	30.9	31.1
DesignQueue:	2	3	0	1	9	16	11	1	9	0	0	1

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                       Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #52 Harkins Rd/ Schilling Pl
*******************************************************************************
Cycle (sec):          100                Critical Vol./Cap. (X):         0.696
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):         27.8
Optimal Cycle:         59                Level Of Service:                  D+
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Split Phase      Split Phase      Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     0   10    10
Lanes:        0  1  1  0  1   0  1  0  1  0    0  1  0  0  1    0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 4:00-5:00 PM
Base Vol:     127  152     4    20   59   347   563    8    64     0   48    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:  127  152     4    20   59   347   563    8    64     0   48    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:   127  152     4    20   59   347   563    8    64     0   48    72
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  127  152     4    20   59   347   563    8    64     0   48    72
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.:   127  152     4    20   59   347   563    8    64     0   48    72
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  1.00 1.05  0.97  1.00 1.00  1.00  1.00 1.00  0.97  1.00 1.00  0.97
Lanes:       0.94 1.06  1.00  0.25 0.75  1.00  0.99 0.01  1.00  0.00 1.00  1.00
Final Sat.:  1683 2015  1750   456 1344  1800  1775   25  1750     0 1800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.08 0.08  0.00  0.04 0.04  0.19  0.32 0.32  0.04  0.00 0.03  0.04
Crit Moves:       ****                   ****       ****              ****
Green Time:  10.1 10.1  10.1  25.7 25.7  25.7  42.3 42.3  42.3   0.0 10.0  10.0
Volume/Cap:  0.75 0.75  0.02  0.17 0.17  0.75  0.75 0.75  0.09  0.00 0.27  0.41
Delay/Veh:   38.9 38.9  30.8  22.0 22.0  29.8  21.5 21.5  13.1   0.0 31.8  33.0
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
ProgAdjFctr: 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 38.9  30.8  22.0 22.0  29.8  21.5 21.5  13.1   0.0 31.8  33.0
DesignQueue:    6    8     0     1    2    15    20    0     2     0    2     4
*******************************************************************************
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-------------------------------------------------------------------------------
                   Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #53 Iris Dr/ Main St
*******************************************************************************
Cycle (sec):         100            Critical Vol./Cap. (X):        0.227
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):    14.7
Optimal Cycle:        39            Level Of Service:                 B-
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:          Include          Include           Include          Include
Min. Green:    7   10    10    7   10    10    7   10    10    7    0    10
Lanes:        1  0  2  1  0    1  0  2  1  0    0  1  0  0  1    0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      69  374     4    12  578    55    51    2    83     6    0     2
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:   69  374     4    12  578    55    51    2    83     6    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    69  374     4    12  578    55    51    2    83     6    0     2
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   69  374     4    12  578    55    51    2    83     6    0     2
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.:    69  374     4    12  578    55    51    2    83     6    0     2
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.04  1.00  0.97 1.04  1.00  1.00 1.00  0.97  1.00 1.00  0.97
Lanes:       1.00 2.97  0.03  1.00 2.73  0.27  0.96 0.04  1.00  1.00 0.00  1.00
Final Sat.:  1750 5541    59  1750 5113   487  1732   68  1750  1800    0  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.07  0.07  0.01 0.11  0.11  0.03 0.03  0.05  0.00 0.00  0.00
Crit Moves:  ****                  ****                     ****
Green Time:  17.4 39.5  39.5  27.6 49.8  49.8  20.9 20.9  20.9  20.9  0.0  20.9
Volume/Cap:  0.23 0.17  0.17  0.02 0.23  0.23  0.14 0.14  0.23  0.02 0.00  0.01
Delay/Veh:   27.1 14.9  14.9  20.0 10.8  10.8  24.5 24.5  25.0  23.9  0.0  23.8
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
ProgAdjFctr: 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:  27.1 14.9  14.9  20.0 10.8  10.8  24.5 24.5  25.0  23.9  0.0  23.8
DesignQueue:    3   13     0     0   17     2     2    0     4     0    0     0
*******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #53 Iris Dr/ Main St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.464
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	16.0
Optimal Cycle:	39	Level Of Service:	C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 2 1 0			1 0 2 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module: 5:00-6:00 PM												
Base Vol:	270	957	35	23	763	122	159	14	136	20	6	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:	270	957	35	23	763	122	159	14	136	20	6	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:	270	957	35	23	763	122	159	14	136	20	6	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	957	35	23	763	122	159	14	136	20	6	8
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.:	270	957	35	23	763	122	159	14	136	20	6	8
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.04	1.00	0.97	1.04	1.00	1.00	1.00	0.97	1.00	1.00	0.97
Lanes:	1.00	2.89	0.11	1.00	2.57	0.43	0.92	0.08	1.00	0.77	0.23	1.00
Final Sat.:	1750	5402	198	1750	4827	772	1654	146	1750	1385	415	1750
Capacity Analysis Module:												
Vol/Sat:	0.15	0.18	0.18	0.01	0.16	0.16	0.10	0.10	0.08	0.01	0.01	0.00
Crit Moves:	****				****			****				
Green Time:	33.2	60.3	60.3	7.0	34.1	34.1	20.7	20.7	20.7	20.7	20.7	20.7
Volume/Cap:	0.46	0.29	0.29	0.19	0.46	0.46	0.46	0.46	0.38	0.07	0.07	0.02
Delay/Veh:	20.5	7.3	7.3	33.4	19.8	19.8	27.1	27.1	26.2	24.2	24.2	24.0
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
ProgAdjFctr:	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:	20.5	7.3	7.3	33.4	19.8	19.8	27.1	27.1	26.2	24.2	24.2	24.0
DesignQueue:	10	22	1	1	29	5	7	1	6	1	0	0

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                     Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #54 John St/ Pajaro St
*******************************************************************************
Cycle (sec):           100               Critical Vol./Cap. (X):         0.355
Loss Time (sec):        12 (Y+R =  4 sec) Average Delay (sec/veh):        21.3
Optimal Cycle:          46               Level Of Service:                   C
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|-----------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    7   10    10    7   10    10    7   10    10    7   10    10
Lanes:         1  0  1  0  1   1  0  0  1  0   1  0  1  1  0   1  0  1  1  0
------------|-----------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      35  158    52    25  234    29    30  325    37    84  452    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:   35  158    52    25  234    29    30  325    37    84  452    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:    35  158    52    25  234    29    30  325    37    84  452    25
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   35  158    52    25  234    29    30  325    37    84  452    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.:    35  158    52    25  234    29    30  325    37    84  452    25
------------|-----------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.97  0.97 1.00  1.00  0.97 1.03  1.00  0.97 1.03  1.00
Lanes:       1.00 1.00  1.00  1.00 0.89  0.11  1.00 1.79  0.21  1.00 1.89  0.11
Final Sat.:  1750 1900  1750  1750 1602   198  1750 3322   378  1750 3506   194
------------|-----------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.08  0.03  0.01 0.15  0.15  0.02 0.10  0.10  0.05 0.13  0.13
Crit Moves:  ****                  ****        ****                  ****
Green Time:   7.0 27.2  27.2  19.1 39.3  39.3   7.0 24.5  24.5  17.2 34.7  34.7
Volume/Cap:  0.29 0.31  0.11  0.07 0.37  0.37  0.24 0.40  0.40  0.28 0.37  0.37
Delay/Veh:   33.9 22.0  20.7  25.3 16.5  16.5  33.7 24.2  24.2  27.5 18.7  18.7
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
ProgAdjFctr: 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:  33.9 22.0  20.7  25.3 16.5  16.5  33.7 24.2  24.2  27.5 18.7  18.7
DesignQueue:    2    7     2     1    8     1     2   14     2     4   17     1
*******************************************************************************
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
               1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #54 John St/ Pajaro St
*******************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):         0.511
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       22.8
Optimal Cycle:         46              Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:        1  0  1  0  1    1  0  0  1  0    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 4:00-5:00 PM
Base Vol:     119  326   201    63  267    87    37  435    75   148  542    64
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:  119  326   201    63  267    87    37  435    75   148  542    64
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  326   201    63  267    87    37  435    75   148  542    64
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  119  326   201    63  267    87    37  435    75   148  542    64
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  326   201    63  267    87    37  435    75   148  542    64
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.97  0.97 1.00  1.00  0.97 1.03  1.00  0.97 1.03  1.00
Lanes:       1.00 1.00  1.00  1.00 0.75  0.25  1.00 1.70  0.30  1.00 1.78  0.22
Final Sat.:  1750 1900  1750  1750 1358   442  1750 3155   544  1750 3309   391
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.17  0.11  0.04 0.20  0.20  0.02 0.14  0.14  0.08 0.16  0.16
Crit Moves:  ****                  ****        ****                   ****
Green Time:  12.9 43.0  43.0   7.0 37.2  37.2   7.0 23.5  23.5  14.4 31.0  31.0
Volume/Cap:  0.53 0.40  0.27  0.51 0.53  0.53  0.30 0.59  0.59  0.59 0.53  0.53
Delay/Veh:   32.8 15.1  14.0  37.1 19.3  19.3  34.0 26.5  26.5  32.9 22.0  22.0
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
ProgAdjFctr: 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:  32.8 15.1  14.0  37.1 19.3  19.3  34.0 26.5  26.5  32.9 22.0  22.0
DesignQueue:    6   11     7     3   10     3     2   19     3     7   22     3
*******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #55 John St/ Sanborn Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.423
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.6
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:		1 0 2 0 1			1 0 2 0 1			1 0 1 1 0			1 0 2 0 1	
Volume Module: 7:30-8:30 AM												
Base Vol:	55	320	164	25	539	124	55	112	80	258	172	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:	55	320	164	25	539	124	55	112	80	258	172	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:	55	320	164	25	539	124	55	112	80	258	172	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	320	164	25	539	124	55	112	80	258	172	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.:	55	320	164	25	539	124	55	112	80	258	172	17
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.05	1.00	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.14	0.86	1.00	2.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	2157	1541	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.08	0.09	0.01	0.14	0.07	0.03	0.05	0.05	0.15	0.05	0.01
Crit Moves:	****				****			****		****		
Green Time:	7.4	24.1	24.1	16.8	33.5	33.5	19.4	12.3	12.3	34.8	27.7	27.7
Volume/Cap:	0.42	0.35	0.39	0.08	0.42	0.21	0.16	0.42	0.42	0.42	0.16	0.04
Delay/Veh:	35.0	24.0	24.5	26.7	19.7	18.1	25.5	31.3	31.3	19.2	20.8	20.1
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
ProgAdjFctr:	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	24.0	24.5	26.7	19.7	18.1	25.5	31.3	31.3	19.2	20.8	20.1
DesignQueue:	3	14	7	1	21	5	2	6	4	10	7	1

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-----------------------------------------------------------------------------
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                  Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #55 John St/ Sanborn Rd
*****************************************************************************
Cycle (sec):         100                 Critical Vol./Cap. (X):        0.479
Loss Time (sec):      12 (Y+R =  4 sec)  Average Delay (sec/veh):        22.4
Optimal Cycle:        46                 Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:        1  0  2  0  1   1  0  2  0  1   1  0  1  1  0   1  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:     165  803   351    12  449   125   199  255    80   198  195    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:  165  803   351    12  449   125   199  255    80   198  195    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:   165  803   351    12  449   125   199  255    80   198  195    27
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  165  803   351    12  449   125   199  255    80   198  195    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.:   165  803   351    12  449   125   199  255    80   198  195    27
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.04  1.00  0.97 1.06  0.97
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  1.00 1.51  0.49  1.00 2.00  1.00
Final Sat.:  1750 3800  1750  1750 3800  1750  1750 2816   883  1750 3800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.21  0.20  0.01 0.12  0.07  0.11 0.09  0.09  0.11 0.05  0.02
Crit Moves:       ****        ****                  ****        ****
Green Time:  21.4 41.2  41.2   7.0 26.8  26.8  29.8 17.7  17.7  22.1 10.0  10.0
Volume/Cap:  0.44 0.51  0.49  0.10 0.44  0.27  0.38 0.51  0.51  0.51 0.51  0.15
Delay/Veh:   26.5 16.9  16.8  33.1 23.3  22.0  21.4 28.9  28.9  27.0 33.4  31.3
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
ProgAdjFctr: 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:  26.5 16.9  16.8  33.1 23.3  22.0  21.4 28.9  28.9  27.0 33.4  31.3
DesignQueue:    7   28    12     1   19     5     8   12     4     9   10     1
*****************************************************************************
```

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--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #56 Kern St/ Market St
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap. (X):         0.283
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):         13.9
Optimal Cycle:         39                Level Of Service:                  B-
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-------------|----------------||----------------||----------------||----------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Ignore           Include          Include
Min. Green:    7    10    10    7    10    10    7    10    10    7    10    10
Lanes:        0  1  0  0  1    0  1  0  0  1    1  0  1  1  0    1  0  1  1  0
-------------|----------------||----------------||----------------||----------------|
Volume Module: 7:30-8:30 AM
Base Vol:      16    60     9    24    47   196    77   324    27     7   460   143
Growth Adj:  1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   16    60     9    24    47     0    77   324    27     7   460   143
User Adj:    1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    16    60     9    24    47     0    77   324    27     7   460   143
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   16    60     9    24    47     0    77   324    27     7   460   143
PCE Adj:     1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:    16    60     9    24    47     0    77   324    27     7   460   143
-------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800
Adjustment:  1.00  1.00  0.97  1.00  1.00  0.97  0.97  1.03  1.00  0.97  1.04  1.00
Lanes:       0.21  0.79  1.00  0.34  0.66  1.00  1.00  1.84  0.16  1.00  1.51  0.49
Final Sat.:   379  1421  1750   608  1192  1750  1750  3415   285  1750  2822   877
-------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.04  0.04  0.01  0.04  0.04  0.00  0.04  0.09  0.09  0.00  0.16  0.16
Crit Moves:        ****                          ****                    ****
Green Time:  14.9  14.9  14.9  14.9  14.9   0.0  15.5  43.0  43.0  30.1  57.6  57.6
Volume/Cap:  0.28  0.28  0.03  0.26  0.26  0.00  0.28  0.22  0.22  0.01  0.28  0.28
Delay/Veh:   28.9  28.9  27.7  28.8  28.8   0.0  28.5  13.7  13.7  18.6   8.2   8.2
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
ProgAdjFctr: 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:  28.9  28.9  27.7  28.8  28.8   0.0  28.5  13.7  13.7  18.6   8.2   8.2
DesignQueue:    1     3     0     1     2     0     4    11     1     0    11     4
********************************************************************************
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #56 Kern St/ Market St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.560
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.5
Optimal Cycle:	45	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module: 5:00-6:00 PM												
Base Vol:	33	227	18	54	38	202	240	790	33	13	507	275
Growth Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	227	18	54	38	0	240	790	33	13	507	275
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	33	227	18	54	38	0	240	790	33	13	507	275
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	227	18	54	38	0	240	790	33	13	507	275
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	33	227	18	54	38	0	240	790	33	13	507	275
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.04	1.00
Lanes:	0.13	0.87	1.00	0.59	0.41	1.00	1.00	1.92	0.08	1.00	1.28	0.72
Final Sat.:	228	1572	1750	1057	743	1750	1750	3552	148	1750	2398	1301
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.01	0.05	0.05	0.00	0.14	0.22	0.22	0.01	0.21	0.21
Crit Moves:		****					****				****	
Green Time:	25.8	25.8	25.8	25.8	25.8	0.0	24.5	55.2	55.2	7.0	37.7	37.7
Volume/Cap:	0.56	0.56	0.04	0.20	0.20	0.00	0.56	0.40	0.40	0.11	0.56	0.56
Delay/Veh:	25.6	25.6	21.1	22.1	22.1	0.0	26.4	9.9	9.9	33.1	19.1	19.1
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
ProgAdjFctr:	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:	25.6	25.6	21.1	22.1	22.1	0.0	26.4	9.9	9.9	33.1	19.1	19.1
DesignQueue:	1	10	1	2	2	0	10	21	1	1	19	10

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                   Level Of Service Computation Report
         1994 HCM Unsignalized Method (Base Volume Alternative)
********************************************************************************
Intersection #57 Kern St/ 101 NB Ramps
********************************************************************************
Average Delay (sec/veh):       2.6          Worst Case Level Of Service:      B
********************************************************************************
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:          Include          Include          Include          Include
Lanes:       1  0  0  1  0    0  0  0  1  0    0  1  0  0  1    0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 8:30-9:30 AM
Base Vol:     224   21    16     0   56    17     7    2   154    22    6     1
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:  224   21    16     0   56    17     7    2   154    22    6     1
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   224   21    16     0   56    17     7    2   154    22    6     1
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:   224   21    16     0   56    17     7    2   154    22    6     1
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:     1.10 1.00  1.00  1.10 1.00  1.00  1.10 1.10  1.10  1.10 1.10  1.10
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:     246   21    16     0   56    17     8    2   169    24    7     1
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  2.1 xxxx xxxxx xxxxx xxxx xxxxx   3.4  3.3   2.6   3.4  3.3   2.6
Critical Gp:  5.0 xxxx xxxxx xxxxx xxxx xxxxx   6.5  6.0   5.5   6.5  6.0   5.5
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   73 xxxx xxxxx  xxxx xxxx xxxxx   321  326    65   396  326    29
Potent Cap.: 1582 xxxx xxxxx  xxxx xxxx xxxxx   690  736  1284   625  736  1339
Adj Cap:     1.00 xxxx xxxxx  xxxx xxxx xxxxx  0.87 0.84  1.00  0.76 0.84  1.00
Move Cap.:   1582 xxxx xxxxx  xxxx xxxx xxxxx   602  622  1284   476  621  1339
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:  2.7 xxxx xxxxx xxxxx xxxx xxxxx   6.0  5.8   3.2   7.9  5.9   2.7
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   607 xxxx xxxxx  xxxx  512 xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   6.0 xxxx xxxxx xxxxx  7.3 xxxxx
Shared LOS:     *    *     *     *    *     *     B    *     *     *    B     *
ApproachDel:        2.3              0.0              3.3              7.3
```

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-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
                    Level Of Service Computation Report
          1994 HCM Unsignalized Method (Base Volume Alternative)
*******************************************************************************
Intersection #57 Kern St/ 101 NB Ramps
*******************************************************************************
Average Delay (sec/veh):        4.5         Worst Case Level Of Service:      D
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:      Uncontrolled     Uncontrolled       Stop Sign        Stop Sign
Rights:          Include          Include          Include          Include
Lanes:       1  0  0  1  0    0  0  0  1  0    0  1  0  0  1    0  1  0  0  0
------------|----------------||----------------||----------------||----------------|
Volume Module: 5:00-6:00 PM
Base Vol:      593   61    22      0  287    23     21    3   162      6    9     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:   593   61    22      0  287    23     21    3   162      6    9     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:    593   61    22      0  287    23     21    3   162      6    9     0
Reduct Vol:      0    0     0      0    0     0      0    0     0      0    0     0
Final Vol.:    593   61    22      0  287    23     21    3   162      6    9     0
------------|----------------||----------------||----------------||----------------|
Adjusted Volume Module:
Grade:              0%               0%               0%               0%
% Cycle/Cars:    xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:    xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:      1.10 1.00  1.00   1.10 1.00  1.00   1.10 1.10  1.10   1.10 1.10  1.10
Cycl/Car PCE:    xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:    xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:      652   61    22      0  287    23     23    3   178      7   10     0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
MoveUp Time:   2.1 xxxx xxxxx xxxxx xxxx xxxxx    3.4  3.3   2.6    3.4  3.3 xxxxx
Critical Gp:   5.0 xxxx xxxxx xxxxx xxxx xxxxx    6.5  6.0   5.5    6.5  6.0 xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol:   310 xxxx xxxxx  xxxx xxxx xxxxx    968  975   299   1046  975 xxxxx
Potent Cap.:  1220 xxxx xxxxx  xxxx xxxx xxxxx    291  336   977    262  336 xxxxx
Adj Cap:      1.00 xxxx xxxxx  xxxx xxxx xxxxx   0.55 0.47  1.00   0.47 0.47 xxxxx
Move Cap.:    1220 xxxx xxxxx  xxxx xxxx xxxxx    161  156   977    122  156 xxxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
Stopped Del:   5.7 xxxx xxxxx xxxxx xxxx xxxxx   25.7 23.5   4.4   31.0 24.4 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    160 xxxx xxxxx    141 xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   25.4 xxxx xxxxx   27.1 xxxx xxxxx
Shared LOS:      *    *     *     *    *     *      D    *     *      D    *     *
ApproachDel:          5.1              0.0              7.1             27.1
```

Level Of Service Computation Report

1985 HCM Operations Method (Base Volume Alternative)

Intersection #58 Laurel Dr/ Linwood Dr

Cycle (sec):	100	Critical Vol./Cap. (X):	0.319
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	15.8
Optimal Cycle:	39	Level Of Service:	C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	0	10	7	10	0	0	10	10
Lanes:	0 0	0	0 0	1 0	0	0 1	1 0	2	0 0	0 0	1	1 0
Volume Module: 7:30-8:30 AM												
Base Vol:	0	0	0	85	0	188	94	332	0	0	386	58
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	85	0	188	94	332	0	0	386	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	85	0	188	94	332	0	0	386	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	85	0	188	94	332	0	0	386	58
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	85	0	188	94	332	0	0	386	58
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.03	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.73	0.27
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	0	3216	483
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.11	0.05	0.09	0.00	0.00	0.12	0.12
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	33.6	0.0	33.6	16.8	54.4	0.0	0.0	37.6	37.6
Volume/Cap:	0.00	0.00	0.00	0.14	0.00	0.32	0.32	0.16	0.00	0.00	0.32	0.32
Delay/Veh:	0.0	0.0	0.0	17.6	0.0	18.9	28.0	8.7	0.0	0.0	16.9	16.9
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
ProgAdjFctr:	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	17.6	0.0	18.9	28.0	8.7	0.0	0.0	16.9	16.9
DesignQueue:	0	0	0	3	0	7	4	9	0	0	14	2

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                      Level Of Service Computation Report
             1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #58 Laurel Dr/ Linwood Dr
*******************************************************************************
Cycle (sec):          100            Critical Vol./Cap. (X):          0.480
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):      15.2
Optimal Cycle:         39            Level Of Service:                   C+
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0     0     0    7     0    10    7    10     0    0    10    10
Lanes:        0  0  0  0  0    1  0  0  0  1    1  0  2  0  0    0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:       0     0     0    72     0   162   289   658     0     0   536    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:    0     0     0    72     0   162   289   658     0     0   536    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:     0     0     0    72     0   162   289   658     0     0   536    72
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    0     0     0    72     0   162   289   658     0     0   536    72
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    72     0   162   289   658     0     0   536    72
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800
Adjustment:  0.97  1.06  0.97  0.97  1.06  0.97  0.97  1.06  0.97  0.97  1.03  1.00
Lanes:       0.00  0.00  0.00  1.00  0.00  1.00  1.00  2.00  0.00  0.00  1.76  0.24
Final Sat.:     0     0     0  1750     0  1750  1750  3800     0     0  3262   438
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.00  0.00  0.04  0.00  0.09  0.17  0.17  0.00  0.00  0.16  0.16
Crit Moves:                               ****  ****                    ****
Green Time:   0.0   0.0   0.0  19.3   0.0  19.3  34.4  68.7   0.0   0.0  34.3  34.3
Volume/Cap:  0.00  0.00  0.00  0.21  0.00  0.48  0.48  0.25  0.00  0.00  0.48  0.48
Delay/Veh:    0.0   0.0   0.0  25.9   0.0  28.1  20.0   4.5   0.0   0.0  19.9  19.9
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
ProgAdjFctr: 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  25.9   0.0  28.1  20.0   4.5   0.0   0.0  19.9  19.9
DesignQueue:    0     0     0     3     0     7    11    12     0     0    20     3
*******************************************************************************
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                     Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #59 Laurel Dr/ Main St
*******************************************************************************
Cycle (sec):         100               Critical Vol./Cap. (X):         0.366
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):        28.8
Optimal Cycle:        46               Level Of Service:                 D
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        2  0  2  0  1   2  0  2  1  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      41  276   118   111  604   118   125  294    87   135  297    65
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:   41  276   118   111  604   118   125  294    87   135  297    65
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  276   118   111  604   118   125  294    87   135  297    65
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   41  276   118   111  604   118   125  294    87   135  297    65
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  276   118   111  604   118   125  294    87   135  297    65
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.88 1.06  0.97  0.88 1.04  1.00  0.97 1.04  1.00  0.97 1.03  1.00
Lanes:       2.00 2.00  1.00  2.00 2.49  0.51  1.00 1.53  0.47  1.00 1.63  0.37
Final Sat.:  3150 3800  1750  3150 4684   915  1750 2854   845  1750 3035   664
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.07  0.07  0.04 0.13  0.13  0.07 0.10  0.10  0.08 0.10  0.10
Crit Moves:  ****                  ****              ****        ****
Green Time:   7.0 24.0  24.0  16.8 33.8  33.8  37.2 27.0  27.0  20.2 10.0  10.0
Volume/Cap:  0.19 0.30  0.28  0.21 0.38  0.38  0.19 0.38  0.38  0.38 0.98  0.98
Delay/Veh:   33.3 23.7  23.6  27.3 19.2  19.2  16.2 22.7  22.7  26.6 64.8  64.8
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
ProgAdjFctr: 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:  33.3 23.7  23.6  27.3 19.2  19.2  16.2 22.7  22.7  26.6 64.8  64.8
DesignQueue:    2   12     5     5   23     4     4   12     4     6   15     3
*******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #59 Laurel Dr/ Main St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.683
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	25.2
Optimal Cycle:	57	Level Of Service:	D+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	2 0	2 0	1	2 0	2 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module: 5:00-6:00 PM												
Base Vol:	110	804	257	222	763	175	290	615	113	174	427	140
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:	110	804	257	222	763	175	290	615	113	174	427	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	804	257	222	763	175	290	615	113	174	427	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	804	257	222	763	175	290	615	113	174	427	140
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.:	110	804	257	222	763	175	290	615	113	174	427	140
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.88	1.06	0.97	0.88	1.05	1.00	0.97	1.03	1.00	0.97	1.04	1.00
Lanes:	2.00	2.00	1.00	2.00	2.42	0.58	1.00	1.68	0.32	1.00	1.49	0.51
Final Sat.:	3150	3800	1750	3150	4554	1044	1750	3125	574	1750	2786	913
Capacity Analysis Module:												
Vol/Sat:	0.03	0.21	0.15	0.07	0.17	0.17	0.17	0.20	0.20	0.10	0.15	0.15
Crit Moves:		****		****			****				****	
Green Time:	7.0	31.0	31.0	10.3	34.3	34.3	24.3	31.0	31.0	15.7	22.4	22.4
Volume/Cap:	0.50	0.68	0.47	0.68	0.49	0.49	0.68	0.63	0.63	0.63	0.68	0.68
Delay/Veh:	35.6	24.1	21.7	36.9	19.9	19.9	29.2	23.3	23.3	33.3	28.6	28.6
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
ProgAdjFctr:	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:	35.6	24.1	21.7	36.9	19.9	19.9	29.2	23.3	23.3	33.3	28.6	28.6
DesignQueue:	6	33	10	11	29	7	13	25	5	8	19	6

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #60 Laurel Dr/ Maryal Dr

Cycle (sec):	100	Critical Vol./Cap. (X):	0.158
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	6.7
Optimal Cycle:	32	Level Of Service:	B+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1 0 0 1			0 1 0 0 1			1 0 1 1 0			1 0 1 1 0		
Volume Module: 7:30-8:30 AM												
Base Vol:	18	21	21	8	40	23	6	364	14	41	409	7
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	21	21	8	40	23	6	364	14	41	409	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	21	21	8	40	23	6	364	14	41	409	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	21	21	8	40	23	6	364	14	41	409	7
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	21	21	8	40	23	6	364	14	41	409	7
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.03	1.00
Lanes:	0.46	0.54	1.00	0.17	0.83	1.00	1.00	1.92	0.08	1.00	1.97	0.03
Final Sat.:	831	969	1750	300	1500	1750	1750	3563	137	1750	3638	62
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.03	0.03	0.01	0.00	0.10	0.10	0.02	0.11	0.11
Crit Moves:					****						****	
Green Time:	16.9	16.9	16.9	16.9	16.9	16.9	71.1	71.1	71.1	71.1	71.1	71.1
Volume/Cap:	0.13	0.13	0.07	0.16	0.16	0.08	0.00	0.14	0.14	0.03	0.16	0.16
Delay/Veh:	26.9	26.9	26.6	27.0	27.0	26.6	3.2	3.5	3.5	3.2	3.6	3.6
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
ProgAdjFctr:	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:	26.9	26.9	26.6	27.0	27.0	26.6	3.2	3.5	3.5	3.2	3.6	3.6
DesignQueue:	1	1	1	0	2	1	0	6	0	1	7	0

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                     Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #60 Laurel Dr/ Maryal Dr
*******************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):         0.333
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):          8.1
Optimal Cycle:         32               Level Of Service:                    B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        0  1  0  0  1   0  1  0  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      66   59    92    10   24    20    22  789    38    38  646    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:   66   59    92    10   24    20    22  789    38    38  646    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:    66   59    92    10   24    20    22  789    38    38  646    14
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   66   59    92    10   24    20    22  789    38    38  646    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.:    66   59    92    10   24    20    22  789    38    38  646    14
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  1.00 1.00  0.97  1.00 1.00  0.97  0.97 1.03  1.00  0.97 1.03  1.00
Lanes:       0.53 0.47  1.00  0.29 0.71  1.00  1.00 1.91  0.09  1.00 1.96  0.04
Final Sat.:   950  850  1750   529 1271  1750  1750 3530   170  1750 3621    78
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.07  0.05  0.02 0.02  0.01  0.01 0.22  0.22  0.02 0.18  0.18
Crit Moves:       ****                               ****
Green Time:  20.9 20.9  20.9  20.9 20.9  20.9  67.1 67.1  67.1  67.1 67.1  67.1
Volume/Cap:  0.33 0.33  0.25  0.09 0.09  0.05  0.02 0.33  0.33  0.03 0.27  0.27
Delay/Veh:   25.8 25.8  25.2  24.3 24.3  24.1   4.2  5.3   5.3   4.2  5.0   5.0
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
ProgAdjFctr: 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:  25.8 25.8  25.2  24.3 24.3  24.1   4.2  5.3   5.3   4.2  5.0   5.0
DesignQueue:    3    3     4     0    1     1     0   15     1     1   12     0
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                   Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #61 Laurel Dr/ Natividad Rd
******************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):         0.460
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       23.6
Optimal Cycle:         46              Level Of Service:                  C-
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Protected        Protected
Rights:           Include          Include           Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:       1  0  2  0  1    2  0  1  1  0    1  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      50  376   215   183  648    56   109  200    91   419  267   222
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:   50  376   215   183  648    56   109  200    91   419  267   222
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  376   215   183  648    56   109  200    91   419  267   222
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   50  376   215   183  648    56   109  200    91   419  267   222
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  376   215   183  648    56   109  200    91   419  267   222
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.97  0.88 1.03  1.00  0.97 1.06  0.97  0.88 1.06  0.97
Lanes:       1.00 2.00  1.00  2.00 1.84  0.16  1.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  1750 3800  1750  3150 3405   294  1750 3800  1750  3150 3800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.10  0.12  0.06 0.19  0.19  0.06 0.05  0.05  0.13 0.07  0.13
Crit Moves:  ****                  ****              ****        ****
Green Time:   7.0 41.0  41.0   7.0 41.0  41.0   7.0 11.3  11.3  28.7 33.0  33.0
Volume/Cap:  0.41 0.24  0.30  0.83 0.46  0.46  0.89 0.46  0.46  0.46 0.21  0.38
Delay/Veh:   35.1 14.7  15.2  50.2 16.5  16.5  69.0 32.1  32.7  22.6 18.4  19.8
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
ProgAdjFctr: 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 14.7  15.2  50.2 16.5  16.5  69.0 32.1  32.7  22.6 18.4  19.8
DesignQueue:    3   13     7    10   22     2     6   10     5    17   10     9
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                     Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #61 Laurel Dr/ Natividad Rd
*******************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):         0.824
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):         28.0
Optimal Cycle:         83               Level Of Service:                   D
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10     10    7   10     10    7   10     10    7   10     10
Lanes:        1  0  2  0  1   2  0  1  1  0   1  0  2  0  1   2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      110  740    600   345  441     80   103  522     97   378  416    375
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:   110  740    600   345  441     80   103  522     97   378  416    375
User Adj:     1.00 1.00   1.00  1.00 1.00   1.00  1.00 1.00   1.00  1.00 1.00   1.00
PHF Adj:      1.00 1.00   1.00  1.00 1.00   1.00  1.00 1.00   1.00  1.00 1.00   1.00
PHF Volume:    110  740    600   345  441     80   103  522     97   378  416    375
Reduct Vol:      0    0      0     0    0      0     0    0      0     0    0      0
Reduced Vol:   110  740    600   345  441     80   103  522     97   378  416    375
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.:    110  740    600   345  441     80   103  522     97   378  416    375
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1800 1800   1800  1800 1800   1800  1800 1800   1800  1800 1800   1800
Adjustment:   0.97 1.06   0.97  0.88 1.03   1.00  0.97 1.06   0.97  0.88 1.06   0.97
Lanes:        1.00 2.00   1.00  2.00 1.68   0.32  1.00 2.00   1.00  2.00 2.00   1.00
Final Sat.:   1750 3800   1750  3150 3131    568  1750 3800   1750  3150 3800   1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.06 0.19   0.34  0.11 0.14   0.14  0.06 0.14   0.06  0.12 0.11   0.21
Crit Moves:               ****  ****              ****                          ****
Green Time:    7.0 41.6   41.6  13.3 47.9   47.9   7.1 17.7   17.7  15.4 26.0   26.0
Volume/Cap:   0.90 0.47   0.82  0.82 0.29   0.29  0.82 0.78   0.31  0.78 0.42   0.82
Delay/Veh:    70.7 16.3   25.1  40.8 12.0   12.0  57.6 33.8   27.5  36.2 23.6   34.6
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
ProgAdjFctr:  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:   70.7 16.3   25.1  40.8 12.0   12.0  57.6 33.8   27.5  36.2 23.6   34.6
DesignQueue:     6   25     21    17   13      2     5   25      4    18   18     16
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #62 Laurel Dr/ Sanborn Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.376
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.1
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 0	1	2 0	1 0	1	2 0	1 1	0	1 0	2 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	33	215	32	134	197	267	178	230	24	32	390	151
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:	33	215	32	134	197	267	178	230	24	32	390	151
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	33	215	32	134	197	267	178	230	24	32	390	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	215	32	134	197	267	178	230	24	32	390	151
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.:	33	215	32	134	197	267	178	230	24	32	390	151
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.88	1.03	1.00	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	2.00	1.00	1.00	2.00	1.81	0.19	1.00	2.00	1.00
Final Sat.:	1750	3800	1750	3150	1900	1750	3150	3350	350	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.02	0.04	0.10	0.15	0.06	0.07	0.07	0.02	0.10	0.09
Crit Moves:	****					****	****				****	
Green Time:	7.0	27.4	27.4	19.2	39.6	39.6	14.7	24.3	24.3	17.0	26.7	26.7
Volume/Cap:	0.27	0.21	0.07	0.22	0.26	0.38	0.38	0.28	0.28	0.11	0.38	0.32
Delay/Veh:	33.8	21.2	20.4	25.9	15.5	16.5	29.6	23.4	23.4	26.7	22.9	22.5
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
ProgAdjFctr:	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:	33.8	21.2	20.4	25.9	15.5	16.5	29.6	23.4	23.4	26.7	22.9	22.5
DesignQueue:	2	9	1	6	7	9	9	10	1	1	16	6

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #62 Laurel Dr/ Sanborn Rd

Cycle (sec):	100		Critical Vol./Cap. (X):	0.530
Loss Time (sec):	12	(Y+R = 4 sec)	Average Delay (sec/veh):	22.2
Optimal Cycle:	46		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 0	1	2 0	1 0	1	2 0	1 1	0	1 0	2 0	1
Volume Module: 5:00-6:00 PM												
Base Vol:	67	277	62	265	245	263	253	866	81	38	531	215
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:	67	277	62	265	245	263	253	866	81	38	531	215
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	277	62	265	245	263	253	866	81	38	531	215
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	277	62	265	245	263	253	866	81	38	531	215
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	277	62	265	245	263	253	866	81	38	531	215
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.88	1.03	1.00	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	2.00	1.00	1.00	2.00	1.82	0.18	1.00	2.00	1.00
Final Sat.:	1750	3800	1750	3150	1900	1750	3150	3383	316	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.07	0.04	0.08	0.13	0.15	0.08	0.26	0.26	0.02	0.14	0.12
Crit Moves:	****					****		****		****		
Green Time:	7.0	10.0	10.0	24.4	27.4	27.4	19.6	46.6	46.6	7.0	34.1	34.1
Volume/Cap:	0.55	0.73	0.35	0.35	0.47	0.55	0.41	0.55	0.55	0.31	0.41	0.36
Delay/Veh:	38.0	38.0	32.4	23.8	23.5	24.6	27.0	14.8	14.8	34.1	19.3	19.0
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
ProgAdjFctr:	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	38.0	32.4	23.8	23.5	24.6	27.0	14.8	14.8	34.1	19.3	19.0
DesignQueue:	3	14	3	11	10	11	12	27	3	2	20	8

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #63 Laurel Dr/ Tyler St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.263
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	11.1
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 0	1!	0 0	0 0	1!	0 0	1 0	1	1 0	1 0	1	1 0
Volume Module: 7:30-8:30 AM												
Base Vol:	116	24	15	5	26	102	57	426	73	8	510	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:	116	24	15	5	26	102	57	426	73	8	510	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:	116	24	15	5	26	102	57	426	73	8	510	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	24	15	5	26	102	57	426	73	8	510	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.:	116	24	15	5	26	102	57	426	73	8	510	17
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	1.03	1.00	0.97	1.03	1.00
Lanes:	0.75	0.15	0.10	0.04	0.19	0.77	1.00	1.70	0.30	1.00	1.93	0.07
Final Sat.:	1310	271	169	66	342	1342	1750	3158	541	1750	3581	119
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.08	0.08	0.08	0.03	0.13	0.13	0.00	0.14	0.14
Crit Moves:		****									****	
Green Time:	33.7	33.7	33.7	33.7	33.7	33.7	54.3	54.3	54.3	54.3	54.3	54.3
Volume/Cap:	0.26	0.26	0.26	0.23	0.23	0.23	0.06	0.25	0.25	0.01	0.26	0.26
Delay/Veh:	18.4	18.4	18.4	18.1	18.1	18.1	8.2	9.2	9.2	8.0	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
ProgAdjFctr:	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:	18.4	18.4	18.4	18.1	18.1	18.1	8.2	9.2	9.2	8.0	9.3	9.3
DesignQueue:	4	1	1	0	1	4	1	11	2	0	13	0

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                  Level Of Service Computation Report
           1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #63 Laurel Dr/ Tyler St
*******************************************************************************
Cycle (sec):         100             Critical Vol./Cap. (X):        0.453
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):     11.0
Optimal Cycle:        38             Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:        0  0  1! 0  0   0  0  1! 0  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:     171   47    26     5   31    68   106  771   187    14  595    12
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   47    26     5   31    68   106  771   187    14  595    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:   171   47    26     5   31    68   106  771   187    14  595    12
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  171   47    26     5   31    68   106  771   187    14  595    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.:   171   47    26     5   31    68   106  771   187    14  595    12
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 0.97  0.97  0.97 0.97  0.97  0.97 1.03  1.00  0.97 1.03  1.00
Lanes:       0.70 0.19  0.11  0.05 0.30  0.65  1.00 1.60  0.40  1.00 1.96  0.04
Final Sat.:  1226  337   186    84  522  1144  1750 2977   722  1750 3627    73
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.14 0.14  0.14  0.06 0.06  0.06  0.06 0.26  0.26  0.01 0.16  0.16
Crit Moves:       ****                              ****
Green Time:  30.8 30.8  30.8  30.8 30.8  30.8  57.2 57.2  57.2  57.2 57.2  57.2
Volume/Cap:  0.45 0.45  0.45  0.19 0.19  0.19  0.11 0.45  0.45  0.01 0.29  0.29
Delay/Veh:   21.6 21.6  21.6  19.4 19.4  19.4   7.4  9.5   9.5   7.0  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
ProgAdjFctr: 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:  21.6 21.6  21.6  19.4 19.4  19.4   7.4  9.5   9.5   7.0  8.3   8.3
DesignQueue:    7    2     1     0    1     3     3   20     5     0   15     0
*******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #64 Laurel Dr/ 101 NB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	0.444
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	6.6
Optimal Cycle:	37	Level Of Service:	B+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	0	10	0	0	0	0	10	10	0	10	10
Lanes:	0 1	0 0	1	0 0	0 0	0	0 0	2 0	1	0 0	2 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	141	0	128	0	0	0	0	789	303	0	1206	220
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:	141	0	128	0	0	0	0	789	303	0	1206	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	141	0	128	0	0	0	0	789	303	0	1206	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	0	128	0	0	0	0	789	303	0	1206	220
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.:	141	0	128	0	0	0	0	789	303	0	1206	220
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	1800	0	1750	0	0	0	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.07	0.00	0.00	0.00	0.00	0.21	0.17	0.00	0.32	0.13
Crit Moves:			****								****	
Green Time:	16.5	0.0	16.5	0.0	0.0	0.0	0.0	71.5	71.5	0.0	71.5	71.5
Volume/Cap:	0.48	0.00	0.44	0.00	0.00	0.00	0.00	0.29	0.24	0.00	0.44	0.18
Delay/Veh:	29.7	0.0	29.3	0.0	0.0	0.0	0.0	3.9	3.7	0.0	4.6	3.5
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
ProgAdjFctr:	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:	29.7	0.0	29.3	0.0	0.0	0.0	0.0	3.9	3.7	0.0	4.6	3.5
DesignQueue:	7	0	6	0	0	0	0	13	5	0	21	4

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                    Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #64 Laurel Dr/ 101 NB Ramps
*********************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):          0.641
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):         13.2
Optimal Cycle:         52               Level Of Service:                  B-
*********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:         Permitted        Permitted         Permitted        Permitted
Rights:           Include          Include           Include          Include
Min. Green:     7   10    10     0    0     0     0   10    10     0   10    10
Lanes:         0  1  0  0  1   0  0  0  0  0   0  0  2  0  1   0  0  2  0  1
------------|----------------||----------------||----------------||----------------|
Volume Module: 5:00-6:00 PM
Base Vol:      299    1   368     0    0     0     0 1346   424     0  895   250
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:   299    1   368     0    0     0     0 1346   424     0  895   250
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    299    1   368     0    0     0     0 1346   424     0  895   250
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   299    1   368     0    0     0     0 1346   424     0  895   250
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.:    299    1   368     0    0     0     0 1346   424     0  895   250
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:     1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:   1.00 1.00  0.97  0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97
Lanes:        0.99 0.01  1.00  0.00 0.00  0.00  0.00 2.00  1.00  0.00 2.00  1.00
Final Sat.:   1794    6  1750     0    0     0     0 3800  1750     0 3800  1750
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:      0.17 0.17  0.21  0.00 0.00  0.00  0.00 0.35  0.24  0.00 0.24  0.14
Crit Moves:              ****                        ****
Green Time:   32.8 32.8  32.8   0.0  0.0   0.0   0.0 55.2  55.2   0.0 55.2  55.2
Volume/Cap:   0.51 0.51  0.64  0.00 0.00  0.00  0.00 0.64  0.44  0.00 0.43  0.26
Delay/Veh:    21.2 21.2  23.5   0.0  0.0   0.0   0.0 12.3  10.3   0.0 10.1   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
ProgAdjFctr:  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:   21.2 21.2  23.5   0.0  0.0   0.0   0.0 12.3  10.3   0.0 10.1   8.9
DesignQueue:    12    0    14     0    0     0     0   37    11     0   24     6
*********************************************************************************
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #65 Laurel Dr/ 101 SB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	0.565
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.5
Optimal Cycle:	45	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	0	10	0	10	10	0	10	10
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	1	0 0	2 0	1
Volume Module: 8:30-9:30 AM												
Base Vol:	0	0	0	167	0	407	0	1004	219	0	624	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:	0	0	0	167	0	407	0	1004	219	0	624	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:	0	0	0	167	0	407	0	1004	219	0	624	205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	167	0	407	0	1004	219	0	624	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.:	0	0	0	167	0	407	0	1004	219	0	624	205
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.23	0.00	0.26	0.13	0.00	0.16	0.12
Crit Moves:						****		****				
Green Time:	0.0	0.0	0.0	41.2	0.0	41.2	0.0	46.8	46.8	0.0	46.8	46.8
Volume/Cap:	0.00	0.00	0.00	0.23	0.00	0.56	0.00	0.56	0.27	0.00	0.35	0.25
Delay/Veh:	0.0	0.0	0.0	14.6	0.0	17.9	0.0	14.9	12.3	0.0	12.9	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
ProgAdjFctr:	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	14.6	0.0	17.9	0.0	14.9	12.3	0.0	12.9	12.2
DesignQueue:	0	0	0	6	0	14	0	32	7	0	19	6

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #65 Laurel Dr/ 101 SB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	0.684
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	12.4
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Permitted			Permitted			Permitted	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	7	0	10	0	10	10	0	10	10
Lanes:	0 0 0 0 0			1 0 0 0 1			0 0 2 0 1			0 0 2 0 1		
Volume Module: 5:00-6:00 PM												
Base Vol:	0	0	0	321	0	317	0	1589	243	0	1078	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:	0	0	0	321	0	317	0	1589	243	0	1078	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:	0	0	0	321	0	317	0	1589	243	0	1078	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	321	0	317	0	1589	243	0	1078	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.:	0	0	0	321	0	317	0	1589	243	0	1078	116
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.18	0.00	0.42	0.14	0.00	0.28	0.07
Crit Moves:				****				****				
Green Time:	0.0	0.0	0.0	26.8	0.0	26.8	0.0	61.2	61.2	0.0	61.2	61.2
Volume/Cap:	0.00	0.00	0.00	0.68	0.00	0.68	0.00	0.68	0.23	0.00	0.46	0.11
Delay/Veh:	0.0	0.0	0.0	27.7	0.0	27.5	0.0	10.4	6.7	0.0	8.1	6.1
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
ProgAdjFctr:	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	27.7	0.0	27.5	0.0	10.4	6.7	0.0	8.1	6.1
DesignQueue:	0	0	0	14	0	13	0	39	5	0	25	3

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                      Level Of Service Computation Report
                1985 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #66 Lincoln Ave/ Market St
*****************************************************************************
Cycle (sec):          100                Critical Vol./Cap. (X):        0.389
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        12.1
Optimal Cycle:         39                Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     7    0    10    0    0     0    0   10    10    7   10     0
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  1  1  0   1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      49    0   141    0    0     0    0  589    50  156  881     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:   49    0   141    0    0     0    0  589    50  156  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:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    49    0   141    0    0     0    0  589    50  156  881     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   49    0   141    0    0     0    0  589    50  156  881     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.:    49    0   141    0    0     0    0  589    50  156  881     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800 1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment:  0.97 1.06  0.97 0.97 1.06  0.97 0.97 1.03  1.00 0.97 1.06  0.97
Lanes:       1.00 0.00  1.00 0.00 0.00  0.00 0.00 1.84  0.16 1.00 2.00  0.00
Final Sat.:  1750    0  1750    0    0     0    0 3410   289 1750 3800     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.00  0.08 0.00 0.00  0.00 0.00 0.17  0.17 0.09 0.23  0.00
Crit Moves:             ****                       ****       ****
Green Time:  20.7  0.0  20.7  0.0  0.0   0.0  0.0 44.4  44.4 22.9 67.3   0.0
Volume/Cap:  0.14 0.00  0.39 0.00 0.00  0.00 0.00 0.39  0.39 0.39 0.34  0.00
Delay/Veh:   24.6  0.0  26.4  0.0  0.0   0.0  0.0 14.3  14.3 25.1  5.3   0.0
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
ProgAdjFctr: 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:  24.6  0.0  26.4  0.0  0.0   0.0  0.0 14.3  14.3 25.1  5.3   0.0
DesignQueue:    2    0     6    0    0     0    0   19     2    7   17     0
*****************************************************************************
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-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
             1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #66 Lincoln Ave/ Market St
*******************************************************************************
Cycle (sec):         100                 Critical Vol./Cap. (X):        0.551
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):        16.4
Optimal Cycle:        44                 Level Of Service:                C+
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    7    0    10    0    0     0    0   10    10    7   10     0
Lanes:       1  0  0  0  1   0  0  0  0  0   0  0  1  1  0   1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:     116    0   352    0    0     0    0  806    37   98  768     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:  116    0   352    0    0     0    0  806    37   98  768     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:   116    0   352    0    0     0    0  806    37   98  768     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  116    0   352    0    0     0    0  806    37   98  768     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.:   116    0   352    0    0     0    0  806    37   98  768     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800 1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment:  0.97 1.06  0.97 0.97 1.06  0.97 0.97 1.03  1.00 0.97 1.06  0.97
Lanes:       1.00 0.00  1.00 0.00 0.00  0.00 0.00 1.91  0.09 1.00 2.00  0.00
Final Sat.:  1750    0  1750    0    0     0    0 3537   162 1750 3800     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.00  0.20 0.00 0.00  0.00 0.00 0.23  0.23 0.06 0.20  0.00
Crit Moves:             ****                      ****           ****
Green Time:  36.5  0.0  36.5  0.0  0.0   0.0  0.0 41.3  41.3 10.2 51.5   0.0
Volume/Cap:  0.18 0.00  0.55 0.00 0.00  0.00 0.00 0.55  0.55 0.55 0.39  0.00
Delay/Veh:   16.4  0.0  20.0  0.0  0.0   0.0  0.0 17.3  17.3 35.2 11.3   0.0
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
ProgAdjFctr: 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:  16.4  0.0  20.0  0.0  0.0   0.0  0.0 17.3  17.3 35.2 11.3   0.0
DesignQueue:    4    0    13    0    0     0    0   28     1    5   22     0
*******************************************************************************
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                     Level Of Service Computation Report
               1985 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #67 Los Coches Av/ Natividad Rd
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap. (X):          0.160
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):        12.5
Optimal Cycle:        39              Level Of Service:                    B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted         Permitted
Rights:          Include          Include           Include           Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  2  1  0   1  0  2  1  0   0  1  0  0  1   0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 8:30-9:30 AM
Base Vol:      11  397    44    31  535    17     8    6    63    26    4     7
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:   11  397    44    31  535    17     8    6    63    26    4     7
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  397    44    31  535    17     8    6    63    26    4     7
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   11  397    44    31  535    17     8    6    63    26    4     7
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  397    44    31  535    17     8    6    63    26    4     7
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.04  1.00  0.97 1.04  1.00  1.00 1.00  0.97  1.00 1.00  0.97
Lanes:       1.00 2.69  0.31  1.00 2.90  0.10  0.57 0.43  1.00  0.87 0.13  1.00
Final Sat.:  1750 5041   559  1750 5427   172  1029  771  1750  1560  240  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.08  0.08  0.02 0.10  0.10  0.01 0.01  0.04  0.02 0.02  0.00
Crit Moves:  ****                  ****                     ****
Green Time:   7.0 39.0  39.0  27.3 59.3  59.3  21.7 21.7  21.7  21.7 21.7  21.7
Volume/Cap:  0.09 0.20  0.20  0.06 0.17  0.17  0.04 0.04  0.17  0.08 0.08  0.02
Delay/Veh:   33.1 15.3  15.3  20.4  7.0   7.0  23.5 23.5  24.2  23.7 23.7  23.4
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
ProgAdjFctr: 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:  33.1 15.3  15.3  20.4  7.0   7.0  23.5 23.5  24.2  23.7 23.7  23.4
DesignQueue:    1   14     2     1   12     0     0    0     3     1    0     0
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                   Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
***************************************************************************
Intersection #67 Los Coches Av/ Natividad Rd
***************************************************************************
Cycle (sec):          100             Critical Vol./Cap. (X):        0.226
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):     18.2
Optimal Cycle:         39             Level Of Service:                 C
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  2  1  0   1  0  2  1  0   0  1  0  0  1   0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:     150  397    91     7  344    35    28   13    79    32    6    12
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:  150  397    91     7  344    35    28   13    79    32    6    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:   150  397    91     7  344    35    28   13    79    32    6    12
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  150  397    91     7  344    35    28   13    79    32    6    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.:   150  397    91     7  344    35    28   13    79    32    6    12
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.05  1.00  0.97 1.04  1.00  1.00 1.00  0.97  1.00 1.00  0.97
Lanes:       1.00 2.42  0.58  1.00 2.71  0.29  0.68 0.32  1.00  0.84 0.16  1.00
Final Sat.:  1750 4554  1044  1750 5082   517  1229  571  1750  1516  284  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.09  0.09  0.00 0.07  0.07  0.02 0.02  0.05  0.02 0.02  0.01
Crit Moves:  ****                  ****                    ****
Green Time:  38.0 40.0  40.0  28.0 30.0  30.0  20.0 20.0  20.0  20.0 20.0  20.0
Volume/Cap:  0.23 0.22  0.22  0.01 0.23  0.23  0.11 0.11  0.23  0.11 0.11  0.03
Delay/Veh:   16.0 15.0  15.0  19.8 20.0  20.0  24.9 24.9  25.5  24.8 24.8  24.5
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
ProgAdjFctr: 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:  16.0 15.0  15.0  19.8 20.0  20.0  24.9 24.9  25.5  24.8 24.8  24.5
DesignQueue:    5   14     3     0   14     1     1    1     4     1    0     1
***************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #68 Los Palos Dr/ Romie Ln

Cycle (sec):	100	Critical Vol./Cap. (X):	0.234
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	19.4
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:		0 1 0 0 1			0 1 0 0 1			1 0 1 1 0			1 0 1 1 0	
Volume Module: 7:30-8:30 AM												
Base Vol:	37	75	40	41	122	89	94	220	36	54	189	39
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:	37	75	40	41	122	89	94	220	36	54	189	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	75	40	41	122	89	94	220	36	54	189	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	75	40	41	122	89	94	220	36	54	189	39
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.:	37	75	40	41	122	89	94	220	36	54	189	39
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.03	1.00
Lanes:	0.33	0.67	1.00	0.25	0.75	1.00	1.00	1.71	0.29	1.00	1.65	0.35
Final Sat.:	595	1205	1750	453	1347	1750	1750	3179	520	1750	3067	633
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.02	0.09	0.09	0.05	0.05	0.07	0.07	0.03	0.06	0.06
Crit Moves:					****		****				****	
Green Time:	38.7	38.7	38.7	38.7	38.7	38.7	23.0	29.0	29.0	20.3	26.3	26.3
Volume/Cap:	0.16	0.16	0.06	0.23	0.23	0.13	0.23	0.24	0.24	0.15	0.23	0.23
Delay/Veh:	15.2	15.2	14.6	15.7	15.7	15.0	23.9	20.6	20.6	24.9	22.0	22.0
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
ProgAdjFctr:	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:	15.2	15.2	14.6	15.7	15.7	15.0	23.9	20.6	20.6	24.9	22.0	22.0
DesignQueue:	1	3	1	1	4	3	4	9	1	2	8	2

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #68 Los Palos Dr/ Romie Ln

Cycle (sec):	100	Critical Vol./Cap. (X):	0.342
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	20.0
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module: 4:00-5:00 PM												
Base Vol:	85	126	72	40	91	110	146	262	78	61	317	55
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:	85	126	72	40	91	110	146	262	78	61	317	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	126	72	40	91	110	146	262	78	61	317	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	126	72	40	91	110	146	262	78	61	317	55
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	126	72	40	91	110	146	262	78	61	317	55
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.04	1.00	0.97	1.03	1.00
Lanes:	0.40	0.60	1.00	0.31	0.69	1.00	1.00	1.53	0.47	1.00	1.70	0.30
Final Sat.:	725	1075	1750	550	1250	1750	1750	2851	849	1750	3153	547
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.04	0.07	0.07	0.06	0.08	0.09	0.09	0.03	0.10	0.10
Crit Moves:		****					****				****	
Green Time:	34.2	34.2	34.2	34.2	34.2	34.2	24.4	31.6	31.6	22.1	29.4	29.4
Volume/Cap:	0.34	0.34	0.12	0.21	0.21	0.18	0.34	0.29	0.29	0.16	0.34	0.34
Delay/Veh:	18.7	18.7	17.1	17.7	17.7	17.5	23.9	19.6	19.6	23.9	21.1	21.1
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
ProgAdjFctr:	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:	18.7	18.7	17.1	17.7	17.7	17.5	23.9	19.6	19.6	23.9	21.1	21.1
DesignQueue:	3	5	3	1	3	4	6	10	3	3	13	2

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #69 Madiera Av/ Oregon St/ Sanborn Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.306
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.3
Optimal Cycle:	46	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	0	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module: 7:30-8:30 AM												
Base Vol:	37	312	0	12	663	34	38	12	86	10	9	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:	37	312	0	12	663	34	38	12	86	10	9	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:	37	312	0	12	663	34	38	12	86	10	9	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	312	0	12	663	34	38	12	86	10	9	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.:	37	312	0	12	663	34	38	12	86	10	9	20
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	0.97	0.97	1.03	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.90	0.10	1.00	0.12	0.88	1.00	0.31	0.69
Final Sat.:	1750	3700	0	1750	3519	180	1750	220	1580	1750	559	1241
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.00	0.01	0.19	0.19	0.02	0.05	0.05	0.01	0.02	0.02
Crit Moves:	****				****			****		****		
Green Time:	7.0	37.9	0.0	26.5	57.4	57.4	9.7	16.6	16.6	7.0	13.9	13.9
Volume/Cap:	0.30	0.22	0.00	0.03	0.33	0.33	0.22	0.33	0.33	0.08	0.12	0.12
Delay/Veh:	34.0	16.0	0.0	20.7	8.5	8.5	31.8	28.2	28.2	33.1	28.7	28.7
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
ProgAdjFctr:	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:	34.0	16.0	0.0	20.7	8.5	8.5	31.8	28.2	28.2	33.1	28.7	28.7
DesignQueue:	2	11	0	0	16	1	2	1	4	1	0	1

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #69 Madiera Av/ Oregon St/ Sanborn Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.434
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.8
Optimal Cycle:	46	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:		1 0 1 1 0			1 0 1 1 0			1 0 0 1 0			1 0 0 1 0	
Volume Module: 5:00-6:00 PM												
Base Vol:	146	1001	7	32	845	63	100	23	66	12	28	33
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:	146	1001	7	32	845	63	100	23	66	12	28	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	146	1001	7	32	845	63	100	23	66	12	28	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	1001	7	32	845	63	100	23	66	12	28	33
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.:	146	1001	7	32	845	63	100	23	66	12	28	33
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.03	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.86	0.14	1.00	0.26	0.74	1.00	0.46	0.54
Final Sat.:	1750	3674	26	1750	3443	257	1750	465	1335	1750	826	974
Capacity Analysis Module:												
Vol/Sat:	0.08	0.27	0.27	0.02	0.25	0.25	0.06	0.05	0.05	0.01	0.03	0.03
Crit Moves:		****		****			****				****	
Green Time:	16.7	58.7	58.7	7.0	49.0	49.0	12.3	13.1	13.1	9.2	10.0	10.0
Volume/Cap:	0.50	0.46	0.46	0.26	0.50	0.50	0.46	0.38	0.38	0.07	0.34	0.34
Delay/Veh:	30.0	9.0	9.0	33.7	13.3	13.3	32.2	30.7	30.7	31.6	32.3	32.3
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
ProgAdjFctr:	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:	30.0	9.0	9.0	33.7	13.3	13.3	32.2	30.7	30.7	31.6	32.3	32.3
DesignQueue:	7	25	0	2	26	2	5	1	3	1	1	2

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                    Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #70 Main St/ John St
******************************************************************************
Cycle (sec):          100             Critical Vol./Cap. (X):         0.489
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):      21.8
Optimal Cycle:         42             Level Of Service:                   C
******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0   10    10     7   10     0     7   10    10     7    0    10
Lanes:         0  0  2  0  1   0  1  1  0  0   1  0  2  0  1   2  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:       0  413   187     1   11     0    60  236   354   376    0   107
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  413   187     1   11     0    60  236   354   376    0   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:     0  413   187     1   11     0    60  236   354   376    0   107
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  413   187     1   11     0    60  236   354   376    0   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.:     0  413   187     1   11     0    60  236   354   376    0   107
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.97  1.00 1.03  0.97  0.97 1.06  0.97  0.88 1.06  0.97
Lanes:       0.00 2.00  1.00  0.17 1.83  0.00  1.00 2.00  1.00  2.00 0.00  1.00
Final Sat.:     0 3800  1750   308 3391     0  1750 3800  1750  3150    0  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.11  0.11  0.00 0.00  0.00  0.03 0.06  0.20  0.12 0.00  0.06
Crit Moves:       ****                                      ****  ****
Green Time:   0.0 22.2  22.2  22.2 22.2   0.0  41.4 41.4  41.4  24.4  0.0  24.4
Volume/Cap:  0.00 0.49  0.48  0.01 0.01  0.00  0.08 0.15  0.49  0.49 0.00  0.25
Delay/Veh:    0.0 26.2  26.5  23.1 23.1   0.0  13.5 13.9  16.8  25.1  0.0  23.2
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
ProgAdjFctr: 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 26.2  26.5  23.1 23.1   0.0  13.5 13.9  16.8  25.1  0.0  23.2
DesignQueue:    0   18     8     0    0     0     2    8    12    16    0     5
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                      Level Of Service Computation Report
               1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #70 Main St/ John St
******************************************************************************
Cycle (sec):          100                Critical Vol./Cap. (X):          0.654
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):          23.6
Optimal Cycle:         54                Level Of Service:                   C-
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted       Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:     0   10    10    7   10     0     7   10    10    7    0    10
Lanes:        0  0  2  0  1   0  1  1  0  0    1  0  2  0  1   2  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 4:00-5:00 PM
Base Vol:       0  727   304    3   29     0    59  207   463   377    0   152
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  727   304    3   29     0    59  207   463   377    0   152
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  727   304    3   29     0    59  207   463   377    0   152
Reduct Vol:     0    0     0    0    0     0     0    0     0     0    0     0
Reduced Vol:    0  727   304    3   29     0    59  207   463   377    0   152
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  727   304    3   29     0    59  207   463   377    0   152
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800 1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.97 1.00 1.03  0.97  0.97 1.06  0.97  0.88 1.06  0.97
Lanes:       0.00 2.00  1.00 0.19 1.81  0.00  1.00 2.00  1.00  2.00 0.00  1.00
Final Sat.:     0 3800  1750  347 3353     0  1750 3800  1750  3150    0  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.19  0.17 0.01 0.01  0.00  0.03 0.05  0.26  0.12 0.00  0.09
Crit Moves:       ****                                       ****  ****
Green Time:   0.0 29.3  29.3 29.3 29.3   0.0  40.5 40.5  40.5  18.3  0.0  18.3
Volume/Cap:  0.00 0.65  0.59 0.03 0.03  0.00  0.08 0.13  0.65  0.65 0.00  0.47
Delay/Veh:    0.0 24.5  24.4 19.2 19.2   0.0  13.9 14.3  19.9  30.7  0.0  28.6
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
ProgAdjFctr: 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 24.5  24.4 19.2 19.2   0.0  13.9 14.3  19.9  30.7  0.0  28.6
DesignQueue:    0   30    12    0    1     0     2    7    16    18    0     7
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                     Level Of Service Computation Report
             1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #71 Main St/ Romie Ln
******************************************************************************
Cycle (sec):         100             Critical Vol./Cap. (X):         0.471
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):      16.3
Optimal Cycle:        39             Level Of Service:                  C+
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:          Include          Include           Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:        1  0  1  1  0   1  0  1  1  0   1  0  1  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      41  699   151   157  555    83    55  132    27   140  180    68
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:   41  699   151   157  555    83    55  132    27   140  180    68
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  699   151   157  555    83    55  132    27   140  180    68
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   41  699   151   157  555    83    55  132    27   140  180    68
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  699   151   157  555    83    55  132    27   140  180    68
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.03  1.00  0.97 1.03  1.00  0.97 1.06  0.97  0.97 1.06  0.97
Lanes:       1.00 1.63  0.37  1.00 1.73  0.27  1.00 1.00  1.00  1.00 1.00  1.00
Final Sat.:  1750 3042   657  1750 3218   481  1750 1900  1750  1750 1900  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.23  0.23  0.09 0.17  0.17  0.03 0.07  0.02  0.08 0.09  0.04
Crit Moves:       ****        ****                                    ****
Green Time:   7.0 48.8  48.8  19.1 60.9  60.9  20.1 20.1  20.1  20.1 20.1  20.1
Volume/Cap:  0.33 0.47  0.47  0.47 0.28  0.28  0.16 0.35  0.08  0.40 0.47  0.19
Delay/Veh:   34.3 13.1  13.1  28.2  7.0   7.0  25.0 26.3  24.6  26.8 27.5  25.3
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
ProgAdjFctr: 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:  34.3 13.1  13.1  28.2  7.0   7.0  25.0 26.3  24.6  26.8 27.5  25.3
DesignQueue:    2   21     5     7   13     2     2    6     1     6    8     3
******************************************************************************
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #71 Main St/ Romie Ln

Cycle (sec):	100	Critical Vol./Cap. (X):	0.521
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	15.8
Optimal Cycle:	42	Level Of Service:	C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module: 5:00-6:00 PM												
Base Vol:	56	926	127	98	885	39	96	158	87	207	170	150
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:	56	926	127	98	885	39	96	158	87	207	170	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	926	127	98	885	39	96	158	87	207	170	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	926	127	98	885	39	96	158	87	207	170	150
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.:	56	926	127	98	885	39	96	158	87	207	170	150
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.03	1.00	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	1.75	0.25	1.00	1.91	0.09	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3253	446	1750	3544	156	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.28	0.28	0.06	0.25	0.25	0.05	0.08	0.05	0.12	0.09	0.09
Crit Moves:		****		****						****		
Green Time:	7.0	54.6	54.6	10.7	58.3	58.3	22.7	22.7	22.7	22.7	22.7	22.7
Volume/Cap:	0.46	0.52	0.52	0.52	0.43	0.43	0.24	0.37	0.22	0.52	0.39	0.38
Delay/Veh:	35.8	11.2	11.2	34.2	8.9	8.9	24.1	25.0	24.0	26.8	25.3	25.1
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
ProgAdjFctr:	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:	35.8	11.2	11.2	34.2	8.9	8.9	24.1	25.0	24.0	26.8	25.3	25.1
DesignQueue:	3	25	3	5	22	1	4	7	4	9	7	7

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #72 Main St/ Rossi St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.656
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	21.6
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	95	502	62	65	1081	133	68	230	249	168	168	74
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:	95	502	62	65	1081	133	68	230	249	168	168	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	502	62	65	1081	133	68	230	249	168	168	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	502	62	65	1081	133	68	230	249	168	168	74
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	502	62	65	1081	133	68	230	249	168	168	74
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.13	0.04	0.04	0.28	0.08	0.04	0.12	0.14	0.10	0.09	0.04
Crit Moves:	****				****				****	****		
Green Time:	8.3	44.7	44.7	7.0	43.4	43.4	15.0	21.7	21.7	14.6	21.4	21.4
Volume/Cap:	0.66	0.30	0.08	0.53	0.66	0.18	0.26	0.56	0.66	0.66	0.41	0.20
Delay/Veh:	40.7	13.4	12.1	37.5	17.7	13.2	28.7	27.8	30.0	34.7	26.2	24.6
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
ProgAdjFctr:	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	13.4	12.1	37.5	17.7	13.2	28.7	27.8	30.0	34.7	26.2	24.6
DesignQueue:	5	16	2	3	37	4	3	10	11	8	8	3

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #72 Main St/ Rossi St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.683
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.9
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module: 5:00-6:00 PM												
Base Vol:	182	1221	118	167	869	107	108	239	121	102	210	199
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:	182	1221	118	167	869	107	108	239	121	102	210	199
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	182	1221	118	167	869	107	108	239	121	102	210	199
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	1221	118	167	869	107	108	239	121	102	210	199
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.:	182	1221	118	167	869	107	108	239	121	102	210	199
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.32	0.07	0.10	0.23	0.06	0.06	0.13	0.07	0.06	0.11	0.11
Crit Moves:		****		****				****		****		
Green Time:	19.1	47.1	47.1	14.0	42.0	42.0	7.0	18.4	18.4	8.5	20.0	20.0
Volume/Cap:	0.55	0.68	0.14	0.68	0.55	0.15	0.88	0.68	0.38	0.68	0.55	0.57
Delay/Veh:	29.2	16.5	11.4	36.2	16.9	13.6	67.4	32.6	27.5	41.8	28.7	29.1
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
ProgAdjFctr:	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:	29.2	16.5	11.4	36.2	16.9	13.6	67.4	32.6	27.5	41.8	28.7	29.1
DesignQueue:	8	39	4	8	30	4	6	11	6	5	10	9

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #73 Main St/ San Juan Grade Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.172
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	18.1
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Split Phase			Split Phase	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:		1 0 2 0 1			1 0 2 0 1			0 1 0 0 1			1 1 0 0 1	
Volume Module: 7:30-8:30 AM												
Base Vol:	13	252	110	15	316	8	18	14	19	136	17	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:	13	252	110	15	316	8	18	14	19	136	17	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:	13	252	110	15	316	8	18	14	19	136	17	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	252	110	15	316	8	18	14	19	136	17	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.:	13	252	110	15	316	8	18	14	19	136	17	26
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	1.00	1.00	0.97	0.98	1.00	0.97
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.56	0.44	1.00	1.78	0.22	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1013	788	1750	3155	394	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.06	0.01	0.08	0.00	0.02	0.02	0.01	0.04	0.04	0.01
Crit Moves:	****				****			****			****	
Green Time:	7.0	31.6	31.6	22.1	46.8	46.8	10.0	10.0	10.0	24.2	24.2	24.2
Volume/Cap:	0.11	0.21	0.20	0.04	0.18	0.01	0.18	0.18	0.11	0.18	0.18	0.06
Delay/Veh:	33.1	19.0	19.0	23.2	11.8	10.8	31.4	31.4	31.1	22.8	22.8	22.1
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
ProgAdjFctr:	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:	33.1	19.0	19.0	23.2	11.8	10.8	31.4	31.4	31.1	22.8	22.8	22.1
DesignQueue:	1	10	4	1	10	0	1	1	1	6	1	1

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                      Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #73 Main St/ San Juan Grade Rd
******************************************************************************
Cycle (sec):          100                Critical Vol./Cap. (X):         0.417
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):         18.9
Optimal Cycle:         49                Level Of Service:                   C
******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:         Protected        Protected       Split Phase      Split Phase
Rights:            Include          Include          Include          Include
Min. Green:      7   10    10    7   10    10    7   10    10    7   10    10
Lanes:         1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  1  0  0  1
------------|----------------||----------------||----------------||----------------|
Volume Module: 5:00-6:00 PM
Base Vol:       94  546   216    90  689     9    49   34   101   235   69    61
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:    94  546   216    90  689     9    49   34   101   235   69    61
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     94  546   216    90  689     9    49   34   101   235   69    61
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    94  546   216    90  689     9    49   34   101   235   69    61
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.:     94  546   216    90  689     9    49   34   101   235   69    61
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:     1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:   0.97 1.06  0.97  0.97 1.06  0.97  1.00 1.00  0.97  0.98 1.00  0.97
Lanes:        1.00 2.00  1.00  1.00 2.00  1.00  0.59 0.41  1.00  1.55 0.45  1.00
Final Sat.:   1750 3800  1750  1750 3800  1750  1063  737  1750  2744  806  1750
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:      0.05 0.14  0.12  0.05 0.18  0.01  0.05 0.05  0.06  0.09 0.09  0.03
Crit Moves:   ****                   ****              ****              ****
Green Time:   12.9 49.4  49.4   7.0 43.5  43.5  13.8 13.8  13.8  20.5 20.5  20.5
Volume/Cap:   0.42 0.29  0.25  0.73 0.42  0.01  0.33 0.33  0.42  0.42 0.42  0.17
Delay/Veh:    31.2 11.4  11.1  48.0 14.9  12.2  29.9 29.9  30.6  26.5 26.5  24.9
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
ProgAdjFctr:  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:   31.2 11.4  11.1  48.0 14.9  12.2  29.9 29.9  30.6  26.5 26.5  24.9
DesignQueue:     5   16     6     5   23     0     2    2     5    11    3     3
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #74 Main St/ San Joaquin St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.339
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	9.9
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 1	0	1 0	2 0	1	0 1	0 0	1	0 1	0 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	29	794	50	20	569	49	54	27	42	74	32	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:	29	794	50	20	569	49	54	27	42	74	32	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:	29	794	50	20	569	49	54	27	42	74	32	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	794	50	20	569	49	54	27	42	74	32	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.:	29	794	50	20	569	49	54	27	42	74	32	20
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	1.00	1.00	0.97	1.00	1.00	0.97
Lanes:	1.00	1.88	0.12	1.00	2.00	1.00	0.67	0.33	1.00	0.70	0.30	1.00
Final Sat.:	1750	3481	219	1750	3800	1750	1200	600	1750	1257	543	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.23	0.01	0.15	0.03	0.04	0.05	0.02	0.06	0.06	0.01
Crit Moves:		****		****							****	
Green Time:	7.0	64.4	64.4	7.0	64.4	64.4	16.6	16.6	16.6	16.6	16.6	16.6
Volume/Cap:	0.24	0.35	0.35	0.16	0.23	0.04	0.27	0.27	0.14	0.35	0.35	0.07
Delay/Veh:	33.6	6.3	6.3	33.3	5.7	5.0	27.8	27.8	27.1	28.4	28.4	26.7
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
ProgAdjFctr:	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:	33.6	6.3	6.3	33.3	5.7	5.0	27.8	27.8	27.1	28.4	28.4	26.7
DesignQueue:	2	17	1	1	12	1	3	1	2	3	2	1

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #74 Main St/ San Joaquin St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.497
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.1
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 1 1 0			1 0 2 0 1			0 1 0 0 1			0 1 0 0 1		
Volume Module: 5:00-6:00 PM												
Base Vol:	138	896	57	57	886	155	141	62	145	175	90	71
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:	138	896	57	57	886	155	141	62	145	175	90	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	138	896	57	57	886	155	141	62	145	175	90	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	896	57	57	886	155	141	62	145	175	90	71
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.:	138	896	57	57	886	155	141	62	145	175	90	71
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	1.00	1.00	0.97	1.00	1.00	0.97
Lanes:	1.00	1.88	0.12	1.00	2.00	1.00	0.69	0.31	1.00	0.66	0.34	1.00
Final Sat.:	1750	3479	221	1750	3800	1750	1250	550	1750	1189	611	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.26	0.26	0.03	0.23	0.09	0.11	0.11	0.08	0.15	0.15	0.04
Crit Moves:		****		****							****	
Green Time:	14.8	51.5	51.5	7.0	43.7	43.7	29.5	29.5	29.5	29.5	29.5	29.5
Volume/Cap:	0.53	0.50	0.50	0.47	0.53	0.20	0.38	0.38	0.28	0.50	0.50	0.14
Delay/Veh:	31.6	12.2	12.2	36.0	15.9	13.2	21.5	21.5	20.7	22.8	22.8	19.7
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
ProgAdjFctr:	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:	31.6	12.2	12.2	36.0	15.9	13.2	21.5	21.5	20.7	22.8	22.8	19.7
DesignQueue:	7	26	2	3	30	5	6	2	6	7	4	3

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                     Level Of Service Computation Report
            1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #75 Market St/ Monterey St
******************************************************************************
Cycle (sec):          100             Critical Vol./Cap. (X):          0.431
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       15.7
Optimal Cycle:         39             Level Of Service:                  C+
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    7   10    10    0    0     0    7   10     0    0   10    10
Lanes:       1  0  2  0  1   0  0  0  0  0   2  0  2  0  0   0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:     40  416    83    0    0     0  219  616     0    0  710    31
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  416    83    0    0     0  219  616     0    0  710    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:   40  416    83    0    0     0  219  616     0    0  710    31
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  40  416    83    0    0     0  219  616     0    0  710    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.:   40  416    83    0    0     0  219  616     0    0  710    31
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1800 1800  1800 1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment: 0.97 1.06  0.97 0.97 1.06  0.97 0.88 1.06  0.97 0.97 1.03  1.00
Lanes:      1.00 2.00  1.00 0.00 0.00  0.00 2.00 2.00  0.00 0.00 1.91  0.09
Final Sat.: 1750 3800  1750    0    0     0 3150 3800     0    0 3545   155
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.02 0.11  0.05 0.00 0.00  0.00 0.07 0.16  0.00 0.00 0.20  0.20
Crit Moves:      ****                      ****                      ****
Green Time: 25.4 25.4  25.4  0.0  0.0   0.0 16.1 62.6   0.0  0.0 46.5  46.5
Volume/Cap: 0.09 0.43  0.19 0.00 0.00  0.00 0.43 0.26  0.00 0.00 0.43  0.43
Delay/Veh:  21.6 23.9  22.2  0.0  0.0   0.0 29.1  6.4   0.0  0.0 13.7  13.7
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
ProgAdjFctr: 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: 21.6 23.9  22.2  0.0  0.0   0.0 29.1  6.4   0.0  0.0 13.7  13.7
DesignQueue:   2   18     3    0    0     0   10   13     0    0   22     1
******************************************************************************
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                     Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #75 Market St/ Monterey St
******************************************************************************
Cycle (sec):         100                Critical Vol./Cap. (X):         0.681
Loss Time (sec):      12  (Y+R =  4 sec) Average Delay (sec/veh):        20.6
Optimal Cycle:        57                Level Of Service:                   C
******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7    10    10    0     0     0    7    10     0    0    10    10
Lanes:        1  0  2  0  1   0  0  0  0  0   2  0  2  0  0   0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:     111   991   120     0     0     0   443   672     0     0   611   121
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:  111   991   120     0     0     0   443   672     0     0   611   121
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:   111   991   120     0     0     0   443   672     0     0   611   121
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:  111   991   120     0     0     0   443   672     0     0   611   121
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.:   111   991   120     0     0     0   443   672     0     0   611   121
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800
Adjustment:  0.97  1.06  0.97  0.97  1.06  0.97  0.88  1.06  0.97  0.97  1.03  1.00
Lanes:       1.00  2.00  1.00  0.00  0.00  0.00  2.00  2.00  0.00  0.00  1.66  0.34
Final Sat.:  1750  3800  1750     0     0     0  3150  3800     0     0  3088   612
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06  0.26  0.07  0.00  0.00  0.00  0.14  0.18  0.00  0.00  0.20  0.20
Crit Moves:        ****                          ****                     ****
Green Time:  38.3  38.3  38.3   0.0   0.0   0.0  20.7  49.7   0.0   0.0  29.1  29.1
Volume/Cap:  0.17  0.68  0.18  0.00  0.00  0.00  0.68  0.36  0.00  0.00  0.68  0.68
Delay/Veh:   15.5  20.5  15.5   0.0   0.0   0.0  29.9  11.7   0.0   0.0  25.1  25.1
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
ProgAdjFctr: 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:  15.5  20.5  15.5   0.0   0.0   0.0  29.9  11.7   0.0   0.0  25.1  25.1
DesignQueue:    4    36     4     0     0     0    20    20     0     0    25     5
******************************************************************************
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #76 Market St/ Sanborn Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.484
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 20.7
Optimal Cycle: 46 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module: 7:30-8:30 AM												
Base Vol:	65	330	21	22	599	259	152	195	63	25	255	5
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	330	21	22	599	259	152	195	63	25	255	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	330	21	22	599	259	152	195	63	25	255	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	330	21	22	599	259	152	195	63	25	255	5
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.:	65	330	21	22	599	259	152	195	63	25	255	5
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.04	1.00	0.97	1.04	1.00	0.97	1.03	1.00
Lanes:	1.00	1.88	0.12	1.00	1.38	0.62	1.00	1.50	0.50	1.00	1.96	0.04
Final Sat.:	1750	3478	221	1750	2582	1117	1750	2796	903	1750	3629	71
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.09	0.01	0.23	0.23	0.09	0.07	0.07	0.01	0.07	0.07
Crit Moves:	****				****		****				****	
Green Time:	7.7	32.7	32.7	22.9	47.9	47.9	17.9	19.1	19.1	13.4	14.5	14.5
Volume/Cap:	0.48	0.29	0.29	0.05	0.48	0.48	0.48	0.37	0.37	0.11	0.48	0.48
Delay/Veh:	35.8	19.1	19.1	22.9	13.6	13.6	29.0	26.9	26.9	28.9	30.4	30.4
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
ProgAdjFctr:	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:	35.8	19.1	19.1	22.9	13.6	13.6	29.0	26.9	26.9	28.9	30.4	30.4
DesignQueue:	3	13	1	1	18	8	7	9	3	1	12	0

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                    Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #76 Market St/ Sanborn Rd
*******************************************************************************
Cycle (sec):        100             Critical Vol./Cap. (X):        0.625
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):     24.1
Optimal Cycle:       51             Level Of Service:                C-
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  1  1  0   1  0  1  1  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:     105  745    55    32  494   287   410  448    75    34  291    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:  105  745    55    32  494   287   410  448    75    34  291    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:   105  745    55    32  494   287   410  448    75    34  291    10
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  105  745    55    32  494   287   410  448    75    34  291    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.:   105  745    55    32  494   287   410  448    75    34  291    10
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.03  1.00  0.97 1.04  1.00  0.97 1.03  1.00  0.97 1.03  1.00
Lanes:       1.00 1.86  0.14  1.00 1.24  0.76  1.00 1.71  0.29  1.00 1.93  0.07
Final Sat.:  1750 3445   254  1750 2339  1359  1750 3169   531  1750 3577   123
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.22  0.22  0.02 0.21  0.21  0.23 0.14  0.14  0.02 0.08  0.08
Crit Moves:       ****        ****             ****                   ****
Green Time:   7.0 32.9  32.9   7.0 32.9  32.9  35.7 41.1  41.1   7.0 12.4  12.4
Volume/Cap:  0.86 0.66  0.66  0.26 0.64  0.64  0.66 0.34  0.34  0.28 0.66  0.66
Delay/Veh:   63.0 22.7  22.7  33.7 22.5  22.5  22.3 15.4  15.4  33.8 34.1  34.1
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
ProgAdjFctr: 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:  63.0 22.7  22.7  33.7 22.5  22.5  22.3 15.4  15.4  33.8 34.1  34.1
DesignQueue:    6   29     2     2   19    11    16   15     3     2   14     0
*******************************************************************************
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #77 Market St/ Salinas St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.630
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	18.4
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	10	10	0	10	10	7	10	0
Lanes:	0 0	0	0 0	0 1	1	0 1	0 0	2	0 1	1 0	2	0 0
Volume Module: 7:30-8:30 AM												
Base Vol:	0	0	0	136	941	479	0	764	78	109	664	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:	0	0	0	136	941	479	0	764	78	109	664	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:	0	0	0	136	941	479	0	764	78	109	664	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	136	941	479	0	764	78	109	664	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.:	0	0	0	136	941	479	0	764	78	109	664	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	1.00	1.03	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	0.00	0.00	0.26	1.74	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	467	3232	1750	0	3800	1750	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.29	0.29	0.27	0.00	0.20	0.04	0.06	0.17	0.00
Crit Moves:					****			****		****		
Green Time:	0.0	0.0	0.0	46.2	46.2	46.2	0.0	31.9	31.9	9.9	41.8	0.0
Volume/Cap:	0.00	0.00	0.00	0.63	0.63	0.59	0.00	0.63	0.14	0.63	0.42	0.00
Delay/Veh:	0.0	0.0	0.0	16.1	16.1	16.0	0.0	22.8	18.4	37.8	15.7	0.0
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
ProgAdjFctr:	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	16.1	16.1	16.0	0.0	22.8	18.4	37.8	15.7	0.0
DesignQueue:	0	0	0	4	30	15	0	31	3	6	23	0

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                    Level Of Service Computation Report
           1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #77 Market St/ Salinas St
******************************************************************************
Cycle (sec):          100                Critical Vol./Cap. (X):        0.665
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        18.3
Optimal Cycle:         55                Level Of Service:                  C
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0    7   10    10    0   10    10    7   10     0
Lanes:        0  0  0  0  0    0  1  1  0  1    0  0  2  0  1    1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:       0    0     0   83  757   354    0 1139    52  103  603     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:    0    0     0   83  757   354    0 1139    52  103  603     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:     0    0     0   83  757   354    0 1139    52  103  603     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0   83  757   354    0 1139    52  103  603     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.:     0    0     0   83  757   354    0 1139    52  103  603     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800 1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment:  0.97 1.06  0.97 1.00 1.03  0.97 0.97 1.06  0.97 0.97 1.06  0.97
Lanes:       0.00 0.00  0.00 0.20 1.80  1.00 0.00 2.00  1.00 1.00 2.00  0.00
Final Sat.:     0    0     0  366 3334  1750    0 3800  1750 1750 3800     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.23 0.23  0.20 0.00 0.30  0.03 0.06 0.16  0.00
Crit Moves:                       ****             ****       ****
Green Time:   0.0  0.0   0.0 34.1 34.1  34.1  0.0 45.0  45.0  8.8 53.9   0.0
Volume/Cap:  0.00 0.00  0.00 0.67 0.67  0.59 0.00 0.67  0.07 0.67 0.29  0.00
Delay/Veh:    0.0  0.0   0.0 22.3 22.3  21.8  0.0 17.1  11.8 40.5  9.6   0.0
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
ProgAdjFctr: 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 22.3 22.3  21.8  0.0 17.1  11.8 40.5  9.6   0.0
DesignQueue:    0    0     0    3   29    14    0   38     2    5   16     0
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                  Level Of Service Computation Report
         1985 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #78 Market St/ Sherwood Dr
*****************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):        0.495
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):       17.8
Optimal Cycle:       40               Level Of Service:                 C
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Prot+Permit       Permitted
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    0    0    10    7   10    10
Lanes:        1  0  2  0  2   1  0  1  1  0   0  0  0  0  1   1  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      28  505   275   216 1033    13     0    0     9   465   22   152
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  505   275   216 1033    13     0    0     9   465   22   152
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  505   275   216 1033    13     0    0     9   465   22   152
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   28  505   275   216 1033    13     0    0     9   465   22   152
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  505   275   216 1033    13     0    0     9   465   22   152
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.88  0.97 1.03  1.00  0.97 1.06  0.97  0.99 1.00  0.97
Lanes:       1.00 2.00  2.00  1.00 1.97  0.03  0.00 0.00  1.00  1.91 0.09  1.00
Final Sat.:  1750 3800  3150  1750 3654    46     0    0  1750  3390  160  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.13  0.09  0.12 0.28  0.28  0.00 0.00  0.01  0.14 0.14  0.09
Crit Moves:  ****                  ****        ****                   ****
Green Time:   7.0 31.9  31.9  29.6 54.5  54.5   0.0  0.0  26.5  26.5 26.5  26.5
Volume/Cap:  0.23 0.42  0.27  0.42 0.52  0.52  0.00 0.00  0.02  0.52 0.52  0.33
Delay/Veh:   33.6 20.5  19.3  21.8 11.1  11.1   0.0  0.0  20.7  24.2 24.2  22.7
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
ProgAdjFctr: 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:  33.6 20.5  19.3  21.8 11.1  11.1   0.0  0.0  20.7  24.2 24.2  22.7
DesignQueue:    1   20    11     9   28     0     0    0     0    20    1     6
*****************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #78 Market St/ Sherwood Dr

Cycle (sec):	100	Critical Vol./Cap. (X):	0.671
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	19.8
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	0	0	10	7	10	10
Lanes:	1 0 2 0 2			1 0 1 1 0			0 0 0 0 1			1 1 0 0 1		

Volume Module: 5:00-6:00 PM												
Base Vol:	43	1003	442	287	525	32	0	0	15	346	44	285
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:	43	1003	442	287	525	32	0	0	15	346	44	285
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	1003	442	287	525	32	0	0	15	346	44	285
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	1003	442	287	525	32	0	0	15	346	44	285
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.:	43	1003	442	287	525	32	0	0	15	346	44	285
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.88	0.97	1.03	1.00	0.97	1.06	0.97	0.98	1.00	0.97
Lanes:	1.00	2.00	2.00	1.00	1.88	0.12	0.00	0.00	1.00	1.78	0.22	1.00
Final Sat.:	1750	3800	3150	1750	3487	213	0	0	1750	3149	401	1750

Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.14	0.16	0.15	0.15	0.00	0.00	0.01	0.11	0.11	0.16
Crit Moves:		****		****			****					****
Green Time:	7.0	39.3	39.3	24.4	56.7	56.7	0.0	0.0	24.3	24.3	24.3	24.3
Volume/Cap:	0.35	0.67	0.36	0.67	0.27	0.27	0.00	0.00	0.04	0.45	0.45	0.67
Delay/Veh:	34.4	19.9	16.4	28.8	8.4	8.4	0.0	0.0	22.0	24.8	24.8	28.9
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
ProgAdjFctr:	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:	34.4	19.9	16.4	28.8	8.4	8.4	0.0	0.0	22.0	24.8	24.8	28.9
DesignQueue:	2	36	15	13	13	1	0	0	1	15	2	12

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #79 Market St/ Simas St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.239
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	9.2
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module: 7:30-8:30 AM												
Base Vol:	57	8	24	15	6	12	23	322	64	45	573	23
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:	57	8	24	15	6	12	23	322	64	45	573	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:	57	8	24	15	6	12	23	322	64	45	573	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	8	24	15	6	12	23	322	64	45	573	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.:	57	8	24	15	6	12	23	322	64	45	573	23
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.03	1.00
Lanes:	0.88	0.12	1.00	0.71	0.29	1.00	1.00	1.66	0.34	1.00	1.92	0.08
Final Sat.:	1578	222	1750	1286	514	1750	1750	3086	613	1750	3557	143
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.10	0.10	0.03	0.16	0.16
Crit Moves:		****					****				****	
Green Time:	14.8	14.8	14.8	14.8	14.8	14.8	7.0	66.2	66.2	7.0	66.2	66.2
Volume/Cap:	0.24	0.24	0.09	0.08	0.08	0.05	0.19	0.16	0.16	0.37	0.24	0.24
Delay/Veh:	28.7	28.7	28.0	27.9	27.9	27.8	33.4	4.9	4.9	34.6	5.2	5.2
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
ProgAdjFctr:	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:	28.7	28.7	28.0	27.9	27.9	27.8	33.4	4.9	4.9	34.6	5.2	5.2
DesignQueue:	3	0	1	1	0	1	1	6	1	2	11	0

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #79 Market St/ Simas St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.408
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	13.6
Optimal Cycle:	39	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module: 4:00-5:00 PM												
Base Vol:	146	19	130	61	16	48	35	735	92	76	665	36
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:	146	19	130	61	16	48	35	735	92	76	665	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	146	19	130	61	16	48	35	735	92	76	665	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	19	130	61	16	48	35	735	92	76	665	36
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.:	146	19	130	61	16	48	35	735	92	76	665	36
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.03	1.00
Lanes:	0.88	0.12	1.00	0.79	0.21	1.00	1.00	1.77	0.23	1.00	1.89	0.11
Final Sat.:	1593	207	1750	1426	374	1750	1750	3288	412	1750	3510	190
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.07	0.04	0.04	0.03	0.02	0.22	0.22	0.04	0.19	0.19
Crit Moves:		****						****		****		
Green Time:	22.5	22.5	22.5	22.5	22.5	22.5	7.0	54.9	54.9	10.7	58.5	58.5
Volume/Cap:	0.41	0.41	0.33	0.19	0.19	0.12	0.29	0.41	0.41	0.41	0.32	0.32
Delay/Veh:	25.5	25.5	24.8	23.9	23.9	23.5	33.9	10.1	10.1	32.5	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
ProgAdjFctr:	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	24.8	23.9	23.9	23.5	33.9	10.1	10.1	32.5	8.1	8.1
DesignQueue:	6	1	6	3	1	2	2	20	2	4	16	1

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                     Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #80 Market St/ Williams Rd
*******************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):        0.223
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       17.5
Optimal Cycle:         49               Level Of Service:                 C
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R  L  -  T  -  R  L  -  T  -  R  L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Split Phase      Split Phase
Rights:          Include          Include          Ignore           Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  1  1  0   1  0  2  0  1   1  0  1  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:       9  227     4   76  497   102   79   64    37   11   50    73
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
Initial Bse:    9  227     4   76  497   102   79   64     0   11   50    73
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Volume:     9  227     4   76  497   102   79   64     0   11   50    73
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    9  227     4   76  497   102   79   64     0   11   50    73
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  1.00
Final Vol.:     9  227     4   76  497   102   79   64     0   11   50    73
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800 1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment:  0.97 1.03  1.00 0.97 1.06  0.97 0.97 1.06  0.97 0.97 1.06  0.97
Lanes:       1.00 1.96  0.04 1.00 2.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Sat.:  1750 3636    64 1750 3800  1750 1750 1900  1750 1750 1900  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.06  0.06 0.04 0.13  0.06 0.05 0.03  0.00 0.01 0.03  0.04
Crit Moves:  ****                 ****                 ****                 ****
Green Time:   7.0 32.7  32.7 22.9 48.7  48.7 16.8 16.8   0.0 15.5 15.5  15.5
Volume/Cap:  0.07 0.19  0.19 0.19 0.27  0.12 0.27 0.20  0.00 0.04 0.17  0.27
Delay/Veh:   33.0 18.3  18.3 23.6 11.5  10.6 27.7 27.3   0.0 27.3 27.9  28.4
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
ProgAdjFctr: 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:  33.0 18.3  18.3 23.6 11.5  10.6 27.7 27.3   0.0 27.3 27.9  28.4
DesignQueue:    0    9     0    3   15     3    4    3     0    1    2     3
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                       Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #80 Market St/ Williams Rd
*******************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):         0.465
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       20.2
Optimal Cycle:         49              Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
-------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected       Split Phase      Split Phase
Rights:           Include          Include          Ignore           Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  1  1  0   1  0  2  0  1   1  0  1  0  1   1  0  1  0  1
-------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:       38  635    29   100  412   124   128  117    33    14   90   195
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
Initial Bse:    38  635    29   100  412   124   128  117     0    14   90   195
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:     38  635    29   100  412   124   128  117     0    14   90   195
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    38  635    29   100  412   124   128  117     0    14   90   195
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
Final Vol.:     38  635    29   100  412   124   128  117     0    14   90   195
-------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:   0.97 1.03  1.00  0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97
Lanes:        1.00 1.91  0.09  1.00 2.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Sat.:   1750 3538   162  1750 3800  1750  1750 1900  1750  1750 1900  1750
-------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.02 0.18  0.18  0.06 0.11  0.07  0.07 0.06  0.00  0.01 0.05  0.11
Crit Moves:        ****        ****                    ****                  ****
Green Time:    7.0 38.6  38.6  12.3 43.8  43.8  15.7 15.7   0.0  23.9 23.9  23.9
Volume/Cap:   0.31 0.47  0.47  0.47 0.25  0.16  0.47 0.39  0.00  0.03 0.20  0.47
Delay/Veh:    34.1 17.7  17.7  32.2 13.5  12.9  30.1 29.2   0.0  22.2 23.1  25.4
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
ProgAdjFctr:  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:   34.1 17.7  17.7  32.2 13.5  12.9  30.1 29.2   0.0  22.2 23.1  25.4
DesignQueue:     2   23     1     5   13     4     6    6     0     1    4     8
*******************************************************************************
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                    Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #81 Pajaro St/ Romie Ln
******************************************************************************
Cycle (sec):        100                 Critical Vol./Cap. (X):        0.279
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):        13.0
Optimal Cycle:       32                 Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  1  0  1   1  0  1  0  1   1  0  1  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      13  162    62   100  128    93    27  304    10    72  265    49
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:   13  162    62   100  128    93    27  304    10    72  265    49
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    13  162    62   100  128    93    27  304    10    72  265    49
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   13  162    62   100  128    93    27  304    10    72  265    49
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.:    13  162    62   100  128    93    27  304    10    72  265    49
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97
Lanes:       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 Sat.:  1750 1900  1750  1750 1900  1750  1750 1900  1750  1750 1900  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.09  0.04  0.06 0.07  0.05  0.02 0.16  0.01  0.04 0.14  0.03
Crit Moves:       ****                              ****
Green Time:  30.6 30.6  30.6  30.6 30.6  30.6  57.4 57.4  57.4  57.4 57.4  57.4
Volume/Cap:  0.02 0.28  0.12  0.19 0.22  0.17  0.03 0.28  0.01  0.07 0.24  0.05
Delay/Veh:   18.4 20.1  19.0  19.4 19.7  19.4   7.0  8.2   6.9   7.2  8.0   7.1
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
ProgAdjFctr: 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:  18.4 20.1  19.0  19.4 19.7  19.4   7.0  8.2   6.9   7.2  8.0   7.1
DesignQueue:    1    6     2     4    5     4     1    8     0     2    7     1
******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #81 Pajaro St/ Romie Ln

Cycle (sec):	100	Critical Vol./Cap. (X):	0.399
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	13.5
Optimal Cycle:	35	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module: 4:00-5:00 PM												
Base Vol:	26	252	100	93	257	113	90	291	33	128	410	117
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	252	100	93	257	113	90	291	33	128	410	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	252	100	93	257	113	90	291	33	128	410	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	252	100	93	257	113	90	291	33	128	410	117
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	252	100	93	257	113	90	291	33	128	410	117
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	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 Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.13	0.06	0.05	0.14	0.06	0.05	0.15	0.02	0.07	0.22	0.07
Crit Moves:					****						****	
Green Time:	33.9	33.9	33.9	33.9	33.9	33.9	54.1	54.1	54.1	54.1	54.1	54.1
Volume/Cap:	0.04	0.39	0.17	0.16	0.40	0.19	0.10	0.28	0.03	0.14	0.40	0.12
Delay/Veh:	16.9	19.3	17.6	17.5	19.4	17.8	8.4	9.5	8.2	8.6	10.4	8.6
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
ProgAdjFctr:	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:	16.9	19.3	17.6	17.5	19.4	17.8	8.4	9.5	8.2	8.6	10.4	8.6
DesignQueue:	1	10	4	3	10	4	2	8	1	3	11	3

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AM Peak                     Fri May 5, 2000 14:48:42                  Page 84-1
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
            1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #82 Rico St/ Rossi St
*******************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):         0.292
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       14.0
Optimal Cycle:         39              Level Of Service:                  B-
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    7   10    10    7   10    10    7   10    10    7   10    10
Lanes:         0  1  0  0  1   0  1  0  0  1   1  0  0  1  0   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:        4    6     6    97   19    94    34  284    28    34  238    30
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:     4    6     6    97   19    94    34  284    28    34  238    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:      4    6     6    97   19    94    34  284    28    34  238    30
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:     4    6     6    97   19    94    34  284    28    34  238    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.:      4    6     6    97   19    94    34  284    28    34  238    30
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:   1.00 1.00  0.97  1.00 1.00  0.97  0.97 1.00  1.00  0.97 1.06  0.97
Lanes:        0.40 0.60  1.00  0.84 0.16  1.00  1.00 0.91  0.09  1.00 1.00  1.00
Final Sat.:    720 1080  1750  1505  295  1750  1750 1638   162  1750 1900  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.01 0.01  0.00  0.06 0.06  0.05  0.02 0.17  0.17  0.02 0.13  0.02
Crit Moves:                         ****             ****        ****
Green Time:   22.0 22.0  22.0  22.0 22.0  22.0   7.0 59.0  59.0   7.0 59.0  59.0
Volume/Cap:   0.03 0.03  0.02  0.29 0.29  0.24  0.28 0.29  0.29  0.28 0.21  0.03
Delay/Veh:    23.3 23.3  23.2  24.9 24.9  24.5  33.8  7.8   7.8  33.8  7.3   6.5
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
ProgAdjFctr:  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  23.2  24.9 24.9  24.5  33.8  7.8   7.8  33.8  7.3   6.5
DesignQueue:     0    0     0     4    1     4     2    7     1     2    6     1
*******************************************************************************
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-------------------------------------------------------------------------------
                    Level Of Service Computation Report
            1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #82 Rico St/ Rossi St
*******************************************************************************
Cycle (sec):          100             Critical Vol./Cap. (X):        0.267
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):     13.4
Optimal Cycle:         39             Level Of Service:                 B-
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        0  1  0  0  1   0  1  0  0  1   1  0  0  1  0   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      20   12    29   57    2    58  125  346     6   12  314   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:   20   12    29   57    2    58  125  346     6   12  314   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:    20   12    29   57    2    58  125  346     6   12  314   100
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   20   12    29   57    2    58  125  346     6   12  314   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.:    20   12    29   57    2    58  125  346     6   12  314   100
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800 1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment:  1.00 1.00  0.97 1.00 1.00  0.97 0.97 1.00  1.00 0.97 1.06  0.97
Lanes:       0.62 0.38  1.00 0.97 0.03  1.00 1.00 0.98  0.02 1.00 1.00  1.00
Final Sat.:  1125  675  1750 1739   61  1750 1750 1769    31 1750 1900  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.02  0.02 0.03 0.03  0.03 0.07 0.20  0.20 0.01 0.17  0.06
Crit Moves:                       ****             ****       ****
Green Time:  11.6 11.6  11.6 11.6 11.6  11.6 23.0 69.4  69.4  7.0 53.3  53.3
Volume/Cap:  0.15 0.15  0.14 0.28 0.28  0.29 0.31 0.28  0.28 0.10 0.31  0.11
Delay/Veh:   30.2 30.2  30.2 30.9 30.9  30.9 24.4  4.5   4.5 33.1 10.0   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
ProgAdjFctr: 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:  30.2 30.2  30.2 30.9 30.9  30.9 24.4  4.5   4.5 33.1 10.0   8.8
DesignQueue:    1    1     1    3    0     3    5    6     0    1    9     3
*******************************************************************************
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-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
            1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #83 Sherwood Dr/ Rossi St
*******************************************************************************
Cycle (sec):           100              Critical Vol./Cap. (X):         0.501
Loss Time (sec):        12 (Y+R =  4 sec) Average Delay (sec/veh):       14.5
Optimal Cycle:          41              Level Of Service:                 B-
*******************************************************************************
Approach:      North Bound       South Bound        East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected         Protected         Permitted         Permitted
Rights:           Include           Include           Include           Include
Min. Green:     7    10    10     7    10    10     7    10    10     7    10    10
Lanes:        1  0  1  1  0    1  0  2  0  1    1  0  1  0  1    0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      111   543     9     43 1015   247    183    18   193     16    19    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:   111   543     9     43 1015   247    183    18   193     16    19    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:    111   543     9     43 1015   247    183    18   193     16    19    25
Reduct Vol:      0     0     0      0    0     0      0     0     0      0     0     0
Reduced Vol:   111   543     9     43 1015   247    183    18   193     16    19    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.:    111   543     9     43 1015   247    183    18   193     16    19    25
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1800 1800  1800   1800 1800  1800   1800 1800  1800   1800 1800  1800
Adjustment:   0.97 1.03  1.00   0.97 1.06  0.97   0.97 1.06  0.97   1.00 1.00  0.97
Lanes:        1.00 1.97  0.03   1.00 2.00  1.00   1.00 1.00  1.00   0.46 0.54  1.00
Final Sat.:   1750 3640    60   1750 3800  1750   1750 1900  1750    823  977  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.06 0.15  0.15   0.02 0.27  0.14   0.10 0.01  0.11   0.02 0.02  0.01
Crit Moves:   ****                   ****                      ****
Green Time:   12.7 59.0  59.0    7.0 53.3  53.3   22.0 22.0  22.0   22.0 22.0  22.0
Volume/Cap:   0.50 0.25  0.25   0.35 0.50  0.26   0.47 0.04  0.50   0.09 0.09  0.06
Delay/Veh:    32.5  7.5   7.5   34.4 11.5   9.7   26.5 23.3  26.9   23.6 23.6  23.4
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
ProgAdjFctr:  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:   32.5  7.5   7.5   34.4 11.5   9.7   26.5 23.3  26.9   23.6 23.6  23.4
DesignQueue:     5   13     0      2   28     7      8    1     9      1    1     1
*******************************************************************************
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #83 Sherwood Dr/ Rossi St
*******************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):         0.596
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        19.2
Optimal Cycle:         48              Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted         Permitted
Rights:           Include          Include          Include           Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  1  1  0   1  0  2  0  1   1  0  1  0  1   0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:     263 1155    19    68  608   186   281   41   295    27   44    68
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:  263 1155    19    68  608   186   281   41   295    27   44    68
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   263 1155    19    68  608   186   281   41   295    27   44    68
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  263 1155    19    68  608   186   281   41   295    27   44    68
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.:   263 1155    19    68  608   186   281   41   295    27   44    68
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.03  1.00  0.97 1.06  0.97  0.97 1.06  0.97  1.00 1.00  0.97
Lanes:       1.00 1.97  0.03  1.00 2.00  1.00  1.00 1.00  1.00  0.38 0.62  1.00
Final Sat.:  1750 3640    60  1750 3800  1750  1750 1900  1750   685 1115  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.15 0.32  0.32  0.04 0.16  0.11  0.16 0.02  0.17  0.04 0.04  0.04
Crit Moves:       ****        ****                          ****
Green Time:  29.0 52.9  52.9   7.0 30.9  30.9  28.1 28.1  28.1  28.1 28.1  28.1
Volume/Cap:  0.52 0.60  0.60  0.56 0.52  0.34  0.57 0.08  0.60  0.14 0.14  0.14
Delay/Veh:   23.3 12.7  12.7  38.2 21.9  20.5  24.6 20.1  25.1  20.5 20.5  20.4
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
ProgAdjFctr: 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 12.7  12.7  38.2 21.9  20.5  24.6 20.1  25.1  20.5 20.5  20.4
DesignQueue:   11   33     1     4   24     7    12    2    12     1    2     3
*******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #84 Terven Av/ Work St/ Sanborn Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.300
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	16.3
Optimal Cycle:	49	Level Of Service:	C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	0	0	10	10	7	0	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 1	0 0	1	0 1	0 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	5	500	137	205	830	0	0	1	1	109	0	74
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	500	137	205	830	0	0	1	1	109	0	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	500	137	205	830	0	0	1	1	109	0	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	500	137	205	830	0	0	1	1	109	0	74
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	500	137	205	830	0	0	1	1	109	0	74
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	1.00	1.00	0.97
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1800	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.08	0.12	0.22	0.00	0.00	0.00	0.00	0.06	0.00	0.04
Crit Moves:	****				****			****				****
Green Time:	7.0	33.1	33.1	29.5	55.6	0.0	0.0	10.0	10.0	15.4	0.0	15.4
Volume/Cap:	0.04	0.40	0.24	0.40	0.39	0.00	0.00	0.01	0.01	0.39	0.00	0.27
Delay/Veh:	33.0	19.7	18.5	21.7	9.7	0.0	0.0	30.8	30.8	29.4	0.0	28.5
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
ProgAdjFctr:	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:	33.0	19.7	18.5	21.7	9.7	0.0	0.0	30.8	30.8	29.4	0.0	28.5
DesignQueue:	0	19	5	8	22	0	0	0	0	5	0	4

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #84 Terven Av/ Work St/ Sanborn Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.414
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	16.1
Optimal Cycle:	49	Level Of Service:	C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 1	0 0	1	0 1	0 0	1
Volume Module: 4:00-5:00 PM												
Base Vol:	20	835	91	127	744	4	4	1	1	124	3	150
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:	20	835	91	127	744	4	4	1	1	124	3	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	835	91	127	744	4	4	1	1	124	3	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	835	91	127	744	4	4	1	1	124	3	150
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	835	91	127	744	4	4	1	1	124	3	150
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.98	1.00	0.97	1.00	1.00	0.97
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.61	0.39	1.00	0.98	0.02	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	2840	710	1750	1757	43	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.22	0.05	0.07	0.20	0.00	0.00	0.00	0.00	0.07	0.07	0.09
Crit Moves:		****		****				****			****	
Green Time:	7.0	45.3	45.3	15.0	53.3	53.3	10.0	10.0	10.0	17.7	17.7	17.7
Volume/Cap:	0.16	0.48	0.11	0.48	0.37	0.00	0.01	0.01	0.01	0.40	0.40	0.48
Delay/Veh:	33.3	14.7	12.0	30.8	10.4	8.3	30.8	30.8	30.8	28.2	28.2	29.1
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
ProgAdjFctr:	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:	33.3	14.7	12.0	30.8	10.4	8.3	30.8	30.8	30.8	28.2	28.2	29.1
DesignQueue:	1	27	3	6	20	0	0	0	0	6	0	7

APPENDIX B

Signal Mitigated Intersection Operational Conditions During A.M. & P.M. Peak Hours

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--------------------------------------------------------------------------------
                   Level Of Service Computation Report
         1985 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #28 Blanco Rd/ Main St
********************************************************************************
Cycle (sec):          70               Critical Vol./Cap. (X):         0.770
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):        20.3
Optimal Cycle:        63               Level Of Service:                  C
********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Protected        Protected
Rights:          Include          Include           Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:         1  0  2  0  1   1  0  2  0  1   1  0  2  0  1   2  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      162  591   553    89  403    88   207  573   179   379  292    68
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:   162  591   553    89  403    88   207  573   179   379  292    68
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    162  591   553    89  403    88   207  573   179   379  292    68
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   162  591   553    89  403    88   207  573   179   379  292    68
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.:    162  591   553    89  403    88   207  573   179   379  292    68
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:   0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.06  0.97  0.88 1.03  1.00
Lanes:        1.00 2.00  1.00  1.00 2.00  1.00  1.00 2.00  1.00  2.00 1.61  0.39
Final Sat.:   1750 3800  1750  1750 3800  1750  1750 3800  1750  3150 3001   699
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.09 0.16  0.32  0.05 0.11  0.05  0.12 0.15  0.10  0.12 0.10  0.10
Crit Moves:               ****  ****                   ****        ****
Green Time:   14.2 27.4  27.4   7.0 20.3  20.3  13.6 13.1  13.1  10.5 10.0  10.0
Volume/Cap:   0.46 0.40  0.81  0.51 0.37  0.17  0.61 0.81  0.55  0.81 0.68  0.68
Delay/Veh:    19.3 11.7  19.3  24.7 15.1  14.2  21.9 25.4  21.1  28.7 24.1  24.1
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
ProgAdjFctr:  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:   19.3 11.7  19.3  24.7 15.1  14.2  21.9 25.4  21.1  28.7 24.1  24.1
DesignQueue:     5   15    14     3   11     2     7   19     6    13   10     2
********************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #28 Blanco Rd/ Main St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.799
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.0
Optimal Cycle:	67	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	2 0	1 1	0
Volume Module: 5:00-6:00 PM												
Base Vol:	221	511	339	111	739	223	298	380	173	609	489	143
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:	221	511	339	111	739	223	298	380	173	609	489	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	511	339	111	739	223	298	380	173	609	489	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	511	339	111	739	223	298	380	173	609	489	143
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.:	221	511	339	111	739	223	298	380	173	609	489	143
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.88	1.04	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.53	0.47
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	3150	2862	837
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.19	0.06	0.19	0.13	0.17	0.10	0.10	0.19	0.17	0.17
Crit Moves:	****				****		****				****	
Green Time:	11.1	21.1	21.1	7.0	17.0	17.0	14.9	10.0	10.0	19.9	15.0	15.0
Volume/Cap:	0.80	0.45	0.64	0.63	0.80	0.52	0.80	0.70	0.69	0.68	0.80	0.80
Delay/Veh:	31.9	15.2	18.0	28.0	22.4	18.4	27.8	24.5	27.1	18.4	23.9	23.9
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
ProgAdjFctr:	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:	31.9	15.2	18.0	28.0	22.4	18.4	27.8	24.5	27.1	18.4	23.9	23.9
DesignQueue:	7	14	10	4	23	7	10	13	6	18	16	5

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------------------------------------------------------------------------------
------------------------------------------------------------------------------
                     Level Of Service Computation Report
            1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #32 Boronda Rd/ Main St
******************************************************************************
Cycle (sec):           70               Critical Vol./Cap. (X):        0.719
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       20.7
Optimal Cycle:         56               Level Of Service:                  C
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        2  0  2  0  1   1  0  2  0  1   2  0  1  1  0   1  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:     170   85    14    39   96   573   165  331   170    14  616    74
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:  170   85    14    39   96   573   165  331   170    14  616    74
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   170   85    14    39   96   573   165  331   170    14  616    74
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  170   85    14    39   96   573   165  331   170    14  616    74
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.:   170   85    14    39   96   573   165  331   170    14  616    74
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.88 1.06  0.97  0.97 1.06  0.97  0.88 1.04  1.00  0.97 1.06  0.97
Lanes:       2.00 2.00  1.00  1.00 2.00  1.00  2.00 1.30  0.70  1.00 2.00  1.00
Final Sat.:  3150 3800  1750  1750 3800  1750  3150 2444  1255  1750 3800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.02  0.01  0.02 0.03  0.33  0.05 0.14  0.14  0.01 0.16  0.04
Crit Moves:  ****                        ****  ****                   ****
Green Time:   7.0 21.4  21.4  15.0 29.4  29.4   7.0 12.7  12.7   8.9 14.6  14.6
Volume/Cap:  0.54 0.07  0.03  0.10 0.06  0.78  0.52 0.75  0.75  0.06 0.78  0.20
Delay/Veh:   24.2 13.1  12.9  16.8  9.2  17.0  24.0 23.8  23.8  20.4 23.4  17.5
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
ProgAdjFctr: 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:  24.2 13.1  12.9  16.8  9.2  17.0  24.0 23.8  23.8  20.4 23.4  17.5
DesignQueue:    6    2     0     1    2    14     6   11     6     0   20     2
******************************************************************************
```

```
---------------------------------------------------------------------------------
---------------------------------------------------------------------------------
                      Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #32 Boronda Rd/ Main St
*********************************************************************************
Cycle (sec):          70                Critical Vol./Cap. (X):          0.845
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):          26.4
Optimal Cycle:        76                Level Of Service:                   D+
*********************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:         2  0  2  0  1    1  0  2  0  1    2  0  1  1  0    1  0  2  0  1
------------|----------------||----------------||----------------||----------------|
Volume Module: 5:00-6:00 PM
Base Vol:      647  289    71    128  219   344   415  737   256    52  444   141
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:   647  289    71    128  219   344   415  737   256    52  444   141
User Adj:     1.00 1.00  1.00   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    647  289    71    128  219   344   415  737   256    52  444   141
Reduct Vol:      0    0     0      0    0     0     0    0     0     0    0     0
Reduced Vol:   647  289    71    128  219   344   415  737   256    52  444   141
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.:    647  289    71    128  219   344   415  737   256    52  444   141
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:     1800 1800  1800   1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:   0.88 1.06  0.97   0.97 1.06  0.97  0.88 1.04  1.00  0.97 1.06  0.97
Lanes:        2.00 2.00  1.00   1.00 2.00  1.00  2.00 1.47  0.53  1.00 2.00  1.00
Final Sat.:   3150 3800  1750   1750 3800  1750  3150 2745   954  1750 3800  1750
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:      0.21 0.08  0.04   0.07 0.06  0.20  0.13 0.27  0.27  0.03 0.12  0.08
Crit Moves:   ****                         ****       ****        ****
Green Time:   15.6 18.0  18.0   12.6 15.0  15.0  17.4 20.4  20.4   7.0 10.0  10.0
Volume/Cap:   0.92 0.30  0.16   0.41 0.27  0.92  0.53 0.92  0.92  0.30 0.82  0.56
Delay/Veh:    32.7 15.9  15.3   19.8 17.5  40.1  17.8 27.3  27.3  22.5 28.7  23.4
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
ProgAdjFctr:  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:   32.7 15.9  15.3   19.8 17.5  40.1  17.8 27.3  27.3  22.5 28.7  23.4
DesignQueue:    20    9     2      4    7    11    12   22     8     2   15     5
*********************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #34 Boronda Rd/ Natividad Rd

Cycle (sec): 80 Critical Vol./Cap. (X): 0.297
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 16.5
Optimal Cycle: 46 Level Of Service: C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 1 0 1			1 0 0 1 0			1 0 1 0 1			1 0 0 1 0		
Volume Module: 7:30-8:30 AM												
Base Vol:	81	60	43	35	72	13	15	155	103	42	219	51
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	60	43	35	72	13	15	155	103	42	219	51
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	60	43	35	72	13	15	155	103	42	219	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	60	43	35	72	13	15	155	103	42	219	51
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	60	43	35	72	13	15	155	103	42	219	51
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.00	1.00	0.97	1.06	0.97	0.97	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.85	0.15	1.00	1.00	1.00	1.00	0.81	0.19
Final Sat.:	1750	1900	1750	1750	1525	275	1750	1900	1750	1750	1460	340
Capacity Analysis Module:												
Vol/Sat:	0.05	0.03	0.02	0.02	0.05	0.05	0.01	0.08	0.06	0.02	0.15	0.15
Crit Moves:	****				****		****				****	
Green Time:	11.6	13.8	13.8	9.6	11.8	11.8	7.0	26.2	26.2	18.4	37.6	37.6
Volume/Cap:	0.32	0.18	0.14	0.17	0.32	0.32	0.10	0.25	0.18	0.10	0.32	0.32
Delay/Veh:	23.6	21.5	21.4	24.0	23.4	23.4	25.5	15.0	14.6	18.5	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
ProgAdjFctr:	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	21.5	21.4	24.0	23.4	23.4	25.5	15.0	14.6	18.5	10.1	10.1
DesignQueue:	3	2	2	1	3	0	1	5	3	1	5	1

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #34 Boronda Rd/ Natividad Rd

Cycle (sec):	80	Critical Vol./Cap. (X):	0.604
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	19.2
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	1 0	1	1 0	0 1	0
Volume Module: 5:00-6:00 PM												
Base Vol:	204	112	121	164	132	32	28	478	177	94	364	52
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:	204	112	121	164	132	32	28	478	177	94	364	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	204	112	121	164	132	32	28	478	177	94	364	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	112	121	164	132	32	28	478	177	94	364	52
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.:	204	112	121	164	132	32	28	478	177	94	364	52
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.00	1.00	0.97	1.06	0.97	0.97	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.80	0.20	1.00	1.00	1.00	1.00	0.88	0.12
Final Sat.:	1750	1900	1750	1750	1449	351	1750	1900	1750	1750	1575	225
Capacity Analysis Module:												
Vol/Sat:	0.12	0.06	0.07	0.09	0.09	0.09	0.02	0.25	0.10	0.05	0.23	0.23
Crit Moves:	****				****			****		****		
Green Time:	15.5	10.0	10.0	17.5	12.1	12.1	7.0	33.3	33.3	7.1	33.5	33.5
Volume/Cap:	0.60	0.47	0.55	0.43	0.60	0.60	0.18	0.60	0.24	0.60	0.55	0.55
Delay/Veh:	24.6	25.9	27.3	20.9	26.8	26.8	25.8	14.8	11.5	31.2	14.1	14.1
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
ProgAdjFctr:	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:	24.6	25.9	27.3	20.9	26.8	26.8	25.8	14.8	11.5	31.2	14.1	14.1
DesignQueue:	8	4	5	6	5	1	1	13	5	4	10	1

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #35 Boronda Rd/ San Juan Grade Rd

Cycle (sec):	80	Critical Vol./Cap. (X):	0.394
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	18.5
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	58	90	16	145	150	264	71	366	48	27	419	68
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:	58	90	16	145	150	264	71	366	48	27	419	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	90	16	145	150	264	71	366	48	27	419	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	90	16	145	150	264	71	366	48	27	419	68
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	90	16	145	150	264	71	366	48	27	419	68
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.03	1.00	0.97	1.06	0.97
Lanes:	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	3800	1750	1750	3271	429	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.05	0.01	0.08	0.04	0.15	0.04	0.11	0.11	0.02	0.11	0.04
Crit Moves:	****					****	****				****	
Green Time:	7.0	22.1	22.1	15.4	30.5	30.5	8.2	17.9	17.9	12.6	22.3	22.3
Volume/Cap:	0.38	0.17	0.03	0.43	0.10	0.40	0.40	0.50	0.50	0.10	0.40	0.14
Delay/Veh:	27.0	16.8	16.1	22.1	12.1	13.9	26.3	21.0	21.0	21.9	17.9	16.5
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
ProgAdjFctr:	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	16.8	16.1	22.1	12.1	13.9	26.3	21.0	21.0	21.9	17.9	16.5
DesignQueue:	2	3	1	5	4	8	3	13	2	1	14	2

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                  Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #35 Boronda Rd/ San Juan Grade Rd
*******************************************************************************
Cycle (sec):          80               Critical Vol./Cap. (X):         0.575
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):         19.6
Optimal Cycle:        46               Level Of Service:                  C
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:        1  0  1  0  1    1  0  2  0  1    1  0  1  1  0    1  0  2  0  1
------------|----------------||----------------||----------------||----------------|
Volume Module: 5:00-6:00 PM
Base Vol:     131  238    61   197  165   127   153  712    91    59  441   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:  131  238    61   197  165   127   153  712    91    59  441   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:   131  238    61   197  165   127   153  712    91    59  441   205
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  131  238    61   197  165   127   153  712    91    59  441   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.:   131  238    61   197  165   127   153  712    91    59  441   205
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.97  0.97 1.06  0.97  0.97 1.03  1.00  0.97 1.06  0.97
Lanes:       1.00 1.00  1.00  1.00 2.00  1.00  1.00 1.77  0.23  1.00 2.00  1.00
Final Sat.:  1750 1900  1750  1750 3800  1750  1750 3280   419  1750 3800  1750
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.13  0.03  0.11 0.04  0.07  0.09 0.22  0.22  0.03 0.12  0.12
Crit Moves:       ****        ****                   ****        ****
Green Time:  13.1 16.8  16.8  15.1 18.8  18.8  14.9 29.1  29.1   7.0 21.2  21.2
Volume/Cap:  0.46 0.60  0.17  0.60 0.19  0.31  0.47 0.60  0.60  0.39 0.44  0.44
Delay/Veh:   23.8 23.5  19.7  24.7 18.6  19.4  22.9 16.2  16.2  27.0 18.8  19.0
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
ProgAdjFctr: 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:  23.8 23.5  19.7  24.7 18.6  19.4  22.9 16.2  16.2  27.0 18.8  19.0
DesignQueue:    5    9     2     7    6     4     6   21     3     2   15     7
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                    Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #41 Davis Rd/ Larkin St
******************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):         0.448
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):         9.8
Optimal Cycle:         39               Level Of Service:                   B
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     7   10    10    7   10     0    0    0     0    7    0    10
Lanes:        1  0  1  1  0   1  0  1  1  0   0  0  1! 0  0   1  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:       2  823    18    62 1141     0    0    0     0   42    0   149
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:    2  823    18    62 1141     0    0    0     0   42    0   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:     2  823    18    62 1141     0    0    0     0   42    0   149
Reduct Vol:     0    0     0     0    0     0    0    0     0    0    0     0
Reduced Vol:    2  823    18    62 1141     0    0    0     0   42    0   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.:     2  823    18    62 1141     0    0    0     0   42    0   149
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800 1800 1800  1800 1800 1800  1800
Adjustment:  0.97 1.03  1.00  0.97 1.03  0.97 0.97 0.97  0.97 0.97 1.06  0.97
Lanes:       1.00 1.96  0.04  1.00 2.00  0.00 0.00 1.00  0.00 1.00 0.00  1.00
Final Sat.:  1750 3621    79  1750 3700     0    0 1750     0 1750    0  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.23  0.23  0.04 0.31  0.00 0.00 0.00  0.00 0.02 0.00  0.09
Crit Moves:  ****                  ****                                    ****
Green Time:   7.0 63.5  63.5   7.0 63.5   0.0  0.0  0.0   0.0 17.5  0.0  17.5
Volume/Cap:  0.02 0.36  0.36  0.51 0.49  0.00 0.00 0.00  0.00 0.14 0.00  0.49
Delay/Veh:   32.9  6.6   6.6  36.9  7.5   0.0  0.0  0.0   0.0 26.5  0.0  29.2
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
ProgAdjFctr: 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  6.6   6.6  36.9  7.5   0.0  0.0  0.0   0.0 26.5  0.0  29.2
DesignQueue:    0   18     0     3   25     0    0    0     0    2    0     7
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #41 Davis Rd/ Larkin St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.762
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	13.3
Optimal Cycle:	69	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	0	0	0	0	7	0	10
Lanes:	1 0 1 1 0			1 0 1 1 0			0 0 1! 0 0			1 0 0 0 1		
Volume Module: 5:00-6:00 PM												
Base Vol:	1	1612	75	213	1154	0	0	0	0	24	0	162
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	1612	75	213	1154	0	0	0	0	24	0	162
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	1612	75	213	1154	0	0	0	0	24	0	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	1612	75	213	1154	0	0	0	0	24	0	162
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	1612	75	213	1154	0	0	0	0	24	0	162
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.03	0.97	0.97	0.97	0.97	0.97	1.06	0.97
Lanes:	1.00	1.91	0.09	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	1750	3535	164	1750	3700	0	0	1750	0	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.46	0.46	0.12	0.31	0.00	0.00	0.00	0.00	0.01	0.00	0.09
Crit Moves:		****		****								****
Green Time:	7.0	59.9	59.9	16.0	68.8	0.0	0.0	0.0	0.0	12.2	0.0	12.2
Volume/Cap:	0.01	0.76	0.76	0.76	0.45	0.00	0.00	0.00	0.00	0.11	0.00	0.76
Delay/Veh:	32.9	12.4	12.4	38.4	5.5	0.0	0.0	0.0	0.0	29.7	0.0	42.3
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
ProgAdjFctr:	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	12.4	12.4	38.4	5.5	0.0	0.0	0.0	0.0	29.7	0.0	42.3
DesignQueue:	0	41	2	10	22	0	0	0	0	1	0	8

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #51 Harden Pkwy/ Main St

Cycle (sec):	80	Critical Vol./Cap. (X):	0.126
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.0
Optimal Cycle:	49	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module: 8:30-9:30 AM												
Base Vol:	51	243	58	58	274	13	37	26	35	86	31	64
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:	51	243	58	58	274	13	37	26	35	86	31	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	243	58	58	274	13	37	26	35	86	31	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	243	58	58	274	13	37	26	35	86	31	64
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	243	58	58	274	13	37	26	35	86	31	64
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.04	0.03	0.03	0.05	0.01	0.02	0.01	0.02	0.05	0.02	0.04
Crit Moves:	****				****			****			****	
Green Time:	18.5	28.8	28.8	20.2	30.5	30.5	13.4	13.4	13.4	31.2	31.2	31.2
Volume/Cap:	0.13	0.12	0.09	0.13	0.13	0.02	0.13	0.08	0.12	0.13	0.04	0.09
Delay/Veh:	18.5	13.0	12.9	17.6	12.2	11.7	21.5	21.4	21.5	11.9	11.5	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
ProgAdjFctr:	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:	18.5	13.0	12.9	17.6	12.2	11.7	21.5	21.4	21.5	11.9	11.5	11.8
DesignQueue:	2	7	2	2	8	0	1	1	1	2	1	2

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #51 Harden Pkwy/ Main St

Cycle (sec):	80	Critical Vol./Cap. (X):	0.384
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	20.9
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module: 5:00-6:00 PM												
Base Vol:	196	570	162	180	581	64	58	105	175	213	109	129
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:	196	570	162	180	581	64	58	105	175	213	109	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	196	570	162	180	581	64	58	105	175	213	109	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	196	570	162	180	581	64	58	105	175	213	109	129
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.:	196	570	162	180	581	64	58	105	175	213	109	129
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.10	0.09	0.10	0.10	0.04	0.03	0.06	0.10	0.12	0.06	0.07
Crit Moves:	****				****			****			****	
Green Time:	23.3	10.0	10.0	34.5	21.2	21.2	20.8	20.8	20.8	25.3	25.3	25.3
Volume/Cap:	0.38	0.80	0.74	0.24	0.38	0.14	0.13	0.21	0.38	0.38	0.18	0.23
Delay/Veh:	17.4	30.4	34.1	11.0	18.4	17.0	17.2	17.6	18.8	16.4	15.1	15.4
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
ProgAdjFctr:	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:	17.4	30.4	34.1	11.0	18.4	17.0	17.2	17.6	18.8	16.4	15.1	15.4
DesignQueue:	6	23	6	5	19	2	2	4	6	7	3	4

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
              1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #59 Laurel Dr/ Main St
*******************************************************************************
Cycle (sec):          80                Critical Vol./Cap. (X):        0.379
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):        18.7
Optimal Cycle:        46                Level Of Service:                  C
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        2  0  2  0  1   2  0  2  1  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      41  276   118   111  604   118   125  294    87   135  297    65
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:   41  276   118   111  604   118   125  294    87   135  297    65
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  276   118   111  604   118   125  294    87   135  297    65
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   41  276   118   111  604   118   125  294    87   135  297    65
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  276   118   111  604   118   125  294    87   135  297    65
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.88 1.06  0.97  0.88 1.04  1.00  0.97 1.04  1.00  0.97 1.03  1.00
Lanes:       2.00 2.00  1.00  2.00 2.49  0.51  1.00 1.53  0.47  1.00 1.63  0.37
Final Sat.:  3150 3800  1750  3150 4684   915  1750 2854   845  1750 3035   664
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.07  0.07  0.04 0.13  0.13  0.07 0.10  0.10  0.08 0.10  0.10
Crit Moves:  ****                  ****              ****        ****
Green Time:   7.0 19.1  19.1  13.4 25.5  25.5  14.6 20.3  20.3  15.2 20.9  20.9
Volume/Cap:  0.15 0.30  0.28  0.21 0.41  0.41  0.39 0.41  0.41  0.41 0.37  0.37
Delay/Veh:   25.7 19.1  19.0  21.9 16.3  16.3  22.3 19.0  19.0  22.1 18.5  18.5
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
ProgAdjFctr: 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:  25.7 19.1  19.0  21.9 16.3  16.3  22.3 19.0  19.0  22.1 18.5  18.5
DesignQueue:    2   10     4     4   19     4     5   10     3     5   10     2
*******************************************************************************
```

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #59 Laurel Dr/ Main St

Cycle (sec):	80	Critical Vol./Cap. (X):	0.707
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	21.4
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	2 0 2 0 1			2 0 2 1 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: 5:00-6:00 PM												
Base Vol:	110	804	257	222	763	175	290	615	113	174	427	140
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:	110	804	257	222	763	175	290	615	113	174	427	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	804	257	222	763	175	290	615	113	174	427	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	804	257	222	763	175	290	615	113	174	427	140
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.:	110	804	257	222	763	175	290	615	113	174	427	140
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.88	1.06	0.97	0.88	1.05	1.00	0.97	1.03	1.00	0.97	1.04	1.00
Lanes:	2.00	2.00	1.00	2.00	2.42	0.58	1.00	1.68	0.32	1.00	1.49	0.51
Final Sat.:	3150	3800	1750	3150	4554	1044	1750	3125	574	1750	2786	913
Capacity Analysis Module:												
Vol/Sat:	0.03	0.21	0.15	0.07	0.17	0.17	0.17	0.20	0.20	0.10	0.15	0.15
Crit Moves:		****		****			****				****	
Green Time:	7.0	23.9	23.9	8.0	24.9	24.9	18.7	24.0	24.0	12.1	17.3	17.3
Volume/Cap:	0.40	0.71	0.49	0.71	0.54	0.54	0.71	0.66	0.66	0.66	0.71	0.71
Delay/Veh:	26.8	20.4	18.1	31.4	17.6	17.6	25.2	19.6	19.6	28.3	24.0	24.0
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
ProgAdjFctr:	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:	26.8	20.4	18.1	31.4	17.6	17.6	25.2	19.6	19.6	28.3	24.0	24.0
DesignQueue:	4	27	8	9	24	6	10	20	4	7	15	5

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #61 Laurel Dr/ Natividad Rd

Cycle (sec):	80	Critical Vol./Cap. (X):	0.476
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	19.1
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 0	1	2 0	1 1	0	1 0	2 0	1	2 0	2 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	50	376	215	183	648	56	109	200	91	419	267	222
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:	50	376	215	183	648	56	109	200	91	419	267	222
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	376	215	183	648	56	109	200	91	419	267	222
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	376	215	183	648	56	109	200	91	419	267	222
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	376	215	183	648	56	109	200	91	419	267	222
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.03	1.00	0.97	1.06	0.97	0.88	1.06	0.97
Lanes:	1.00	2.00	1.00	2.00	1.84	0.16	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	3800	1750	3150	3405	294	1750	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.12	0.06	0.19	0.19	0.06	0.05	0.05	0.13	0.07	0.13
Crit Moves:	****				****			****		****		
Green Time:	7.0	21.8	21.8	15.2	30.0	30.0	7.0	10.0	10.0	21.0	24.0	24.0
Volume/Cap:	0.33	0.36	0.45	0.30	0.51	0.51	0.71	0.42	0.42	0.51	0.23	0.42
Delay/Veh:	26.5	18.0	18.8	21.2	14.9	14.9	36.5	24.9	25.3	19.5	16.1	17.4
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
ProgAdjFctr:	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:	26.5	18.0	18.8	21.2	14.9	14.9	36.5	24.9	25.3	19.5	16.1	17.4
DesignQueue:	2	12	7	7	19	2	4	8	4	14	8	7

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                    Level Of Service Computation Report
           1985 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #61 Laurel Dr/ Natividad Rd
********************************************************************************
Cycle (sec):           80              Critical Vol./Cap. (X):          0.854
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        24.3
Optimal Cycle:         83              Level Of Service:                  C-
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  2  0  1   2  0  1  1  0   1  0  2  0  1   2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:     110  740   600   345  441    80   103  522    97   378  416   375
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:  110  740   600   345  441    80   103  522    97   378  416   375
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   110  740   600   345  441    80   103  522    97   378  416   375
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  110  740   600   345  441    80   103  522    97   378  416   375
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.:   110  740   600   345  441    80   103  522    97   378  416   375
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.97 1.06  0.97  0.88 1.03  1.00  0.97 1.06  0.97  0.88 1.06  0.97
Lanes:       1.00 2.00  1.00  2.00 1.68  0.32  1.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  1750 3800  1750  3150 3131   568  1750 3800  1750  3150 3800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.19  0.34  0.11 0.14  0.14  0.06 0.14  0.06  0.12 0.11  0.21
Crit Moves:             ****  ****             ****                         ****
Green Time:   7.0 31.4  31.4  10.0 34.4  34.4   7.0 14.2  14.2  12.4 19.6  19.6
Volume/Cap:  0.72 0.50  0.87  0.87 0.33  0.33  0.67 0.77  0.31  0.77 0.45  0.87
Delay/Veh:   36.9 14.2  25.6  39.4 11.5  11.5  34.2 27.7  22.0  29.9 19.7  34.5
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
ProgAdjFctr: 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:  36.9 14.2  25.6  39.4 11.5  11.5  34.2 27.7  22.0  29.9 19.7  34.5
DesignQueue:    5   21    18    14   12     2     4   20     4    15   14    13
********************************************************************************
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APPENDIX C

Lane Mitigated Intersection Operational Conditions During A.M. & P.M. Peak Hours

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #26 Blanco Rd/ Davis Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.567
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	23.8
Optimal Cycle:	46	Level Of Service:	C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 1	0	1 0	1 0	1	2 0	1 1	0	1 0	1 1	1
Volume Module: 7:30-8:30 AM												
Base Vol:	18	193	28	192	244	485	351	510	20	23	382	162
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	193	28	192	244	485	351	510	20	23	382	162
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	193	28	192	244	485	351	510	20	23	382	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	193	28	192	244	485	351	510	20	23	382	162
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	193	28	192	244	485	351	510	20	23	382	162
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	0.88	1.03	1.00	0.97	1.06	0.97
Lanes:	1.00	1.74	0.26	1.00	1.00	1.00	2.00	1.92	0.08	1.00	2.00	1.00
Final Sat.:	1750	3231	469	1750	1900	1750	3150	3560	140	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.06	0.06	0.11	0.13	0.28	0.11	0.14	0.14	0.01	0.10	0.09
Crit Moves:	****					****	****				****	
Green Time:	7.0	10.0	10.0	42.9	45.9	45.9	18.5	28.1	28.1	7.0	16.6	16.6
Volume/Cap:	0.15	0.60	0.60	0.26	0.28	0.60	0.60	0.51	0.51	0.19	0.60	0.56
Delay/Veh:	33.2	34.6	34.6	14.0	12.8	16.3	29.7	23.3	23.3	33.4	30.2	29.6
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
ProgAdjFctr:	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:	33.2	34.6	34.6	14.0	12.8	16.3	29.7	23.3	23.3	33.4	30.2	29.6
DesignQueue:	1	10	1	6	8	16	16	21	1	1	18	8

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                     Level Of Service Computation Report
             1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #26 Blanco Rd/ Davis Rd
*******************************************************************************
Cycle (sec):          100                Critical Vol./Cap. (X):        0.714
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        26.4
Optimal Cycle:         61                Level Of Service:                 D+
*******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Protected        Protected         Protected         Protected
Rights:           Include          Include           Include           Include
Min. Green:     7   10    10     7   10    10     7   10    10     7   10    10
Lanes:         1  0  1  1  0    1  0  1  0  1    2  0  1  1  0    1  0  1  1  1
------------|----------------||----------------||----------------||----------------|
Volume Module: 5:00-6:00 PM
Base Vol:      16  310    68    214  216   424    661  464    34     28  510   402
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:   16  310    68    214  216   424    661  464    34     28  510   402
User Adj:    1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00
PHF Volume:    16  310    68    214  216   424    661  464    34     28  510   402
Reduct Vol:     0    0     0      0    0     0      0    0     0      0    0     0
Reduced Vol:   16  310    68    214  216   424    661  464    34     28  510   402
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.:    16  310    68    214  216   424    661  464    34     28  510   402
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800   1800 1800  1800   1800 1800  1800   1800 1800  1800
Adjustment:  0.97 1.03  1.00   0.97 1.06  0.97   0.88 1.03  1.00   0.97 1.03  0.98
Lanes:       1.00 1.63  0.37   1.00 1.00  1.00   2.00 1.86  0.14   1.00 1.64  1.36
Final Sat.:  1750 3034   665   1750 1900  1750   3150 3447   253   1750 3046  2401
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.10  0.10   0.12 0.11  0.24   0.21 0.13  0.13   0.02 0.17  0.17
Crit Moves:  ****                         ****   ****                   ****
Green Time:   7.0 17.6  17.6   21.1 31.7  31.7   27.4 42.3  42.3    7.0 21.9  21.9
Volume/Cap:  0.13 0.58  0.58   0.58 0.36  0.76   0.76 0.32  0.32   0.23 0.76  0.76
Delay/Veh:   33.2 29.7  29.7   28.7 20.2  27.8   28.2 14.6  14.6   33.6 30.0  30.0
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
ProgAdjFctr: 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:  33.2 29.7  29.7   28.7 20.2  27.8   28.2 14.6  14.6   33.6 30.0  30.0
DesignQueue:    1   15     3     10    8    17     28   15     1      1   23    18
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                     Level Of Service Computation Report
           1985 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #28 Blanco Rd/ Main St
******************************************************************************
Cycle (sec):         100              Critical Vol./Cap. (X):        0.725
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):      25.4
Optimal Cycle:        63              Level Of Service:                D+
******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     7    10    10    7    10    10    7    10    10    7    10    10
Lanes:         1  0  2  0  1   1  0  2  0  1   1  0  2  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:     162   591   553    89   403    88   207   573   179   379   292    68
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:  162   591   553    89   403    88   207   573   179   379   292    68
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:   162   591   553    89   403    88   207   573   179   379   292    68
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:  162   591   553    89   403    88   207   573   179   379   292    68
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.:   162   591   553    89   403    88   207   573   179   379   292    68
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800  1800
Adjustment:  0.97  1.06  0.97  0.97  1.06  0.97  0.97  1.06  0.97  0.88  1.05  1.00
Lanes:       1.00  2.00  1.00  1.00  2.00  1.00  1.00  2.00  1.00  2.00  2.41  0.59
Final Sat.:  1750  3800  1750  1750  3800  1750  1750  3800  1750  3150  4541  1057
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09  0.16  0.32  0.05  0.11  0.05  0.12  0.15  0.10  0.12  0.06  0.06
Crit Moves:              ****  ****                    ****        ****
Green Time:  23.6  43.6  43.6   7.0  27.0  27.0  27.4  20.8  20.8  16.6  10.0  10.0
Volume/Cap:  0.39  0.36  0.72  0.72  0.39  0.19  0.43  0.72  0.49  0.72  0.64  0.64
Delay/Veh:   24.8  14.4  20.1  47.1  22.8  21.3  23.1  30.4  27.4  33.5  34.7  34.7
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
ProgAdjFctr: 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:  24.8  14.4  20.1  47.1  22.8  21.3  23.1  30.4  27.4  33.5  34.7  34.7
DesignQueue:    7    19    19     5    17     4     9    26     8    18    15     3
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #28 Blanco Rd/ Main St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.698
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	27.7
Optimal Cycle:	59	Level Of Service:	D+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 2 0 1			2 0 2 1 0		
Volume Module: 5:00-6:00 PM												
Base Vol:	221	511	339	111	739	223	298	380	173	609	489	143
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:	221	511	339	111	739	223	298	380	173	609	489	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	511	339	111	739	223	298	380	173	609	489	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	511	339	111	739	223	298	380	173	609	489	143
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.:	221	511	339	111	739	223	298	380	173	609	489	143
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.88	1.05	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.30	0.70
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	3800	1750	3150	4331	1267
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.19	0.06	0.19	0.13	0.17	0.10	0.10	0.19	0.11	0.11
Crit Moves:	****				****			****		****		
Green Time:	18.1	39.0	39.0	7.0	27.9	27.9	25.3	14.3	14.3	27.7	16.8	16.8
Volume/Cap:	0.70	0.35	0.50	0.91	0.70	0.46	0.67	0.70	0.69	0.70	0.67	0.67
Delay/Veh:	33.7	16.4	18.0	72.4	26.0	23.2	28.4	33.7	36.2	26.3	31.0	31.0
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
ProgAdjFctr:	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:	33.7	16.4	18.0	72.4	26.0	23.2	28.4	33.7	36.2	26.3	31.0	31.0
DesignQueue:	10	18	12	6	31	9	13	19	8	26	23	7

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #32 Boronda Rd/ Main St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.512
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.1
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	2 0	2 0	1	1 0	2 1	1	2 0	1 1	0	1 0	2 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	170	85	14	39	96	573	165	331	170	14	616	74
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:	170	85	14	39	96	573	165	331	170	14	616	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	85	14	39	96	573	165	331	170	14	616	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	85	14	39	96	573	165	331	170	14	616	74
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.:	170	85	14	39	96	573	165	331	170	14	616	74
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.88	1.06	0.97	0.97	1.06	0.88	0.88	1.04	1.00	0.97	1.06	0.97
Lanes:	2.00	2.00	1.00	1.00	2.00	2.00	2.00	1.30	0.70	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	3150	3150	2444	1255	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.02	0.01	0.02	0.03	0.18	0.05	0.14	0.14	0.01	0.16	0.04
Crit Moves:	****					****	****				****	
Green Time:	10.5	27.1	27.1	19.0	35.5	35.5	10.2	34.9	34.9	7.0	31.7	31.7
Volume/Cap:	0.51	0.08	0.03	0.12	0.07	0.51	0.51	0.39	0.39	0.11	0.51	0.13
Delay/Veh:	33.3	20.7	20.4	25.5	16.2	19.6	33.5	18.7	18.7	33.2	21.5	18.5
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
ProgAdjFctr:	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:	33.3	20.7	20.4	25.5	16.2	19.6	33.5	18.7	18.7	33.2	21.5	18.5
DesignQueue:	9	3	1	2	3	21	8	12	6	1	24	3

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #32 Boronda Rd/ Main St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.696
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	27.2
Optimal Cycle:	59	Level Of Service:	D+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	2 0	2 0	1	1 0	2 1	1	2 0	1 1	0	1 0	2 0	1
Volume Module: 5:00-6:00 PM												
Base Vol:	647	289	71	128	219	344	415	737	256	52	444	141
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:	647	289	71	128	219	344	415	737	256	52	444	141
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	647	289	71	128	219	344	415	737	256	52	444	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	647	289	71	128	219	344	415	737	256	52	444	141
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.:	647	289	71	128	219	344	415	737	256	52	444	141
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.88	1.06	0.97	0.97	1.06	0.88	0.88	1.04	1.00	0.97	1.06	0.97
Lanes:	2.00	2.00	1.00	1.00	2.00	2.00	2.00	1.47	0.53	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	3150	3150	2745	954	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.21	0.08	0.04	0.07	0.06	0.11	0.13	0.27	0.27	0.03	0.12	0.08
Crit Moves:	****					****		****		****		
Green Time:	28.5	10.0	10.0	33.7	15.2	15.2	23.5	37.3	37.3	7.0	20.8	20.8
Volume/Cap:	0.72	0.76	0.41	0.22	0.38	0.72	0.56	0.72	0.72	0.42	0.56	0.39
Delay/Veh:	26.4	39.3	32.9	18.0	29.1	33.0	26.4	21.7	21.7	35.3	27.7	26.3
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
ProgAdjFctr:	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:	26.4	39.3	32.9	18.0	29.1	33.0	26.4	21.7	21.7	35.3	27.7	26.3
DesignQueue:	27	15	4	5	10	17	18	28	10	3	20	6

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #34 Boronda Rd/ Natividad Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.247
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	20.3
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0 1 0 1			1 0 0 1 0			1 0 1 0 1			1 0 1 0 1		
Volume Module: 7:30-8:30 AM												
Base Vol:	81	60	43	35	72	13	15	155	103	42	219	51
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	60	43	35	72	13	15	155	103	42	219	51
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	60	43	35	72	13	15	155	103	42	219	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	60	43	35	72	13	15	155	103	42	219	51
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	60	43	35	72	13	15	155	103	42	219	51
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.00	1.00	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	1.00	1.00	1.00	0.85	0.15	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1900	1750	1750	1525	275	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.03	0.02	0.02	0.05	0.05	0.01	0.08	0.06	0.02	0.12	0.03
Crit Moves:	****				****		****				****	
Green Time:	18.0	21.3	21.3	14.9	18.3	18.3	7.0	30.4	30.4	21.3	44.7	44.7
Volume/Cap:	0.26	0.15	0.12	0.13	0.26	0.26	0.12	0.27	0.19	0.11	0.26	0.07
Delay/Veh:	26.9	24.3	24.1	28.1	26.7	26.7	33.2	20.1	19.6	24.1	13.2	12.0
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
ProgAdjFctr:	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:	26.9	24.3	24.1	28.1	26.7	26.7	33.2	20.1	19.6	24.1	13.2	12.0
DesignQueue:	4	3	2	2	3	1	1	6	4	2	7	2

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #34 Boronda Rd/ Natividad Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.583
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.9
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module: 5:00-6:00 PM												
Base Vol:	204	112	121	164	132	32	28	478	177	94	364	52
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:	204	112	121	164	132	32	28	478	177	94	364	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	204	112	121	164	132	32	28	478	177	94	364	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	112	121	164	132	32	28	478	177	94	364	52
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.:	204	112	121	164	132	32	28	478	177	94	364	52
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.00	1.00	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	1.00	1.00	1.00	0.80	0.20	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1900	1750	1750	1449	351	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.06	0.07	0.09	0.09	0.09	0.02	0.25	0.10	0.05	0.19	0.03
Crit Moves:	****				****			****		****		
Green Time:	20.0	10.0	10.0	25.6	15.6	15.6	7.0	43.2	43.2	9.2	45.4	45.4
Volume/Cap:	0.58	0.59	0.69	0.37	0.58	0.58	0.23	0.58	0.23	0.58	0.42	0.07
Delay/Veh:	29.3	36.1	40.5	23.4	32.0	32.0	33.6	17.2	13.7	36.9	14.2	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
ProgAdjFctr:	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:	29.3	36.1	40.5	23.4	32.0	32.0	33.6	17.2	13.7	36.9	14.2	11.7
DesignQueue:	9	6	6	7	6	2	1	16	6	5	12	2

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #38 Calle del Adobe/ Laurel Dr/ Davis Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.618
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	23.3
Optimal Cycle:	50	Level Of Service:	C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 1	2	2 0	1 1	0	1 0	1 1	0	2 0	2 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	27	152	760	85	256	34	23	259	5	877	362	99
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:	27	152	760	85	256	34	23	259	5	877	362	99
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	152	760	85	256	34	23	259	5	877	362	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	152	760	85	256	34	23	259	5	877	362	99
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	152	760	85	256	34	23	259	5	877	362	99
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.84	0.88	1.03	1.00	0.97	1.03	1.00	0.88	1.06	0.97
Lanes:	1.00	2.00	3.00	2.00	1.76	0.24	1.00	1.96	0.04	2.00	2.00	1.00
Final Sat.:	1750	3800	4551	3150	3266	434	1750	3630	70	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.17	0.03	0.08	0.08	0.01	0.07	0.07	0.28	0.10	0.06
Crit Moves:			****	****				****		****		
Green Time:	13.7	26.2	26.2	7.0	19.5	19.5	22.6	11.2	11.2	43.6	32.2	32.2
Volume/Cap:	0.11	0.15	0.64	0.39	0.40	0.40	0.06	0.64	0.64	0.64	0.30	0.18
Delay/Veh:	28.8	21.6	25.5	34.4	26.9	26.9	23.1	34.6	34.6	17.4	19.3	18.5
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
ProgAdjFctr:	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:	28.8	21.6	25.5	34.4	26.9	26.9	23.1	34.6	34.6	17.4	19.3	18.5
DesignQueue:	1	6	32	4	12	2	1	13	0	29	14	4

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                      Level Of Service Computation Report
             1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #38 Calle del Adobe/ Laurel Dr/ Davis Rd
*******************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):         0.815
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):       26.3
Optimal Cycle:         81              Level Of Service:                 D+
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:         1  0  2  1  2   2  0  1  1  0   1  0  1  1  0   2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:       32  460  1235   342  374    38    32  251    14   836  305   339
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:    32  460  1235   342  374    38    32  251    14   836  305   339
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 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  460  1235   342  374    38    32  251    14   836  305   339
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    32  460  1235   342  374    38    32  251    14   836  305   339
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  460  1235   342  374    38    32  251    14   836  305   339
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:   0.97 1.06  0.84  0.88 1.03  1.00  0.97 1.03  1.00  0.88 1.06  0.97
Lanes:        1.00 2.00  3.00  2.00 1.81  0.19  1.00 1.89  0.11  2.00 2.00  1.00
Final Sat.:   1750 3800  4551  3150 3358   341  1750 3504   195  3150 3800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.02 0.12  0.27  0.11 0.11  0.11  0.02 0.07  0.07  0.27 0.08  0.19
Crit Moves:              ****  ****                  ****        ****
Green Time:    7.0 32.8  32.8  13.1 38.9  38.9   7.0 10.0  10.0  32.1 35.1  35.1
Volume/Cap:   0.26 0.37  0.83  0.83 0.29  0.29  0.26 0.72  0.72  0.83 0.23  0.55
Delay/Veh:    33.7 19.5  25.7  41.2 16.0  16.0  33.7 37.6  37.6  27.9 17.4  20.7
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
ProgAdjFctr:  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:   33.7 19.5  25.7  41.2 16.0  16.0  33.7 37.6  37.6  27.9 17.4  20.7
DesignQueue:     2   18    49    17   13     1     2   13     1    33   11    13
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                    Level Of Service Computation Report
          1985 HCM Operations Method (Base Volume Alternative)
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Intersection #59 Laurel Dr/ Main St
*******************************************************************************
Cycle (sec):          100             Critical Vol./Cap. (X):        0.366
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):     24.0
Optimal Cycle:         46             Level Of Service:                 C-
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        2  0  2  0  1   2  0  2  1  0   1  0  1  1  0   1  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: 7:30-8:30 AM
Base Vol:      41  276   118   111  604   118   125  294    87   135  297    65
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:   41  276   118   111  604   118   125  294    87   135  297    65
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 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  276   118   111  604   118   125  294    87   135  297    65
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   41  276   118   111  604   118   125  294    87   135  297    65
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  276   118   111  604   118   125  294    87   135  297    65
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:  0.88 1.06  0.97  0.88 1.04  1.00  0.97 1.04  1.00  0.97 1.05  1.00
Lanes:       2.00 2.00  1.00  2.00 2.49  0.51  1.00 1.53  0.47  1.00 2.44  0.56
Final Sat.:  3150 3800  1750  3150 4684   915  1750 2854   845  1750 4593  1005
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.07  0.07  0.04 0.13  0.13  0.07 0.10  0.10  0.08 0.06  0.06
Crit Moves:  ****                  ****              ****        ****
Green Time:   7.0 24.0  24.0  16.8 33.8  33.8  37.2 27.0  27.0  20.2 10.0  10.0
Volume/Cap:  0.19 0.30  0.28  0.21 0.38  0.38  0.19 0.38  0.38  0.38 0.65  0.65
Delay/Veh:   33.3 23.7  23.6  27.3 19.2  19.2  16.2 22.7  22.7  26.6 34.7  34.7
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
ProgAdjFctr: 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:  33.3 23.7  23.6  27.3 19.2  19.2  16.2 22.7  22.7  26.6 34.7  34.7
DesignQueue:    2   12     5     5   23     4     4   12     4     6   15     3
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Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #59 Laurel Dr/ Main St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.657
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	24.8
Optimal Cycle:	54	Level Of Service:	C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	2 0 2 0 1			2 0 2 1 0			1 0 1 1 0			1 0 2 1 0		
Volume Module: 5:00-6:00 PM												
Base Vol:	110	804	257	222	763	175	290	615	113	174	427	140
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:	110	804	257	222	763	175	290	615	113	174	427	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	804	257	222	763	175	290	615	113	174	427	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	804	257	222	763	175	290	615	113	174	427	140
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.:	110	804	257	222	763	175	290	615	113	174	427	140
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.88	1.06	0.97	0.88	1.05	1.00	0.97	1.03	1.00	0.97	1.05	1.00
Lanes:	2.00	2.00	1.00	2.00	2.42	0.58	1.00	1.68	0.32	1.00	2.23	0.77
Final Sat.:	3150	3800	1750	3150	4554	1044	1750	3125	574	1750	4215	1382
Capacity Analysis Module:												
Vol/Sat:	0.03	0.21	0.15	0.07	0.17	0.17	0.17	0.20	0.20	0.10	0.10	0.10
Crit Moves:		****		****				****		****		
Green Time:	7.0	32.2	32.2	10.7	35.9	35.9	28.0	29.9	29.9	15.1	17.1	17.1
Volume/Cap:	0.50	0.66	0.46	0.66	0.47	0.47	0.59	0.66	0.66	0.66	0.59	0.59
Delay/Veh:	35.6	23.1	20.9	35.8	18.9	18.9	25.0	24.2	24.2	34.4	29.8	29.8
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
ProgAdjFctr:	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:	35.6	23.1	20.9	35.8	18.9	18.9	25.0	24.2	24.2	34.4	29.8	29.8
DesignQueue:	6	32	10	11	28	7	12	25	5	8	20	7

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #61 Laurel Dr/ Natividad Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.460
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	23.4
Optimal Cycle:	46	Level Of Service:	C-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2 1	1	2 0	1 1	0	1 0	2 0	1	2 0	2 0	1
Volume Module: 7:30-8:30 AM												
Base Vol:	50	376	215	183	648	56	109	200	91	419	267	222
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:	50	376	215	183	648	56	109	200	91	419	267	222
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	376	215	183	648	56	109	200	91	419	267	222
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	376	215	183	648	56	109	200	91	419	267	222
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	376	215	183	648	56	109	200	91	419	267	222
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.04	0.98	0.88	1.03	1.00	0.97	1.06	0.97	0.88	1.06	0.97
Lanes:	1.00	2.49	1.51	2.00	1.84	0.16	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	4672	2671	3150	3405	294	1750	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.08	0.08	0.06	0.19	0.19	0.06	0.05	0.05	0.13	0.07	0.13
Crit Moves:	****				****			****		****		
Green Time:	7.0	28.2	28.2	19.8	41.0	41.0	7.0	11.3	11.3	28.7	33.0	33.0
Volume/Cap:	0.41	0.29	0.29	0.29	0.46	0.46	0.89	0.46	0.46	0.46	0.21	0.38
Delay/Veh:	35.1	21.3	21.3	26.1	16.5	16.5	69.0	32.1	32.7	22.6	18.4	19.8
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
ProgAdjFctr:	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	21.3	21.3	26.1	16.5	16.5	69.0	32.1	32.7	22.6	18.4	19.8
DesignQueue:	3	15	9	8	22	2	6	10	5	17	10	9

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
             1985 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #61 Laurel Dr/ Natividad Rd
*******************************************************************************
Cycle (sec):         100               Critical Vol./Cap. (X):         0.642
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):        25.7
Optimal Cycle:        52               Level Of Service:                  D+
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     7   10    10    7   10    10    7   10    10    7   10    10
Lanes:        1  0  2  1  1   2  0  1  1  0   1  0  2  0  1   2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: 5:00-6:00 PM
Base Vol:      110  740   600   345  441    80   103  522    97   378  416   375
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:   110  740   600   345  441    80   103  522    97   378  416   375
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    110  740   600   345  441    80   103  522    97   378  416   375
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   110  740   600   345  441    80   103  522    97   378  416   375
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.:    110  740   600   345  441    80   103  522    97   378  416   375
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1800 1800  1800  1800 1800  1800  1800 1800  1800  1800 1800  1800
Adjustment:   0.97 1.05  0.98  0.88 1.03  1.00  0.97 1.06  0.97  0.88 1.06  0.97
Lanes:        1.00 2.14  1.86  2.00 1.68  0.32  1.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:   1750 4055  3288  3150 3131   568  1750 3800  1750  3150 3800  1750
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.06 0.18  0.18  0.11 0.14  0.14  0.06 0.14  0.06  0.12 0.11  0.21
Crit Moves:        ****        ****             ****                        ****
Green Time:    7.0 28.4  28.4  17.1 38.5  38.5   9.2 22.7  22.7  19.8 33.4  33.4
Volume/Cap:   0.90 0.64  0.64  0.64 0.37  0.37  0.64 0.61  0.24  0.61 0.33  0.64
Delay/Veh:    70.7 24.3  24.3  31.2 16.8  16.8  39.1 27.2  24.1  29.0 19.0  23.2
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
ProgAdjFctr:  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:   70.7 24.3  24.3  31.2 16.8  16.8  39.1 27.2  24.1  29.0 19.0  23.2
DesignQueue:     6   31    25    16   16     3     5   23     4    17   16    15
*******************************************************************************
```

APPENDIX D

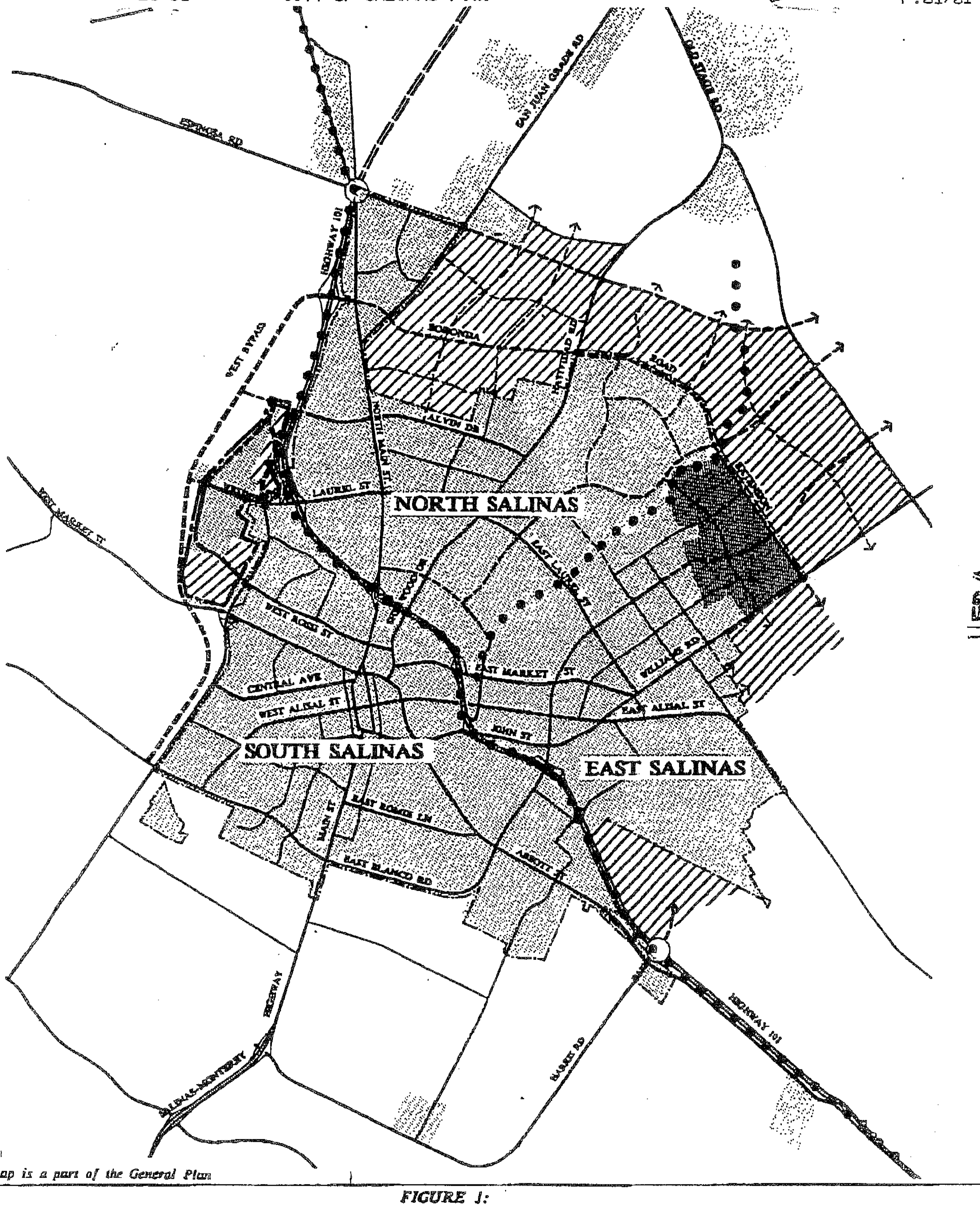
Roadway Segment Levels of Service Based on Threshold ADT Volumes & Roadway Types

LEVEL OF SERVICE THRESHOLD VOLUMES
FOR VARIOUS ROADWAY TYPES
TOTAL DAILY VEHICLES IN BOTH DIRECTIONS (ADT)

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)	51,000	79,000	112,000	136,000	146,000
6-Lane Freeway (6F)	39,000	59,000	85,000	102,000	110,000
8-Lane Expressway (8E)	35,000	54,000	75,000	90,000	98,000
6-Lane Expressway (6E)	28,000	42,000	56,000	67,000	74,000
4-Lane Freeway (4F)	26,000	40,000	57,000	69,000	74,000
8-Lane Divided Arterial (9) (w/left turn lane)	40,000	47,000	54,000	61,000	68,000
6-Lane Divided Arterial (7) (w/left turn lane)	32,000	38,000	43,000	49,000	54,000
4-Lane Expressway (4E)	18,000	27,000	36,000	45,000	50,000
4-Lane Divided Arterial (5) (w/left turn lane)	22,000	25,000	29,000	32,500	36,000
4-Lane Undivided Arterial (4) (no left turn lane)	16,000	19,000	22,000	24,000	27,000
2-Lane Rural Highway (2R)	4,000	8,000	12,000	17,000	25,000
2-Lane Arterial (3) (w/left turn lane)	11,000	12,500	14,500	16,000	18,000
2-Lane Collector (2)	6,000	7,500	9,000	10,500	12,000
2-Lane Local* (2L)	1,200	1,400	1,600	1,800	2,000
1-Lane Freeway Ramp** (1)	5,000	7,500	10,500	13,000	15,000
2-Lane Freeway Ramp** (1)	10,000	15,000	21,000	26,000	28,000

Note:

1. Non-directional peak hour volume is normally about 10 percent of the daily volume. Directional split is assumed 60/40.
2. Based on "Highway Capacity Manual", Transportation Research Board, 1985.
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. It is to be used for preliminary planning purposes only. Levels of service established by more detailed analysis take precedence over the LOS based on this table. Actual threshold volumes for each level of service listed above may vary depending on a number of factors including curvature and grade, intersection or interchange spacing, percentage of trucks and other heavy vehicles, lane widths, signal timing, on-street parking, amount of cross traffic and pedestrians, driveway spacing, etc.



This map is a part of the General Plan

FIGURE 1:
EXISTING URBAN AREA AND CONDITIONAL GROWTH AREAS

SECTOR BOUNDARY

EXISTING URBAN AREA

CONDITIONAL GROWTH AREAS

ANNEXED 1988

NOT ANNEXED 1988

0 3,000 6,000 FEET 2 MILES

BLAYNEY-DYETT, URBAN AND REGIONAL PLANNERS

APPENDIX D-1

LEVEL OF SERVICE THRESHOLD VOLUMES FOR VARIOUS ROADWAY TYPES TOTAL DAILY VOLUMES IN BOTH DIRECTIONS (ADT) /a/

ROADWAY TYPE	CODE	LOS A	LOS B	LOS C	LOS D	LOS E
10-Lane Freeway	10F	64,000	99,000	139,000	160,000	182,000
8-Lane Freeway	8F	51,000	79,000	112,000	136,000	146,000
6-Lane Freeway	6F	39,000	59,000	85,000	102,000	110,000
8-Lane Expressway	8E	35,000	54,000	75,000	90,000	98,000
6-Lane Expressway	6E	28,000	42,000	56,000	67,000	74,000
4-Lane Freeway	4F	26,000	40,000	57,000	69,000	74,000
8-Lane Divided Arterial (w/ left-turn lane)	9	40,000	47,000	54,000	61,000	68,000
6-Lane Divided Arterial (w/ left-turn lane)	7	32,000	38,000	43,000	49,000	54,000
4-Lane Expressway	4E	18,000	27,000	36,000	45,000	50,000
4-Lane Divided Arterial (w/ left-turn lane)	5	22,000	25,000	29,000	32,500	36,000
4-Lane Undivided Arterial (no left-turn lane)	4	16,000	19,000	22,000	24,000	27,000
2-Lane Arterial (w/ left-turn lane)	3	11,000	12,500	14,500	16,000	18,000
2-Lane Collector	2	6,000	7,500	9,000	10,500	12,000
2-Lane Local /b/	2L	1,200	1,400	1,600	1,800	2,000
1-Lane Freeway Ramp /c/	1	5,000	7,500	10,500	13,000	15,000
2-Lane Freeway Ramp /c/	1	10,000	15,000	21,000	26,000	28,000

Note: /a/ Non-directional peak hour traffic volume is assumed to be 10 percent of the daily traffic volume. Directional split is assumed 60/40.
All volumes are approximate and assume ideal roadway characteristics. Actual threshold volumes for each level of service listed above may vary depending on a number of factors including curvature and grade, intersection or interchange spacing, percentage of trucks and other heavy vehicles, lane widths, signal timing, on-street parking, amount of cross traffic and pedestrians, driveway spacing, etc.

/b/ The capacity limitation is related to neighborhood quality-of-life rather than the physical 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.

/c/ 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 ratio, not attainable vehicle speed. Level of service will be controlled by freeway level of service if worse than ramp.

Source: *Highway Capacity Manual, Special Report 209*, Transportation Research Board, 1985.

APPENDIX D-2

MAXIMUM AVERAGE DAILY TRAFFIC VOLUMES (ADT) FOR TWO-LANE RURAL HIGHWAYS USING PLANNING DEFAULT VALUES

TYPE OF TERRAIN	NO. PASSING ZONES	LOS	DESIGN HOUR FACTOR 0.10	0.11	0.12	0.13	0.14	0.15
Level	20%	A	2,400	2,200	2,000	1,900	1,700	1,600
		B	4,800	4,400	4,000	3,700	3,400	3,200
		C	7,900	7,200	6,600	6,100	5,700	5,300
		D	13,500	12,200	11,200	10,400	9,600	9,000
		E	22,900	20,800	19,000	17,600	13,600	15,200
Rolling	40%	A	1,100	1,000	900	900	800	700
		B	2,800	2,500	2,300	2,100	2,000	1,800
		C	5,200	4,700	4,400	4,000	3,700	3,500
		D	8,000	7,200	6,600	6,100	5,700	5,300
		E	14,800	13,500	12,300	11,400	10,600	9,900
Mountainous	60%	A	500	400	400	400	300	300
		B	1,300	1,200	1,100	1,000	900	900
		C	2,400	2,200	2,000	1,800	1,700	1,600
		D	3,700	3,400	3,100	2,900	2,700	2,500
		E	8,100	7,300	6,700	6,200	5,800	5,400

Note: All values are rounded to the nearest 100 daily vehicles.
Assumed conditions include directional split of 60/40, 14% trucks, 4% recreational vehicles and 0% buses.

Source: Highway Capacity Manual, Special Report 209, Table 8-10, page 8-14, Transportation Research Board, 1985.

APPENDIX E

Vehicle Miles Traveled and Vehicle Hours Traveled

Table I: Vehicle Miles of Travel (VMT), Vehicle Hours of Travel (VHT) in the City of Salinas: Year 2000 (The Existing Conditions)

City of Salinas: The Valid Model in Year 2000

Functional Name	Capc Class	AM-Peak Hour VMT	AM-Peak Hour VHT	AM-Peak Hour Speed	PM-Peak Hour VMT	PM-Peak Hour VHT	PM-Peak Hour Speed	Off-Peak Hour VMT	Off-Peak Hour VHT	Off-Peak Hour Speed	AADT VMT	AADT VHT	AADT Speed
Freeway	1-1	24,084	398	60.5	34,962	581	60.2	324,548	5,366	60.5	**393,184**	**6,504**	60.5
Highway	2-2	27	1	27.0	37	1	37.0	342	8	42.8	**416**	**10**	40.6
Arterial	3-3	59,944	1,326	45.2	92,400	2,049	45.1	786,855	17,367	45.3	**962,679**	**21,261**	45.3
Minor Art.	4-4	12,588	287	43.9	19,667	501	39.3	167,843	4,287	39.2	**205,100**	**5,202**	39.4
Collector	5-5	4,749	139	34.2	7,463	245	30.5	64,029	2,436	26.3	**78,147**	**2,891**	27.0
Ramp	7-7	1,477	45	32.8	2,226	67	33.2	19,460	635	30.6	**23,742**	**766**	31.0
Centroid	63-63	8,585	313	27.4	14,094	567	24.9	122,217	5,096	24.0	**148,518**	**6,125**	24.2
		102,869	**2,196**		**156,755**	**3,444**		**1,363,077**	**30,099**		**1,663,269** **1,622,701**	**36,632**	45.40

Note: VMT & VHT have been adjusted for intrazonal trips

TOTAL VMT&VHT&SPEED: **1,663,269** **36,632** **45.4**

Table II: Vehicle Miles of Travel (VMT), Vehicle Hours of Travel (VHT) in the City of Salinas: Year 2020 (The NO-Build Condition)

City of Salinas: The No Build Network and the City/County Land Use at "BuildOut"

Functional Name	Capc Class	AM-Peak Hour VMT	AM-Peak Hour VHT	AM-Peak Hour Speed	PM-Peak Hour VMT	PM-Peak Hour VHT	PM-Peak Hour Speed	Off-Peak Hour VMT	Off-Peak Hour VHT	Off-Peak Hour Speed	AADT VMT	AADT VHT	AADT Speed
Freeway	1-1	39,905	661	60.4	51,262	865	59.3	493,678	8,204	60.2	**599,466**	**9,973**	60.1
Highway	2-2	473	7	67.6	660	10	66.0	5,536	88	62.9	**6,836**	**108**	63.5
Arterial	3-3	89,533	1,965	45.6	136,353	3,072	44.4	1,153,698	25,522	45.2	**1,414,074**	**31,323**	45.1
Minor Art.	4-4	20,079	466	43.1	32,842	811	40.5	269,436	6,701	40.2	**330,416**	**8,177**	40.4
Collector	5-5	6,626	211	31.4	10,902	387	28.2	92,108	3,448	26.7	**112,377**	**4,147**	27.1
Ramp	7-7	1,943	64	30.4	2,787	98	28.4	24,893	833	29.9	**30,364**	**1,020**	29.8
Centroid	63-63	12,839	490	26.2	20,876	849	24.6	181,330	7,503	24.2	**220,421**	**9,063**	24.3
		158,559	**3,374**		**234,806**	**5,243**		**2,039,349**	**44,796**		**2,493,532** **2,432,714**	**54,748**	45.55

Note: VMT & VHT have been adjusted for intrazonal trips

TOTAL VMT&VHT&SPEED: 2,493,532 **54,748** **45.55**

Table III: Vehicle Miles of Travel (VMT), Vehicle Hours of Travel (VHT) in the City of Salinas: Year 2020 (The The Eastern Expressway Option)

City of Salinas: City Preferred Network with Prunedale Bypass, East Expressway & City/County Land Use at "BuildOut"

Functional Name	Capc Class	AM-Peak Hour VMT	AM-Peak Hour VHT	AM-Peak Hour Speed	PM-Peak Hour VMT	PM-Peak Hour VHT	PM-Peak Hour Speed	Off-Peak Hour VMT	Off-Peak Hour VHT	Off-Peak Hour Speed	AADT VMT	AADT VHT	AADT Speed
Freeway	1-1	23,266	385	60.4	32,747	542	60.4	282,221	4,657	60.6	**346,690**	**5,724**	60.6
Highway	2-2	22,749	377	60.3	34,848	576	60.5	301,215	4,939	61.0	**367,782**	**6,039**	60.9
Arterial	3-3	79,840	1,752	45.6	121,987	2,708	45.0	1,041,377	23,039	45.2	**1,274,284**	**28,186**	45.2
Minor Art.	4-4	16,538	398	41.6	26,114	664	39.3	222,342	5,813	38.2	**271,619**	**7,047**	38.5
Collector	5-5	7,151	216	33.1	11,222	402	27.9	96,952	3,620	26.8	**118,208**	**4,344**	27.2
Ramp	7-7	1,536	45	34.1	2,300	68	33.8	20,485	666	30.8	**24,929**	**798**	31.2
Centroid	63-63	11,659	435	26.8	19,150	764	25.1	166,215	6,856	24.2	**201,950**	**8,256**	24.5
		151,080	**3,173**		**229,218**	**4,960**		**1,964,592**	**42,734**		**2,403,512**	**52,139**	46.10
											2,344,890		

Note: VMT & VHT have been adjusted for intrazonal trips

TOTAL VMT&VHT&SPEED: **2,403,512** **52,139** 46.10

Table IV: Vehicle Miles of Travel (VMT), Vehicle Hours of Travel (VHT) in the City of Salinas: Year 2020 (The $210 Million Option)

City of Salinas: City Preferred Network, Safety Improvements on 101 & City/County Land Use at "BuildOut"

Functional Name	Capc Class	AM-Peak Hour VMT	AM-Peak Hour VHT	AM-Peak Hour Speed	PM-Peak Hour VMT	PM-Peak Hour VHT	PM-Peak Hour Speed	Off-Peak Hour VMT	Off-Peak Hour VHT	Off-Peak Hour Speed	AADT VMT	AADT VHT	AADT Speed
Freeway	1-1	31,313	516	60.7	44,978	741	60.7	410,742	6,769	60.7	**499,209**	**8,227**	60.7
Highway	2-2	14,217	236	60.2	21,169	355	59.6	171,058	2,852	60.0	**211,605**	**3,529**	60.0
Arterial	3-3	83,560	1,826	45.8	128,173	2,814	45.5	1,089,387	23,936	45.5	**1,333,648**	**29,290**	45.5
Minor Art.	4-4	16,515	402	41.1	26,113	667	39.1	222,395	5,798	38.4	**271,649**	**7,039**	38.6
Collector	5-5	6,973	212	32.9	11,008	397	27.7	94,831	3,538	26.8	**115,632**	**4,251**	27.2
Ramp	7-7	1,760	54	32.6	2,610	80	32.6	22,959	753	30.5	**28,012**	**909**	30.8
Centroid	63-63	12,017	449	26.8	19,639	784	25.0	170,419	7,012	24.3	**207,127**	**8,451**	24.5
		154,338	**3,246**		**234,051**	**5,054**		**2,011,372**	**43,646**		**2,459,755**	**53,245**	46.20
											2,399,761		

Note: VMT & VHT have been adjusted for intrazonal trips

Table V: Vehicle Miles of Travel (VMT), Vehicle Hours of Travel (VHT) in the City of Salinas: Year 2020 (The Old Stage Upgrade option)

City of Salinas: City Preferred Network, the Prunedale Bypass, Operational Improvements on Crazy Horse & City/County Land Use at "BuildOut"

Functional	Capc	AM-Peak Hour			PM-Peak Hour			Off-Peak Hour			AADT		
Name	Class	VMT	VHT	Speed	VMT	VHT	Speed	VMT	VHT	Speed	VMT	VHT	Speed
Freeway	1-1	32,233	535	60.2	48,020	795	60.4	430,456	7,097	60.7	**523,477**	**8,638**	60.6
Highway	2-2	14,854	252	58.9	20,895	351	59.5	170,770	2,868	59.5	**211,682**	**3,558**	59.5
Arterial	3-3	84,059	1,831	45.9	128,161	2,818	45.5	1,091,593	23,937	45.6	**1,336,408**	**29,301**	45.6
Minor Art.	4-4	16,456	402	40.9	26,046	666	39.1	221,974	5,804	38.2	**271,088**	**7,044**	38.5
Collector	5-5	7,137	214	33.4	11,216	400	28.0	96,831	3,617	26.8	**118,064**	**4,337**	27.2
Ramp	7-7	1,764	55	32.1	2,738	90	30.4	23,630	801	29.5	**28,835**	**970**	29.7
Centroid	63-63	11,890	445	26.7	19,470	778	25.0	168,935	6,960	24.3	**205,302**	**8,388**	24.5
		156,503	**3,289**		**237,076**	**5,120**		**2,035,254**	**44,124**		**2,489,554**	**53,846**	46.23
											2,428,833		

Note: VMT & VHT have been adjusted for intrazonal trips

APPENDIX F

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8. "Alvin Drive/US 101 Northbound Temporary Slip Ramps, Final Report", prepared by DKS Associates, August, 1993.

9. "License Plate Survey", Transportation Planning Partners in the Monterey Bay Region, 1994.

10. "Major Investment Study for the Highway 1 Corridor Between Watsonville and Santa Cruz", 1997.

11. "Bardin Elementary School Safety Enhancements," City of Salinas, March 18, 1997.

12. "Westridge Center Traffic Analysis Draft Report, Salinas, California", April 5, 2000.

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15. "Census Journey to Work," U.S. Census, 2000.

16. U.S. Census Data, U.S. Census, 1990 and 2000.

17. State of California Employment Data, Employment Development Department.

18. "Draft Route 101 Interchange Study Vicinity of Salinas", prepared by the Transportation Agency of Monterey County in cooperation with the Federal Highway Administration, California Department of Transportation, and the Association of Monterey Bay Area Governments.

19. Population Projections for 2005, Association of Monterey Bay Area Governments.

Appendix C:
Noise Analysis

Table 5. Measured Hourly Noise Levels and Community Noise Equivalent Level, CNEL

Project: Salinas Noise Element
Location: Rear yard of 219 Arguello Drive
Date: October 23/24, 2001

Measurement Period	Hourly Noise Level, dB(A)		Measurement Period	Hourly Noise Level, dB(A)
12:00 am - 1:00 am	48.4		12:00 pm - 1:00 pm	59.3
1:00 am - 2:00 am	50.1		1:00 pm - 2:00 pm	60.0
2:00 am - 3:00 am	45.4		2:00 pm - 3:00 pm	60.6
3:00 am - 4:00 am	47.1		3:00 pm- 4:00 pm	61.2
4:00 am - 5:00 am	48.6		4:00 pm - 5:00 pm	60.4
5:00 am - 6:00 am	53.7		5:00 pm - 6:00 pm	60.4
6:00 am - 7:00 am	58.5		6:00 pm - 7:00 pm	59.9
7:00 am - 8:00 am	61.0		7:00 pm - 8:00 pm	57.1
8:00 am - 9:00 am	60.5		8:00 pm - 9:00 pm	56.7
9:00 am - 10:00 am	58.3		9:00 pm - 10:00 pm	55.2
10:00 am -11:00 am	60.1		10:00 pm - 11:00 pm	52.5
11:00 am - 12:00 pm	60.1		11:00 pm - 12:00 am	51.3
			CNEL:	***61.3***

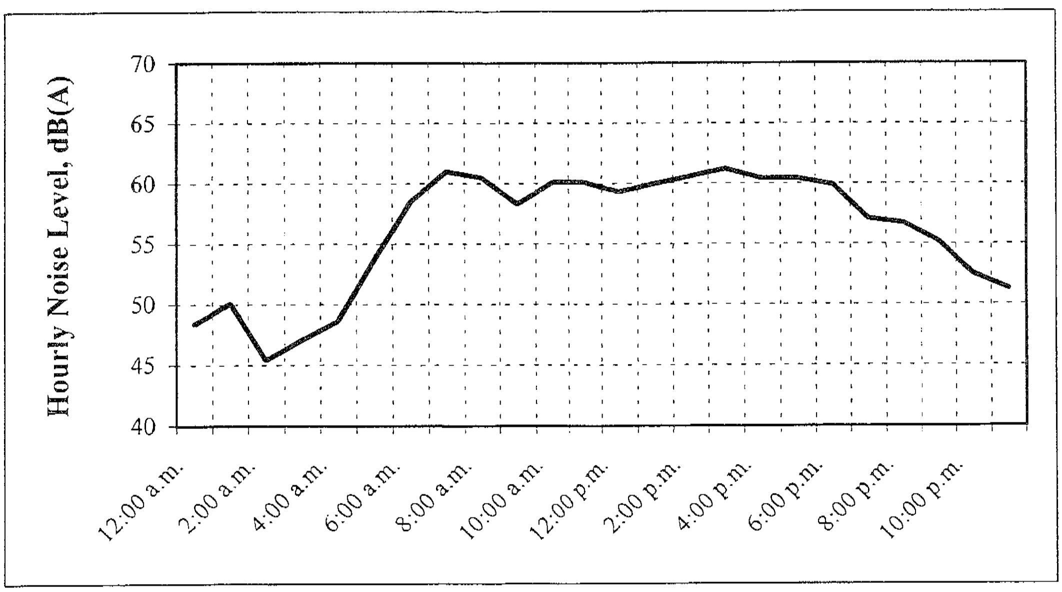


Table 6. Noise Survey

Project: Salinas Noise Element

Position: Behind Microtel Inn & Suites

Date: October 23, 2001

Time From: Noted

Noise Source: Traffic on the 101 freeway

Distance: 81' from the property line
18' from the parking lot pad

SLM Height: 5'

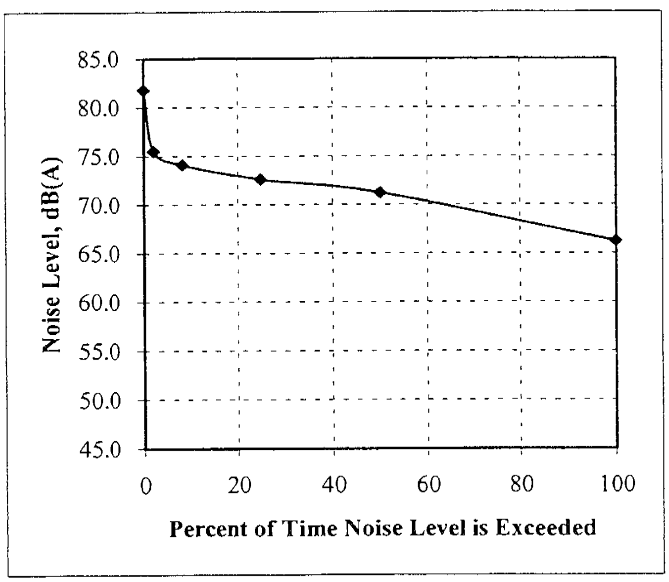
LD 712 S/N: 0556

LD CAL200
Calibrator S/N: 2916

Operator: Patrick Keenan

	Measurement Period		
	3:22 PM to 3:42 PM	to	to
N*	Ln	Ln	Ln
2	75.5		
8	74.1		
25	72.6		
50	71.2		
90	-		
99	-		
Leq	71.8		
Lmax	81.8		
Lmin	66.2		

Source: Noted



* Leq is the average sound level during the measurement period.
* Ln is the sound level exceeded n% of the time during the measurement period.
* Lmax and Lmin are the maximum and minimum sound levels during the measurement period.

Table A. Summary of Noise Measurements Obtained in the City of Salinas

Position No.	Location	Date	Time	Measured A-Weighted Noise Levels, dB(A)*							CNEL, dB
				L2	L8	L25	L50	Leq	Lmax	Lmin	
1	Northeast corner of East Bolivar Road and North Main Street	10/23/01	10:45 AM - 11:05 AM	71.6	69.0	66.1	62.9	65.1	76.1	55.5	-
2	Southwest corner of Alvin Drive and Cherokee Drive	10/23/01	11:22 AM - 11:42 AM	68.6	62.7	58.5	55.4	60.1	77.0	49.9	-
3	At the offset of 924 Larkin Street	10/23/01	12:30 PM - 12:50 PM	68.1	62.6	59.6	57.6	59.8	71.6	50.2	-
4	East corner of Natividad Road and Rainer Drive	10/23/01	1:05 PM - 1:25 PM	71.7	70.0	66.0	62.6	65.2	74.8	50.7	-
5	Rear yard of 219 Arguello Drive	10/23-24/01	24 hr	-	-	-	-	-	-	-	61.3
6	Behind Microtel Inn & Suites	10/23/01	3:22 PM - 3:42 PM	75.5	74.1	72.6	71.2	71.8	81.8	66.2	-
7	East corner of North Sanborn Road and Acosta Street	10/23/01	1:40 PM - 2:00 PM	68.0	65.5	63.1	59.9	62.0	73.5	51.5	-
8	North side of East Alisal Street at Hartnell College	10/23/01	2:22 PM - 2:42 PM	67.6	65.5	62.6	59.6	61.3	71.0	47.2	-
9	At the offset of 325 Kings Street	10/23/01	8:38 AM - 8:58 AM	68.2	64.2	60.7	58.7	61.2	75.8	53.8	-
10	Northwest corner of Geil Street and South Main Street	10/23/01	4:38 PM - 4:58 PM	72.2	70.2	68.4	65.9	67.0	74.7	54.0	-

Table A, continued. Summary of Noise Measurements Obtained in the City of Salinas

Position No.	Location	Date	Time	Measured A-Weighted Noise Levels, dB(A)*							CNEL, dB
				L2	L8	L25	L50	Leq	Lmax	Lmin	
11	Northwest corner of Los Palos Drive and Abbott Street	10/23/01	3:57 PM - 4:17 PM	76.6	72.1	69.0	66.1	69.3	84.2	57.2	-
12	Rear yard of 493 Carol Drive	10/23-24/01	24 hr	-	-	-	-	-	-	-	63.4

* Ln refers to the noise level exceeded n% of the time during the measurement period. Lmax and Lmin are the maximum and minimum noise levels that occurred during the measurement period, respectively. Leq is the average noise level. CNEL is the community noise equivalent level.

Table E-1. Distance to Existing CNEL Contour Lines, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic 2000	CNEL @ 50' From Near Lane C/L 2000	Distance to Existing Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
ABBOTT STREET												
South of John Street	4	35	AT	1.8%	0.7%	26,413	68.0	215	90	---	---	---
North of Sanborn Road	4	35	AT	1.8%	0.7%	23,230	67.5	200	83	---	---	---
East of Harkins Road	6	45	AT	1.8%	0.7%	17,528	68.5	235	100	---	---	---
City Limits	6	45	AT	1.8%	0.7%	11,165	66.5	170	69	---	---	---
ACACIA STREET												
East of Davis Road	1	35	AT	1.8%	0.7%	5,495	63.0	90	---	---	---	---
AIRPORT BOULEVARD												
West of Moffett Street	6	45	AT	5.0%	5.0%	10,719	69.0	255	110	---	---	---
West of U.S. 101	6	45	AT	5.0%	5.0%	17,777	71.0	340	155	62	---	---
ALISAL ROAD												
South of Bardin Road	1	35	AT	5.0%	5.0%	6,786	67.0	185	75	---	---	---
EAST ALISAL STREET												
East of Front Street	4	35	AT	1.8%	0.7%	15,754	66.0	155	62	---	---	---
West of E. Market Street	1	35	AT	1.8%	0.7%	8,909	65.0	130	50	---	---	---
East of Monterey Street	4	35	AT	1.8%	0.7%	16,079	66.0	155	62	---	---	---
East of Sanborn Road	4	35	AT	1.8%	0.7%	16,775	66.5	170	69	---	---	---
West of Sanborn Road	4	35	AT	1.8%	0.7%	11,698	65.0	130	50	---	---	---
East of U.S. 101	4	35	AT	1.8%	0.7%	15,891	66.0	155	62	---	---	---
East of Work Street	4	35	AT	1.8%	0.7%	18,172	66.5	170	69	---	---	---
WEST ALISAL STREET												
West of Homestead Avenue	4	35	AT	1.8%	0.7%	10,729	64.5	120	---	---	---	---
North of Ambrose Drive	4	35	AT	1.8%	0.7%	8,179	63.5	100	---	---	---	---
EAST ALVIN DRIVE												
East of Cherokee Drive	4	35	AT	1.8%	0.7%	3,273	60.0	50	---	---	---	---
West of McKinnon Street	4	35	AT	1.8%	0.7%	10,824	64.5	120	---	---	---	---
West of Natividad Road	4	35	AT	1.8%	0.7%	12,457	65.0	130	50	---	---	---

Table E-1, cont. Distance to Existing CNEL Contour Lines, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Existing Contours From Near Lane Centerline, feet				
				Med.	Hvy	2000	2000	60dB	65dB	70dB	75dB	80dB
BARDIN ROAD												
South of Williams Road	4	35	AT	5.0%	5.0%	7,927	66.5	170	69	---	---	---
BERNAL DRIVE												
East of N. Main Street	1	35	AT	1.8%	0.7%	12,539	66.0	155	62	---	---	---
BLANCO ROAD												
West of Davis Road	3	65	AT	1.8%	0.7%	22,900	75.0	600	300	130	50	---
EAST BLANCO ROAD												
East of S. Main Street	6	45	AT	5.0%	5.0%	24,081	72.5	428	200	83	---	---
East of La Mesa Way	6	45	AT	5.0%	5.0%	25,526	73.0	460	215	90	---	---
WEST BLANCO ROAD												
West of S. Main Street	6	45	AT	5.0%	5.0%	24,223	72.5	428	200	83	---	---
East of Davis Road	6	45	AT	5.0%	5.0%	19,423	71.5	368	170	69	---	---
EAST BORONDA ROAD												
East of Independence Blvd.	3	45	AT	5.0%	5.0%	16,258	72.0	395	185	75	---	---
East of McKinnon Street	3	45	AT	5.0%	5.0%	21,116	73.0	460	215	90	---	---
West of McKinnon Street	3	45	AT	5.0%	5.0%	25,219	74.0	520	255	110	---	---
East of Natividad Road	3	45	AT	5.0%	5.0%	20,743	73.0	460	215	90	---	---
East of Constitution Blvd.	3	45	AT	1.8%	0.7%	8,461	66.5	170	69	---	---	---
East of U.S. 101	6	45	AT	5.0%	5.0%	42,957	75.0	600	300	130	50	---
West of Williams Road	3	45	AT	1.8%	0.7%	5,204	64.0	110	---	---	---	---
CENTRAL AVENUE												
East of Davis Road	1	35	AT	1.8%	0.7%	3,488	61.0	62	---	---	---	---
CONSTITUTION BOULEVARD												
South of E. Boronda Road	6	45	AT	5.0%	5.0%	4,398	65.5	143	56	---	---	---
North of Laurel Road	6	45	AT	1.8%	0.7%	16,258	68.5	235	100	---	---	---

Table E-1, cont. Distance to Existing CNEL Contour Lines, City of Salinas

		Speed				Avg. Daily	CNEL @ 50' From Near	Distance to Existing Contours From Near Lane Centerline, feet				
	Arterial	Limit,		% Trucks		Traffic	Lane C/L					
Arterial / Reach	Type*	mph	Elev.	Med.	Hvy	2000	2000	60dB	65dB	70dB	75dB	80dB
DAVIS ROAD												
South of W. Blanco Road	3	65	AT	1.8%	0.7%	4,196	67.5	200	83	---	---	---
North of W. Acacia Street	3	45	AT	5.0%	5.0%	27,119	74.0	520	255	110	---	---
North of Central Avenue	3	45	AT	5.0%	5.0%	28,912	74.5	560	278	120	---	---
N. DAVIS ROAD												
South of Boronda Road	6	45	AT	5.0%	5.0%	16,755	71.0	340	155	62	---	---
North of West Laurel Drive	6	45	AT	5.0%	5.0%	21,674	72.0	395	185	75	---	---
South of West Laurel Drive	6	45	AT	5.0%	5.0%	37,685	74.5	560	278	120	---	---
North of W. Market Street	6	45	AT	5.0%	5.0%	30,215	73.5	490	235	100	---	---
South of Post Drive	6	45	AT	5.0%	5.0%	34,174	74.0	520	255	110	---	---
DEL MONTE AVENUE												
West of N. Sanborn Road	1	25	AT	1.8%	0.7%	6,947	61.0	62	---	---	---	---
West of Williams Road	1	25	AT	1.8%	0.7%	7,127	61.0	62	---	---	---	---
EL DORADO DRIVE												
South of E. Boronda Road	1	35	AT	1.8%	0.7%	3,465	61.0	62	---	---	---	---
ESPINOSA ROAD												
West of U.S. 101	3	65	AT	1.8%	0.7%	9,688	71.0	340	155	62	---	---
FREEDOM PARKWAY												
East of Constitution Blvd.	4	35	AT	5.0%	5.0%	6,708	66.0	155	62	---	---	---
West of Williams Road	4	35	AT	5.0%	5.0%	5,361	65.0	130	50	---	---	---
FRONT STREET												
South of E. Alisal Street	4	35	AT	1.8%	0.7%	19,205	67.0	185	75	---	---	---
HARKINS ROAD												
South of Dayton Street	1	35	AT	1.8%	0.7%	6,180	63.5	100	---	---	---	---
HARRIS ROAD												
East of Abbott Street	1	35	AT	1.8%	0.7%	8,779	64.5	120	---	---	---	---

Table E-1, cont. Distance to Existing CNEL Contour Lines, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic 2000	CNEL @ 50' From Near Lane C/L 2000	Distance to Existing Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
HARRISON ROAD												
North of Russell Road	6	65	AT	1.8%	0.7%	5,495	68.0	215	90	---	---	---
HEBERT ROAD												
East of San Juan Grade Road	3	65	AT	1.8%	0.7%	4,686	68.0	215	90	---	---	---
INDEPENDENCE BOULEVARD												
South of E. Boronda Road	4	35	AT	1.8%	0.7%	7,106	63.0	90	---	---	---	---
JOHN STREET												
West of Sanborn Road	4	35	AT	1.8%	0.7%	9,760	64.0	110	---	---	---	---
East of S. Main Street	4	35	AT	3.8%	2.4%	10,465	66.0	155	62	---	---	---
West of Abbott Street	4	35	AT	3.8%	2.4%	11,204	66.5	170	69	---	---	---
West of U.S. 101	4	35	AT	3.8%	2.4%	24,147	69.5	278	120	---	---	---
LAS CASITAS DRIVE												
South of Constitution Blvd.	1	35	AT	1.8%	0.7%	6,290	63.5	100	---	---	---	---
EAST LAUREL DRIVE												
East of Constitution Blvd.	6	45	AT	5.0%	5.0%	21,787	72.0	395	185	75	---	---
West of Constitution Blvd.	6	45	AT	5.0%	5.0%	31,325	73.5	490	235	100	---	---
West of Loma Drive	4	35	AT	5.0%	5.0%	19,849	70.0	300	130	50	---	---
WEST LAUREL DRIVE												
East of U.S. 101	4	35	AT	5.0%	5.0%	25,513	71.5	368	170	69	---	---
West of U.S. 101	4	35	AT	5.0%	5.0%	43,399	73.5	490	235	100	---	---

Table E-1, cont. Distance to Existing CNEL Contour Lines, City of Salinas

				% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Existing Contours From Near Lane Centerline, feet				
Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	Med.	Hvy	2000	2000	60dB	65dB	70dB	75dB	80dB
NORTH MAIN STREET												
South of Alvin Drive	4	35	AT	1.8%	0.7%	26,838	68.0	215	90	---	---	---
North of Laurel Drive	6	45	AT	1.8%	0.7%	30,591	71.0	340	155	62	---	---
South of Laurel Drive	4	35	AT	1.8%	0.7%	27,324	68.5	235	100	---	---	---
North of Market Street	4	35	AT	6.2%	2.6%	34,097	71.5	368	170	69	---	---
North of U.S. 101	4	35	AT	1.8%	0.7%	32,590	69.0	255	110	---	---	---
South of E. Boronda Road	6	45	AT	1.8%	0.7%	16,272	68.5	235	100	---	---	---
South of San Juan Grade Road	6	45	AT	1.8%	0.7%	20,810	69.5	278	120	---	---	---
SOUTH MAIN STREET												
North of Blanco Road	4	35	AT	3.8%	2.4%	24,436	69.5	278	120	---	---	---
South of Blanco Road	4	35	AT	3.8%	2.4%	33212	71.0	340	155	62	---	---
South of John Street	4	35	AT	3.8%	2.4%	25,659	70.0	300	130	50	---	---
North of Romie Lane	4	35	AT	3.8%	2.4%	28,113	70.0	300	130	50	---	---
EAST MARKET STREET												
East of Hebbron Avenue	4	35	AT	1.8%	0.7%	18,615	66.5	170	69	---	---	---
West of Monterey Street	4	35	AT	1.8%	0.7%	20,384	67.0	185	75	---	---	---
East of Monterey Street	4	35	AT	1.8%	0.7%	23,211	67.5	200	83	---	---	---
East of Sherwood Drive	4	35	AT	1.8%	0.7%	17,572	66.5	170	69	---	---	---
East of N. Sanborn Road	4	25	AT	1.8%	0.7%	10,890	61.5	69	---	---	---	---
East of U.S. 101	4	35	AT	1.8%	0.7%	23,208	67.5	200	83	---	---	---
WEST MARKET STREET												
East of Davis Road	4	35	AT	4.4%	7.7%	18,419	71.0	340	155	62	---	---
West of Lincoln Avenue	4	35	AT	4.4%	7.7%	21,384	71.5	368	170	69	---	---
MCKINNON STREET												
South of E. Boronda Road	1	35	AT	1.8%	0.7%	7,182	64.0	110	---	---	---	---
MONTEREY STREET												
South of E. Alisal Street	4	35	AT	1.8%	0.7%	11,561	64.5	120	---	---	---	---
North of E. Gabilan Street	4	35	AT	1.8%	0.7%	31,259	69.0	255	110	---	---	---

Table E-1, cont. Distance to Existing CNEL Contour Lines, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic 2000	CNEL @ 50' From Near Lane C/L 2000	Distance to Existing Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
NATIVIDAD ROAD												
South of E. Alvin Drive	6	45	AT	1.8%	0.7%	27,742	70.5	320	143	56	---	---
North of E. Boronda Road	3	45	AT	1.8%	0.7%	7,246	65.5	143	56	---	---	---
South of E. Boronda Road	6	45	AT	1.8%	0.7%	9,881	66.0	155	62	---	---	---
North of E. Laurel Drive	6	45	AT	1.8%	0.7%	28,994	71.0	340	155	62	---	---
South of E. Laurel Drive	6	45	AT	1.8%	0.7%	29,328	71.0	340	155	62	---	---
OLD STAGE ROAD												
South of Natividad Road	3	65	AT	1.8%	0.7%	1,155	62.0	75	---	---	---	---
POST DRIVE												
West of Davis Road	4	35	AT	1.8%	0.7%	10,324	64.5	120	---	---	---	---
ROMIE LANE												
East of Los Palos Drive	4	35	AT	1.8%	0.7%	8,564	63.5	100	---	---	---	---
ROSSI STREET												
East of Davis Road	2	40	AT	1.8%	0.7%	9,439	66.0	155	62	---	---	---
RUSSELL ROAD												
East of Van Buren Avenue	1	35	AT	1.8%	0.7%	7,736	64.0	110	---	---	---	---
East of U.S. 101	1	35	AT	1.8%	0.7%	4,288	62.0	75	---	---	---	---
SALINAS STREET												
South of W. Alisal Street	4	35	AT	1.8%	0.7%	11,036	64.5	120	---	---	---	---
NORTH SANBORN ROAD												
West of Freedom Parkway	4	25	AT	1.8%	0.7%	4,473	58.0	---	---	---	---	---
South of Del Monte Avenue	4	35	AT	1.8%	0.7%	10,857	64.5	120	---	---	---	---
South of E. Laurel Drive	4	35	AT	5.0%	5.0%	21,180	70.5	320	143	56	---	---
SOUTH SANBORN ROAD												
North of U.S. 101	4	35	AT	5.0%	5.0%	26,000	71.5	368	170	69	---	---
South of U.S. 101	6	45	AT	5.0%	5.0%	24,127	72.5	428	200	83	---	---

Table E-1, cont. Distance to Existing CNEL Contour Lines, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic 2000	CNEL @ 50' From Near Lane C/L 2000	Distance to Existing Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
SAN JUAN GRADE ROAD												
South of E. Boronda Road	4	35	AT	1.8%	0.7%	12,199	65.0	130	50	---	---	---
North of E. Boronda Road	3	45	AT	1.8%	0.7%	14,766	69.0	255	110	---	---	---
North of Russell Road	1	35	AT	1.8%	0.7%	11,905	66.0	155	62	---	---	---
SHERWOOD DRIVE												
North of U.S. 101	6	45	AT	1.8%	0.7%	22,417	69.5	278	120	---	---	---
TOWT STREET												
West of Freedom Parkway	1	35	AT	1.8%	0.7%	1,959	59.0	---	---	---	---	---
WILLIAMS ROAD												
South of Del Monte Drive	4	35	AT	5.0%	5.0%	17,116	69.5	278	120	---	---	---
North of E. Laurel Drive	4	35	AT	1.8%	0.7%	17,171	66.5	170	69	---	---	---
South of Freedom Parkway	4	35	AT	5.0%	5.0%	10,590	67.5	200	83	---	---	---
North of Freedom Parkway	1	35	AT	1.8%	0.7%	5,609	63.0	90	---	---	---	---
North of E. Boronda Road	4	35	AT	1.8%	0.7%	2,154	58.0	---	---	---	---	---
WORK STREET												
South of John Street	4	35	AT	1.8%	0.7%	3,505	60.0	50	---	---	---	---
West of S. Sanborn Road	4	35	AT	1.8%	0.7%	3,675	60.0	50	---	---	---	---
U. S. 101												
North of Russell-Espinosa	7	65	AT	4.7%	13.7%	59,381	80.0	1,050	600	300	130	50
North of Boronda Road	7	65	AT	4.7%	13.7%	68,540	80.5	1,100	640	320	143	56
North of Laurel Drive	7	65	AT	4.7%	13.7%	56,500	79.5	1,000	560	278	120	---
South of Laurel Drive	7	65	BELOW	4.7%	13.7%	53,121	72.5	430	---	---	---	---
South of N. Main Street	7	65	BELOW	4.7%	13.7%	54,375	79.5	1,000	560	230	---	---
South of Airport Boulevard	7	65	AT	4.7%	13.7%	26,997	76.0	680	340	155	62	---

* Arterial Types: 1) 2 lanes, 35 mph or less; 2) 2 lanes, 40 mph; 3) 2 lanes, 45 mph or more; 4) 4-6 lanes, 35 mph or less; 5) 4-6 lanes, 40 mph; 6) 4-6 lanes, 45 mph or more; 7) 4-6 lane freeway, 55 mph or more; 8) 8 lane freeway, 55 mph or more.

Notes:
AT', 'ABOVE', and 'BELOW' refer to the elevation of the surrounding area relative to the arterial.

Table E-2. Distance to Existing and Future Rail Line Noise Contours, City of Salinas

	Distance From Track Center to CNEL Contour			
	75 dB	**70 dB**	**65 dB**	**60 dB**
Tracks At Grade	-	100'	250'	550'

Table F-1. Distance to CNEL Contour Lines for Buildout with 210 Improvements, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic Fut.	CNEL @ 50' From Near Lane C/L Fut.	Distance to Future Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
ABBOTT STREET												
South of John Street	4	35	AT	1.8%	0.7%	34,662	69.5	278	120	---	---	---
North of Sanborn Road	4	35	AT	1.8%	0.7%	30,810	69.0	255	110	---	---	---
East of Harkins Road	6	45	AT	1.8%	0.7%	22,294	69.5	278	120	---	---	---
City Limits	6	45	AT	1.8%	0.7%	2,857	61.5	69	---	---	---	---
ACACIA STREET												
East of Davis Road	1	35	AT	1.8%	0.7%	8,495	64.5	120	---	---	---	---
AIRPORT BOULEVARD												
West of Moffett Street	6	45	AT	5.0%	5.0%	13,916	70.0	300	130	50	---	---
West of U.S. 101	6	45	AT	5.0%	5.0%	16,004	70.5	320	143	56	---	---
ALISAL ROAD												
South of Bardin Road	1	35	AT	5.0%	5.0%	12,115	69.5	278	120	---	---	---
EAST ALISAL STREET												
East of Front Street	4	35	AT	1.8%	0.7%	19,376	67.0	185	75	---	---	---
West of E. Market Street	1	35	AT	1.8%	0.7%	4,202	62.0	75	---	---	---	---
East of Monterey Street	4	35	AT	1.8%	0.7%	24,621	68.0	215	90	---	---	---
East of Sanborn Road	4	35	AT	1.8%	0.7%	19,905	67.0	185	75	---	---	---
West of Sanborn Road	4	35	AT	1.8%	0.7%	14,603	65.5	143	56	---	---	---
East of U.S. 101	4	35	AT	1.8%	0.7%	20,527	67.0	185	75	---	---	---
East of Work Street	4	35	AT	1.8%	0.7%	20,866	67.0	185	75	---	---	---
WEST ALISAL STREET												
West of Homestead Avenue	4	35	AT	1.8%	0.7%	20,251	67.0	185	75	---	---	---
North of Ambrose Drive	4	35	AT	1.8%	0.7%	15,860	66.0	155	62	---	---	---
EAST ALVIN DRIVE												
East of Cherokee Drive	4	35	AT	1.8%	0.7%	15,869	66.0	155	62	---	---	---
West of McKinnon Street	4	35	AT	1.8%	0.7%	12,491	65.0	130	50	---	---	---
West of Natividad Road	4	35	AT	1.8%	0.7%	16,616	66.0	155	62	---	---	---

Table F-1, cont. Distance to CNEL Contour Lines for Buildout with 21[illegible] Improvements, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic Fut.	CNEL @ 50' From Near Lane C/L Fut.	Distance to Future Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
BARDIN ROAD												
South of Williams Road	4	35	AT	5.0%	5.0%	13,937	69.0	255	110	---	---	---
BERNAL DRIVE												
East of N. Main Street	1	35	AT	1.8%	0.7%	17,092	67.5	200	83	---	---	---
BLANCO ROAD												
West of Davis Road	3	65	AT	1.8%	0.7%	31,869	76.5	720	368	170	69	---
EAST BLANCO ROAD												
East of S. Main Street	6	45	AT	5.0%	5.0%	29,777	73.5	490	235	100	---	---
East of La Mesa Way	6	45	AT	5.0%	5.0%	31,295	73.5	490	235	100	---	---
WEST BLANCO ROAD												
West of S. Main Street	6	45	AT	5.0%	5.0%	29,624	73.5	490	235	100	---	---
East of Davis Road	6	45	AT	5.0%	5.0%	30,803	73.5	490	235	100	---	---
EAST BORONDA ROAD												
East of Independence Blvd.	3	45	AT	5.0%	5.0%	23,612	73.5	490	235	100	---	---
East of McKinnon Street	3	45	AT	5.0%	5.0%	26,354	74.0	520	255	110	---	---
West of McKinnon Street	3	45	AT	5.0%	5.0%	35,980	75.5	640	320	143	56	---
East of Natividad Road	3	45	AT	5.0%	5.0%	25,346	74.0	520	255	110	---	---
East of Constitution Blvd.	3	45	AT	1.8%	0.7%	20,510	70.5	320	143	56	---	---
East of U.S. 101	6	45	AT	5.0%	5.0%	37,704	74.5	560	278	120	---	---
West of Williams Road	3	45	AT	1.8%	0.7%	24,288	71.0	340	155	62	---	---
CENTRAL AVENUE												
East of Davis Road	1	35	AT	1.8%	0.7%	1,973	59.0	---	---	---	---	---
CONSTITUTION BOULEVARD												
South of E. Boronda Road	6	45	AT	5.0%	5.0%	11,148	69.0	255	110	---	---	---
North of Laurel Road	6	45	AT	1.8%	0.7%	23,612	70.0	300	130	50	---	---

Table F-1, cont. Distance to CNEL Contour Lines for Buildout with [illegible] Improvements, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic Fut.	CNEL @ 50' From Near Lane C/L Fut.	Distance to Future Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
DAVIS ROAD												
South of W. Blanco Road	3	65	AT	1.8%	0.7%	8,442	70.5	320	143	56	---	---
North of W. Acacia Street	3	45	AT	5.0%	5.0%	1,664	62.0	75	---	---	---	---
North of Central Avenue	3	45	AT	5.0%	5.0%	1,932	62.5	83	---	---	---	---
N. DAVIS ROAD												
South of Boronda Road	6	45	AT	5.0%	5.0%	3,294	64.5	120	---	---	---	---
North of West Laurel Drive	6	45	AT	5.0%	5.0%	19,040	71.5	368	170	69	---	---
South of West Laurel Drive	6	45	AT	5.0%	5.0%	17,795	71.0	340	155	62	---	---
North of W. Market Street	6	45	AT	5.0%	5.0%	7,916	68.0	215	90	---	---	---
South of Post Drive	6	45	AT	5.0%	5.0%	16,624	71.0	340	155	62	---	---
DEL MONTE AVENUE												
West of N. Sanborn Road	1	25	AT	1.8%	0.7%	7,869	61.5	69	---	---	---	---
West of Williams Road	1	25	AT	1.8%	0.7%	9,811	62.0	75	---	---	---	---
EL DORADO DRIVE												
South of E. Boronda Road	1	35	AT	1.8%	0.7%	6,279	63.5	100	---	---	---	---
ESPINOSA ROAD												
West of U.S. 101	3	65	AT	1.8%	0.7%	9,946	71.0	340	155	62	---	---
FREEDOM PARKWAY												
East of Constitution Blvd.	4	35	AT	5.0%	5.0%	11,918	68.0	215	90	---	---	---
West of Williams Road	4	35	AT	5.0%	5.0%	7,176	66.0	155	62	---	---	---
FRONT STREET												
South of E. Alisal Street	4	35	AT	1.8%	0.7%	28,067	68.5	235	100	---	---	---
HARKINS ROAD												
South of Dayton Street	1	35	AT	1.8%	0.7%	10,295	65.5	143	56	---	---	---
HARRIS ROAD												
East of Abbott Street	1	35	AT	1.8%	0.7%	9,480	65.0	130	50	---	---	---

Table F-1, cont. Distance to CNEL Contour Lines for Buildout with 210 Improvements, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic Fut.	CNEL @ 50' From Near Lane C/L Fut.	Distance to Future Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
HARRISON ROAD												
North of Russell Road	6	65	AT	1.8%	0.7%	8,495	69.5	278	120	---	---	---
HEBERT ROAD												
East of San Juan Grade Road	3	65	AT	1.8%	0.7%	20,866	74.5	560	278	120	---	---
INDEPENDENCE BOULEVARD												
South of E. Boronda Road	4	35	AT	1.8%	0.7%	9,344	64.0	110	---	---	---	---
JOHN STREET												
West of Sanborn Road	4	35	AT	1.8%	0.7%	11,107	64.5	120	---	---	---	---
East of S. Main Street	4	35	AT	3.8%	2.4%	10,357	66.0	155	62	---	---	---
West of Abbott Street	4	35	AT	3.8%	2.4%	12,282	66.5	170	69	---	---	---
West of U.S. 101	4	35	AT	3.8%	2.4%	28,007	70.0	300	130	50	---	---
LAS CASITAS DRIVE												
South of Constitution Blvd.	1	35	AT	1.8%	0.7%	7,535	64.0	110	---	---	---	---
EAST LAUREL DRIVE												
East of Constitution Blvd.	6	45	AT	5.0%	5.0%	28,601	73.5	490	235	100	---	---
West of Constitution Blvd.	6	45	AT	5.0%	5.0%	42,683	75.0	600	300	130	50	---
West of Loma Drive	4	35	AT	5.0%	5.0%	20,794	70.5	320	143	56	---	---
WEST LAUREL DRIVE												
East of U.S. 101	4	35	AT	5.0%	5.0%	18,144	70.0	300	130	50	---	---
West of U.S. 101	4	35	AT	5.0%	5.0%	33,293	72.5	428	200	83	---	---

Table F-1, cont. Distance to CNEL Contour Lines for Buildout with 210 Improvements, City of Salinas

		Speed				Avg.	CNEL @ 50'	Distance to Future Contours				
	Arterial	Limit,		% Trucks		Daily Traffic	From Near Lane C/L	From Near Lane Centerline, feet				
Arterial / Reach	Type*	mph	Elev.	Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
NORTH MAIN STREET												
South of Alvin Drive	4	35	AT	1.8%	0.7%	31,760	69.0	255	110	---	---	---
North of Laurel Drive	6	45	AT	1.8%	0.7%	34,165	71.5	368	170	69	---	---
South of Laurel Drive	4	35	AT	1.8%	0.7%	34,785	69.5	278	120	---	---	---
North of Market Street	4	35	AT	6.2%	2.6%	40,453	72.5	428	200	83	---	---
North of U.S. 101	4	35	AT	1.8%	0.7%	43,610	70.5	320	143	56	---	---
South of E. Boronda Road	6	45	AT	1.8%	0.7%	14,968	68.0	215	90	---	---	---
South of San Juan Grade Road	6	45	AT	1.8%	0.7%	35,537	71.5	368	170	69	---	---
SOUTH MAIN STREET												
North of Blanco Road	4	35	AT	3.8%	2.4%	28,588	70.0	300	130	50	---	---
South of Blanco Road	4	35	AT	3.8%	2.4%	37222	71.5	368	170	69	---	---
South of John Street	4	35	AT	3.8%	2.4%	30,894	70.5	320	143	56	---	---
North of Romie Lane	4	35	AT	3.8%	2.4%	33,695	71.0	340	155	62	---	---
EAST MARKET STREET												
East of Hebbron Avenue	4	35	AT	1.8%	0.7%	20,952	67.0	185	75	---	---	---
West of Monterey Street	4	35	AT	1.8%	0.7%	21,618	67.5	200	83	---	---	---
East of Monterey Street	4	35	AT	1.8%	0.7%	20,975	67.0	185	75	---	---	---
East of Sherwood Drive	4	35	AT	1.8%	0.7%	21,418	67.5	200	83	---	---	---
East of N. Sanborn Road	4	25	AT	1.8%	0.7%	12,516	62.0	75	---	---	---	---
East of U.S. 101	4	35	AT	1.8%	0.7%	25,933	68.0	215	90	---	---	---
WEST MARKET STREET												
East of Davis Road	4	35	AT	4.4%	7.7%	19,953	71.5	368	170	69	---	---
West of Lincoln Avenue	4	35	AT	4.4%	7.7%	25,100	72.0	395	185	75	---	---
MCKINNON STREET												
South of E. Boronda Road	1	35	AT	1.8%	0.7%	15,130	67.0	185	75	---	---	---
MONTEREY STREET												
South of E. Alisal Street	4	35	AT	1.8%	0.7%	14,244	65.5	143	56	---	---	---
North of E. Gabilan Street	4	35	AT	1.8%	0.7%	45,614	70.5	320	143	56	---	---

Table F-1, cont. Distance to CNEL Contour Lines for Buildout with 210 Improvements, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic Fut.	CNEL @ 50' From Near Lane C/L Fut.	Distance to Future Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
NATIVIDAD ROAD												
South of E. Alvin Drive	6	45	AT	1.8%	0.7%	38,024	72.0	395	185	75	---	---
North of E. Boronda Road	3	45	AT	1.8%	0.7%	14,986	69.0	255	110	---	---	---
South of E. Boronda Road	6	45	AT	1.8%	0.7%	20,783	69.5	278	120	---	---	---
North of E. Laurel Drive	6	45	AT	1.8%	0.7%	37,881	72.0	395	185	75	---	---
South of E. Laurel Drive	6	45	AT	1.8%	0.7%	40,436	72.5	428	200	83	---	---
OLD STAGE ROAD												
South of Natividad Road	3	65	AT	1.8%	0.7%	20,866	74.5	560	278	120	---	---
POST DRIVE												
West of Davis Road	4	35	AT	1.8%	0.7%	3,413	60.0	50	---	---	---	---
ROMIE LANE												
East of Los Palos Drive	4	35	AT	1.8%	0.7%	9,867	64.0	110	---	---	---	---
ROSSI STREET												
East of Davis Road	2	40	AT	1.8%	0.7%	10,179	66.5	170	69	---	---	---
RUSSELL ROAD												
East of Van Buren Avenue	1	35	AT	1.8%	0.7%	46,403	72.0	395	185	75	---	---
East of U.S. 101	1	35	AT	1.8%	0.7%	10,242	65.5	143	56	---	---	---
SALINAS STREET												
South of W. Alisal Street	4	35	AT	1.8%	0.7%	14,608	65.5	143	56	---	---	---
NORTH SANBORN ROAD												
West of Freedom Parkway	4	25	AT	1.8%	0.7%	7,224	60.0	50	---	---	---	---
South of Del Monte Avenue	4	35	AT	1.8%	0.7%	12,033	65.0	130	50	---	---	---
South of E. Laurel Drive	4	35	AT	5.0%	5.0%	23,124	71.0	340	155	62	---	---
SOUTH SANBORN ROAD												
North of U.S. 101	4	35	AT	5.0%	5.0%	28,978	72.0	395	185	75	---	---
South of U.S. 101	6	45	AT	5.0%	5.0%	28,656	73.5	490	235	100	---	---

Table F-1, cont. Distance to CNEL Contour Lines for Buildout with 210 Improvements, City of Salinas

		Speed		% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Future Contours From Near Lane Centerline, feet				
Arterial / Reach	Arterial Type*	Limit, mph	Elev.	Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
SAN JUAN GRADE ROAD												
South of E. Boronda Road	4	35	AT	1.8%	0.7%	15,251	66.0	155	62	---	---	---
North of E. Boronda Road	3	45	AT	1.8%	0.7%	14,063	68.5	235	100	---	---	---
North of Russell Road	1	35	AT	1.8%	0.7%	17,755	67.5	200	83	---	---	---
SHERWOOD DRIVE												
North of U.S. 101	6	45	AT	1.8%	0.7%	27,105	70.5	320	143	56	---	---
TOWT STREET												
West of Freedom Parkway	1	35	AT	1.8%	0.7%	2,051	59.0	---	---	---	---	---
WILLIAMS ROAD												
South of Del Monte Drive	4	35	AT	5.0%	5.0%	34,426	72.5	428	200	83	---	---
North of E. Laurel Drive	4	35	AT	1.8%	0.7%	34,366	69.5	278	120	---	---	---
South of Freedom Parkway	4	35	AT	5.0%	5.0%	23,786	71.0	340	155	62	---	---
North of Freedom Parkway	1	35	AT	1.8%	0.7%	19,943	68.0	215	90	---	---	---
North of E. Boronda Road	4	35	AT	1.8%	0.7%	5,905	62.0	75	---	---	---	---
WORK STREET												
South of John Street	4	35	AT	1.8%	0.7%	6,744	62.5	83	---	---	---	---
West of S. Sanborn Road	4	35	AT	1.8%	0.7%	6,771	62.5	83	---	---	---	---
U. S. 101												
North of Russell-Espinosa	7	65	AT	4.7%	13.7%	75,703	81.0	1,150	680	340	155	62
North of Boronda Road	7	65	AT	4.7%	13.7%	74,342	81.0	1,150	680	340	155	62
North of Laurel Drive	7	65	AT	4.7%	13.7%	65,668	80.5	1,100	640	320	143	56
South of Laurel Drive	7	65	BELOW	4.7%	13.7%	68,843	73.5	490	98	---	---	---
South of N. Main Street	7	65	BELOW	4.7%	13.7%	67,310	80.5	1,100	640	298	---	---
South of Airport Boulevard	7	65	AT	4.7%	13.7%	36,860	77.5	810	428	200	83	---

* Arterial Types: 1) 2 lanes, 35 mph or less; 2) 2 lanes, 40 mph; 3) 2 lanes, 45 mph or more; 4) 4-6 lanes, 35 mph or less; 5) 4-6 lanes, 40 mph; 6) 4-6 lanes, 45 mph or more; 7) 4-6 lane freeway, 55 mph or more; 8) 8 lane freeway, 55 mph or more.

Notes:
AT', 'ABOVE', and 'BELOW' refer to the elevation of the surrounding area relative to the arterial.

Table F-2. Distance to CNEL Contour Lines for Buildout with Prunedale Bypass and Eastside Expressway, City of Salinas

		Speed				Avg. Daily	CNEL @ 50' From Near	Distance to Buildout Contours From Near Lane Centerline, feet				
	Arterial	Limit,		% Trucks		Traffic	Lane C/L					
Arterial / Reach	Type*	mph	Elev.	Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
ABBOTT STREET												
South of John Street	4	35	AT	1.8%	0.7%	34,680	69.5	278	120	---	---	---
North of Sanborn Road	4	35	AT	1.8%	0.7%	30,804	69.0	255	110	---	---	---
East of Harkins Road	6	45	AT	1.8%	0.7%	22,275	69.5	278	120	---	---	---
City Limits	6	45	AT	1.8%	0.7%	2,836	61.0	62	---	---	---	---
ACACIA STREET												
East of Davis Road	1	35	AT	1.8%	0.7%	8,534	64.5	120	---	---	---	---
AIRPORT BOULEVARD												
West of Moffett Street	6	45	AT	5.0%	5.0%	13,724	70.0	300	130	50	---	---
West of U.S. 101	6	45	AT	5.0%	5.0%	15,696	70.5	320	143	56	---	---
ALISAL ROAD												
South of Bardin Road	1	35	AT	5.0%	5.0%	10,870	69.0	255	110	---	---	---
EAST ALISAL STREET												
East of Front Street	4	35	AT	1.8%	0.7%	19,389	67.0	185	75	---	---	---
West of E. Market Street	1	35	AT	1.8%	0.7%	4,210	62.0	75	---	---	---	---
East of Monterey Street	4	35	AT	1.8%	0.7%	24,082	68.0	215	90	---	---	---
East of Sanborn Road	4	35	AT	1.8%	0.7%	19,926	67.0	185	75	---	---	---
West of Sanborn Road	4	35	AT	1.8%	0.7%	14,617	65.5	143	56	---	---	---
East of U.S. 101	4	35	AT	1.8%	0.7%	20,499	67.0	185	75	---	---	---
East of Work Street	4	35	AT	1.8%	0.7%	20,823	67.0	185	75	---	---	---
WEST ALISAL STREET												
West of Homestead Avenue	4	35	AT	1.8%	0.7%	20,216	67.0	185	75	---	---	---
North of Ambrose Drive	4	35	AT	1.8%	0.7%	15,867	66.0	155	62	---	---	---
EAST ALVIN DRIVE												
East of Cherokee Drive	4	35	AT	1.8%	0.7%	15,797	66.0	155	62	---	---	---
West of McKinnon Street	4	35	AT	1.8%	0.7%	12,490	65.0	130	50	---	---	---
West of Natividad Road	4	35	AT	1.8%	0.7%	16,602	66.0	155	62	---	---	---

Table F-2, cont.   Distance to CNEL Contour Lines for Buildout with Prunedale Bypass and Eastside Expressway, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
				Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
BARDIN ROAD												
South of Williams Road	4	35	AT	5.0%	5.0%	12,785	68.5	235	100	---	---	---
BERNAL DRIVE												
East of N. Main Street	1	35	AT	1.8%	0.7%	17,039	67.5	200	83	---	---	---
BLANCO ROAD												
West of Davis Road	3	65	AT	1.8%	0.7%	33,229	76.5	720	368	170	69	---
EAST BLANCO ROAD												
East of S. Main Street	6	45	AT	5.0%	5.0%	30,012	73.5	490	235	100	---	---
East of La Mesa Way	6	45	AT	5.0%	5.0%	31,518	73.5	490	235	100	---	---
WEST BLANCO ROAD												
West of S. Main Street	6	45	AT	5.0%	5.0%	29,498	73.5	490	235	100	---	---
East of Davis Road	6	45	AT	5.0%	5.0%	30,689	73.5	490	235	100	---	---
EAST BORONDA ROAD												
East of Independence Blvd.	3	45	AT	5.0%	5.0%	23,086	73.5	490	235	100	---	---
East of McKinnon Street	3	45	AT	5.0%	5.0%	23,567	73.5	490	235	100	---	---
West of McKinnon Street	3	45	AT	5.0%	5.0%	33,052	75.0	600	300	130	50	---
East of Natividad Road	3	45	AT	5.0%	5.0%	22,417	73.5	490	235	100	---	---
East of Constitution Blvd.	3	45	AT	1.8%	0.7%	20,217	70.5	320	143	56	---	---
East of U.S. 101	6	45	AT	5.0%	5.0%	35,192	74.0	520	255	110	---	---
West of Williams Road	3	45	AT	1.8%	0.7%	22,084	70.5	320	143	56	---	---
CENTRAL AVENUE												
East of Davis Road	1	35	AT	1.8%	0.7%	1,968	59.0	---	---	---	---	---
CONSTITUTION BOULEVARD												
South of E. Boronda Road	6	45	AT	5.0%	5.0%	9,343	68.5	235	100	---	---	---
North of Laurel Road	6	45	AT	1.8%	0.7%	23,086	70.0	300	130	50	---	---

Table F-2, cont. Distance to CNEL Contour Lines for Buildout with ..unedale Bypass and Eastside Expressway, City of Salinas

		Speed		% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
Arterial / Reach	Arterial Type*	Limit, mph	Elev.	Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
DAVIS ROAD												
South of W. Blanco Road	3	65	AT	1.8%	0.7%	8,368	70.5	320	143	56	---	---
North of W. Acacia Street	3	45	AT	5.0%	5.0%	1,669	62.0	75	---	---	---	---
North of Central Avenue	3	45	AT	5.0%	5.0%	1,918	62.5	83	---	---	---	---
N. DAVIS ROAD												
South of Boronda Road	6	45	AT	5.0%	5.0%	3,670	64.5	120	---	---	---	---
North of West Laurel Drive	6	45	AT	5.0%	5.0%	18,951	71.5	368	170	69	---	---
South of West Laurel Drive	6	45	AT	5.0%	5.0%	17,895	71.0	340	155	62	---	---
North of W. Market Street	6	45	AT	5.0%	5.0%	8,096	68.0	215	90	---	---	---
South of Post Drive	6	45	AT	5.0%	5.0%	16,748	71.0	340	155	62	---	---
DEL MONTE AVENUE												
West of N. Sanborn Road	1	25	AT	1.8%	0.7%	7,840	61.5	69	---	---	---	---
West of Williams Road	1	25	AT	1.8%	0.7%	9,489	62.0	75	---	---	---	---
EL DORADO DRIVE												
South of E. Boronda Road	1	35	AT	1.8%	0.7%	6,208	63.5	100	---	---	---	---
ESPINOSA ROAD												
West of U.S. 101	3	65	AT	1.8%	0.7%	15,784	73.0	460	215	90	---	---
FREEDOM PARKWAY												
East of Constitution Blvd.	4	35	AT	5.0%	5.0%	12,378	68.5	235	100	---	---	---
West of Williams Road	4	35	AT	5.0%	5.0%	10,195	67.5	200	83	---	---	---
FRONT STREET												
South of E. Alisal Street	4	35	AT	1.8%	0.7%	28,047	68.5	235	100	---	---	---
HARKINS ROAD												
South of Dayton Street	1	35	AT	1.8%	0.7%	10,254	65.5	143	56	---	---	---
HARRIS ROAD												
East of Abbott Street	1	35	AT	1.8%	0.7%	14,904	67.0	185	75	---	---	---

Table F-2, cont. Distance to CNEL Contour Lines for Buildout with Prunedale Bypass and Eastside Expressway, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
				Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
HARRISON ROAD												
North of Russell Road	6	65	AT	1.8%	0.7%	8,534	69.5	278	120	---	---	---
HEBERT ROAD												
East of San Juan Grade Road	3	65	AT	1.8%	0.7%	32,219	76.5	720	368	170	69	---
INDEPENDENCE BOULEVARD												
South of E. Boronda Road	4	35	AT	1.8%	0.7%	9,320	64.0	110	---	---	---	---
JOHN STREET												
West of Sanborn Road	4	35	AT	1.8%	0.7%	11,123	64.5	120	---	---	---	---
East of S. Main Street	4	35	AT	3.8%	2.4%	10,274	66.0	155	62	---	---	---
West of Abbott Street	4	35	AT	3.8%	2.4%	12,249	66.5	170	69	---	---	---
West of U.S. 101	4	35	AT	3.8%	2.4%	28,095	70.0	300	130	50	---	---
LAS CASITAS DRIVE												
South of Constitution Blvd.	1	35	AT	1.8%	0.7%	7,555	64.0	110	---	---	---	---
EAST LAUREL DRIVE												
East of Constitution Blvd.	6	45	AT	5.0%	5.0%	28,344	73.0	460	215	90	---	---
West of Constitution Blvd.	6	45	AT	5.0%	5.0%	42,385	75.0	600	300	130	50	---
West of Loma Drive	4	35	AT	5.0%	5.0%	20,672	70.5	320	143	56	---	---
WEST LAUREL DRIVE												
East of U.S. 101	4	35	AT	5.0%	5.0%	18,271	70.0	300	130	50	---	---
West of U.S. 101	4	35	AT	5.0%	5.0%	33,349	72.5	428	200	83	---	---

Table F-2, cont. Distance to CNEL Contour Lines for Buildout with Prunedale Bypass and Eastside Expressway, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
				Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
NORTH MAIN STREET												
South of Alvin Drive	4	35	AT	1.8%	0.7%	31,436	69.0	255	110	---	---	---
North of Laurel Drive	6	45	AT	1.8%	0.7%	33,872	71.5	368	170	69	---	---
South of Laurel Drive	4	35	AT	1.8%	0.7%	34,702	69.5	278	120	---	---	---
North of Market Street	4	35	AT	6.2%	2.6%	40,964	72.5	428	200	83	---	---
North of U.S. 101	4	35	AT	1.8%	0.7%	43,657	70.5	320	143	56	---	---
South of E. Boronda Road	6	45	AT	1.8%	0.7%	14,931	68.0	215	90	---	---	---
South of San Juan Grade Road	6	45	AT	1.8%	0.7%	35,148	71.5	368	170	69	---	---
SOUTH MAIN STREET												
North of Blanco Road	4	35	AT	3.8%	2.4%	28,799	70.5	320	143	56	---	---
South of Blanco Road	4	35	AT	3.8%	2.4%	37,734	71.5	368	170	69	---	---
South of John Street	4	35	AT	3.8%	2.4%	31,131	70.5	320	143	56	---	---
North of Romie Lane	4	35	AT	3.8%	2.4%	33,887	71.0	340	155	62	---	---
EAST MARKET STREET												
East of Hebbron Avenue	4	35	AT	1.8%	0.7%	20,942	67.0	185	75	---	---	---
West of Monterey Street	4	35	AT	1.8%	0.7%	21,925	67.5	200	83	---	---	---
East of Monterey Street	4	35	AT	1.8%	0.7%	21,257	67.0	185	75	---	---	---
East of Sherwood Drive	4	35	AT	1.8%	0.7%	21,546	67.5	200	83	---	---	---
East of N. Sanborn Road	4	25	AT	1.8%	0.7%	12,473	62.0	75	---	---	---	---
East of U.S. 101	4	35	AT	1.8%	0.7%	25,988	68.0	215	90	---	---	---
WEST MARKET STREET												
East of Davis Road	4	35	AT	4.4%	7.7%	20,378	71.5	368	170	69	---	---
West of Lincoln Avenue	4	35	AT	4.4%	7.7%	25,473	72.5	428	200	83	---	---
MCKINNON STREET												
South of E. Boronda Road	1	35	AT	1.8%	0.7%	15,137	67.0	185	75	---	---	---
MONTEREY STREET												
South of E. Alisal Street	4	35	AT	1.8%	0.7%	14,431	65.5	143	56	---	---	---
North of E. Gabilan Street	4	35	AT	1.8%	0.7%	45,292	70.5	320	143	56	---	---

Table F-2, cont. Distance to CNEL Contour Lines for Buildout with Prunedale Bypass and Eastside Expressway, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
				Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
NATIVIDAD ROAD												
South of E. Alvin Drive	6	45	AT	1.8%	0.7%	37,652	72.0	395	185	75	---	---
North of E. Boronda Road	3	45	AT	1.8%	0.7%	15,033	69.0	255	110	---	---	---
South of E. Boronda Road	6	45	AT	1.8%	0.7%	20,420	69.5	278	120	---	---	---
North of E. Laurel Drive	6	45	AT	1.8%	0.7%	37,479	72.0	395	185	75	---	---
South of E. Laurel Drive	6	45	AT	1.8%	0.7%	39,836	72.5	428	200	83	---	---
OLD STAGE ROAD												
South of Natividad Road	3	65	AT	1.8%	0.7%	27,844	76.0	680	340	155	62	---
POST DRIVE												
West of Davis Road	4	35	AT	1.8%	0.7%	3,402	60.0	50	---	---	---	---
ROMIE LANE												
East of Los Palos Drive	4	35	AT	1.8%	0.7%	9,841	64.0	110	---	---	---	---
ROSSI STREET												
East of Davis Road	2	40	AT	1.8%	0.7%	10,212	66.5	170	69	---	---	---
RUSSELL ROAD												
East of Van Buren Avenue	1	35	AT	1.8%	0.7%	39,891	71.0	340	155	62	---	---
East of U.S. 101	1	35	AT	1.8%	0.7%	16,111	67.0	185	75	---	---	---
SALINAS STREET												
South of W. Alisal Street	4	35	AT	1.8%	0.7%	14,714	65.5	143	56	---	---	---
NORTH SANBORN ROAD												
West of Freedom Parkway	4	25	AT	1.8%	0.7%	7,297	60.0	50	---	---	---	---
South of Del Monte Avenue	4	35	AT	1.8%	0.7%	12,026	65.0	130	50	---	---	---
South of E. Laurel Drive	4	35	AT	5.0%	5.0%	23,098	71.0	340	155	62	---	---
SOUTH SANBORN ROAD												
North of U.S. 101	4	35	AT	5.0%	5.0%	29,054	72.0	395	185	75	---	---
South of U.S. 101	6	45	AT	5.0%	5.0%	28,837	73.5	490	235	100	---	---

Table F-2, cont. Distance to CNEL Contour Lines for Buildout with Prunedale Bypass and Eastside Expressway, City of Salinas

	Arterial	Speed Limit,		% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
Arterial / Reach	Type*	mph	Elev.	Med.	Hvy.	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
SAN JUAN GRADE ROAD												
South of E. Boronda Road	4	35	AT	1.8%	0.7%	15,199	66.0	155	62	---	---	---
North of E. Boronda Road	3	45	AT	1.8%	0.7%	13,701	68.5	235	100	---	---	---
North of Russell Road	1	35	AT	1.8%	0.7%	17,352	67.5	200	83	---	---	---
SHERWOOD DRIVE												
North of U.S. 101	6	45	AT	1.8%	0.7%	26,611	70.5	320	143	56	---	---
TOWT STREET												
West of Freedom Parkway	1	35	AT	1.8%	0.7%	1,900	59.0	---	---	---	---	---
WILLIAMS ROAD												
South of Del Monte Drive	4	35	AT	5.0%	5.0%	33,774	72.5	428	200	83	---	---
North of E. Laurel Drive	4	35	AT	1.8%	0.7%	34,427	69.5	278	120	---	---	---
South of Freedom Parkway	4	35	AT	5.0%	5.0%	24,079	71.0	340	155	62	---	---
North of Freedom Parkway	1	35	AT	1.8%	0.7%	20,430	68.5	235	100	---	---	---
North of E. Boronda Road	4	35	AT	1.8%	0.7%	1,584	57.0	---	---	---	---	---
WORK STREET												
South of John Street	4	35	AT	1.8%	0.7%	6,779	62.5	83	---	---	---	---
West of S. Sanborn Road	4	35	AT	1.8%	0.7%	6,773	62.5	83	---	---	---	---
U. S. 101												
North of Russell-Espinosa	7	65	AT	4.7%	13.7%	57,556	80.0	1,050	600	300	130	50
North of Boronda Road	7	65	AT	4.7%	13.7%	57,556	80.0	1,050	600	300	130	50
North of Laurel Drive	7	65	AT	4.7%	13.7%	48,138	79.0	950	520	255	110	---
South of Laurel Drive	7	65	BELOW	4.7%	13.7%	52,679	72.5	430	---	---	---	---
South of N. Main Street	7	65	BELOW	4.7%	13.7%	47,999	79.0	950	520	195	---	---
South of Airport Boulevard	7	65	AT	4.7%	13.7%	20,443	75.0	600	300	130	50	---

* Arterial Types: 1) 2 lanes, 35 mph or less; 2) 2 lanes, 40 mph; 3) 2 lanes, 45 mph or more; 4) 4-6 lanes, 35 mph or less; 5) 4-6 lanes, 40 mph; 6) 4-6 lanes, 45 mph or more; 7) 4-6 lane freeway, 55 mph or more; 8) 8 lane freeway, 55 mph or more.

Notes:
AT', 'ABOVE', and 'BELOW' refer to the elevation of the surrounding area relative to the arterial.

Table F-3. Distance to CNEL Contour Lines for Buildout Without Roadway Improvements, City of Salinas

		Speed		% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
Arterial / Reach	Arterial Type*	Limit, mph	Elev.	Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
ABBOTT STREET												
South of John Street	4	35	AT	1.8%	0.7%	34,039	69.5	278	120	---	---	---
North of Sanborn Road	4	35	AT	1.8%	0.7%	30,121	68.5	235	100	---	---	---
East of Harkins Road	6	45	AT	1.8%	0.7%	21,807	69.5	278	120	---	---	---
City Limits	6	45	AT	1.8%	0.7%	14,489	68.0	215	90	---	---	---
ACACIA STREET												
East of Davis Road	1	35	AT	1.8%	0.7%	5,699	63.0	90	---	---	---	---
AIRPORT BOULEVARD												
West of Moffett Street	6	45	AT	5.0%	5.0%	23,204	72.5	428	200	83	---	---
West of U.S. 101	6	45	AT	5.0%	5.0%	23,435	72.5	428	200	83	---	---
ALISAL ROAD												
South of Bardin Road	1	35	AT	5.0%	5.0%	11,765	69.0	255	110	---	---	---
EAST ALISAL STREET												
East of Front Street	4	35	AT	1.8%	0.7%	11,765	65.0	130	50	---	---	---
West of E. Market Street	1	35	AT	1.8%	0.7%	9,512	65.0	130	50	---	---	---
East of Monterey Street	4	35	AT	1.8%	0.7%	22,536	67.5	200	83	---	---	---
East of Sanborn Road	4	35	AT	1.8%	0.7%	20,553	67.0	185	75	---	---	---
West of Sanborn Road	4	35	AT	1.8%	0.7%	15,240	66.0	155	62	---	---	---
East of U.S. 101	4	35	AT	1.8%	0.7%	19,909	67.0	185	75	---	---	---
East of Work Street	4	35	AT	1.8%	0.7%	23,529	67.5	200	83	---	---	---
WEST ALISAL STREET												
West of Homestead Avenue	4	35	AT	1.8%	0.7%	14,769	65.5	143	56	---	---	---
North of Ambrose Drive	4	35	AT	1.8%	0.7%	11,599	64.5	120	---	---	---	---
EAST ALVIN DRIVE												
East of Cherokee Drive	4	35	AT	1.8%	0.7%	3,485	60.0	50	---	---	---	---
West of McKinnon Street	4	35	AT	1.8%	0.7%	14,408	65.5	143	56	---	---	---
West of Natividad Road	4	35	AT	1.8%	0.7%	18,417	66.5	170	69	---	---	---

Table F-3, cont. Distance to CNEL Contour Lines for Buildout Without Roadway Improvements, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
				Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
BARDIN ROAD												
South of Williams Road	4	35	AT	5.0%	5.0%	12,184	68.0	215	90	---	---	---
BERNAL DRIVE												
East of N. Main Street	1	35	AT	1.8%	0.7%	21,829	68.5	235	100	---	---	---
BLANCO ROAD												
West of Davis Road	3	65	AT	1.8%	0.7%	34,007	77.0	760	395	185	75	---
EAST BLANCO ROAD												
East of S. Main Street	6	45	AT	5.0%	5.0%	31,540	73.5	490	235	100	---	---
East of La Mesa Way	6	45	AT	5.0%	5.0%	33,214	74.0	520	255	110	---	---
WEST BLANCO ROAD												
West of S. Main Street	6	45	AT	5.0%	5.0%	29,648	73.5	490	235	100	---	---
East of Davis Road	6	45	AT	5.0%	5.0%	25,723	73.0	460	215	90	---	---
EAST BORONDA ROAD												
East of Independence Blvd.	3	45	AT	5.0%	5.0%	23,849	73.5	490	235	100	---	---
East of McKinnon Street	3	45	AT	5.0%	5.0%	33,828	75.0	600	300	130	50	---
West of McKinnon Street	3	45	AT	5.0%	5.0%	37,028	75.5	640	320	143	56	---
East of Natividad Road	3	45	AT	5.0%	5.0%	37,608	76.0	680	340	155	62	---
East of Constitution Blvd.	3	45	AT	1.8%	0.7%	23,185	71.0	340	155	62	---	---
East of U.S. 101	6	45	AT	5.0%	5.0%	59,569	76.5	720	368	170	69	---
West of Williams Road	3	45	AT	1.8%	0.7%	23,638	71.0	340	155	62	---	---
CENTRAL AVENUE												
East of Davis Road	1	35	AT	1.8%	0.7%	3,868	61.5	69	---	---	---	---
CONSTITUTION BOULEVARD												
South of E. Boronda Road	6	45	AT	5.0%	5.0%	11,289	69.5	278	120	---	---	---
North of Laurel Road	6	45	AT	1.8%	0.7%	23,849	70.0	300	130	50	---	---

Table F-3, cont. Distance to CNEL Contour Lines for Buildout Without Roadway Improvements, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic Fut.	CNEL @ 50' From Near Lane C/L Fut.	Distance to Buildout Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
DAVIS ROAD												
South of W. Blanco Road	3	65	AT	1.8%	0.7%	5,827	68.5	235	100	---	---	---
North of W. Acacia Street	3	45	AT	5.0%	5.0%	34,842	75.5	640	320	143	56	---
North of Central Avenue	3	45	AT	5.0%	5.0%	36,424	75.5	640	320	143	56	---
N. DAVIS ROAD												
South of Boronda Road	6	45	AT	5.0%	5.0%	20,354	72.0	395	185	75	---	---
North of West Laurel Drive	6	45	AT	5.0%	5.0%	23,743	72.5	428	200	83	---	---
South of West Laurel Drive	6	45	AT	5.0%	5.0%	47,690	75.5	640	320	143	56	---
North of W. Market Street	6	45	AT	5.0%	5.0%	39,501	74.5	560	278	120	---	---
South of Post Drive	6	45	AT	5.0%	5.0%	44,304	75.0	600	300	130	50	---
DEL MONTE AVENUE												
West of N. Sanborn Road	1	25	AT	1.8%	0.7%	7,983	61.5	69	---	---	---	---
West of Williams Road	1	25	AT	1.8%	0.7%	8,396	61.5	69	---	---	---	---
EL DORADO DRIVE												
South of E. Boronda Road	1	35	AT	1.8%	0.7%	6,754	63.5	100	---	---	---	---
ESPINOSA ROAD												
West of U.S. 101	3	65	AT	1.8%	0.7%	12,229	72.0	395	185	75	---	---
FREEDOM PARKWAY												
East of Constitution Blvd.	4	35	AT	5.0%	5.0%	10,649	67.5	200	83	---	---	---
West of Williams Road	4	35	AT	5.0%	5.0%	9,511	67.0	185	75	---	---	---
FRONT STREET												
South of E. Alisal Street	4	35	AT	1.8%	0.7%	26,493	68.0	215	90	---	---	---
HARKINS ROAD												
South of Dayton Street	1	35	AT	1.8%	0.7%	10,322	65.5	143	56	---	---	---
HARRIS ROAD												
East of Abbott Street	1	35	AT	1.8%	0.7%	10,861	65.5	143	56	---	---	---

Table F-3, cont. Distance to CNEL Contour Lines for Buildout Without Roadway Improvements, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
				Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
HARRISON ROAD												
North of Russell Road	6	65	AT	1.8%	0.7%	5,699	68.0	215	90	---	---	---
HEBERT ROAD												
East of San Juan Grade Road	3	65	AT	1.8%	0.7%	17,015	73.5	490	235	100	---	---
INDEPENDENCE BOULEVARD												
South of E. Boronda Road	4	35	AT	1.8%	0.7%	10,223	64.0	110	---	---	---	---
JOHN STREET												
West of Sanborn Road	4	35	AT	1.8%	0.7%	11,322	64.5	120	---	---	---	---
East of S. Main Street	4	35	AT	3.8%	2.4%	44,304	72.0	395	185	75	---	---
West of Abbott Street	4	35	AT	3.8%	2.4%	12,659	67.0	185	75	---	---	---
West of U.S. 101	4	35	AT	3.8%	2.4%	28,844	70.5	320	143	56	---	---
LAS CASITAS DRIVE												
South of Constitution Blvd.	1	35	AT	1.8%	0.7%	7,508	64.0	110	---	---	---	---
EAST LAUREL DRIVE												
East of Constitution Blvd.	6	45	AT	5.0%	5.0%	31,509	73.5	490	235	100	---	---
West of Constitution Blvd.	6	45	AT	5.0%	5.0%	45,219	75.5	640	320	143	56	---
West of Loma Drive	4	35	AT	5.0%	5.0%	26,492	71.5	368	170	69	---	---
WEST LAUREL DRIVE												
East of U.S. 101	4	35	AT	5.0%	5.0%	28,265	71.5	368	170	69	---	---
West of U.S. 101	4	35	AT	5.0%	5.0%	57,810	75.0	600	300	130	50	---

Table F-3, cont. Distance to CNEL Contour Lines for Buildout Without Roadway Improvements, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic Fut.	CNEL @ 50' From Near Lane C/L Fut.	Distance to Buildout Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
NORTH MAIN STREET												
South of Alvin Drive	4	35	AT	1.8%	0.7%	37,290	69.5	278	120	---	---	---
North of Laurel Drive	6	45	AT	1.8%	0.7%	40,730	72.5	428	200	83	---	---
South of Laurel Drive	4	35	AT	1.8%	0.7%	36,578	69.5	278	120	---	---	---
North of Market Street	4	35	AT	6.2%	2.6%	46,614	73.0	460	215	90	---	---
North of U.S. 101	4	35	AT	1.8%	0.7%	48,068	71.0	340	155	62	---	---
South of E. Boronda Road	6	45	AT	1.8%	0.7%	22,139	69.5	278	120	---	---	---
South of San Juan Grade Road	6	45	AT	1.8%	0.7%	39,454	72.0	395	185	75	---	---
SOUTH MAIN STREET												
North of Blanco Road	4	35	AT	3.8%	2.4%	29,744	70.5	320	143	56	---	---
South of Blanco Road	4	35	AT	3.8%	2.4%	40840	72.0	395	185	75	---	---
South of John Street	4	35	AT	3.8%	2.4%	32,886	71.0	340	155	62	---	---
North of Romie Lane	4	35	AT	3.8%	2.4%	35,471	71.0	340	155	62	---	---
EAST MARKET STREET												
East of Hebbron Avenue	4	35	AT	1.8%	0.7%	21,802	67.5	200	83	---	---	---
West of Monterey Street	4	35	AT	1.8%	0.7%	26,174	68.0	215	90	---	---	---
East of Monterey Street	4	35	AT	1.8%	0.7%	30,295	69.0	255	110	---	---	---
East of Sherwood Drive	4	35	AT	1.8%	0.7%	21,309	67.5	200	83	---	---	---
East of N. Sanborn Road	4	25	AT	1.8%	0.7%	12,840	62.0	75	---	---	---	---
East of U.S. 101	4	35	AT	1.8%	0.7%	26,488	68.0	215	90	---	---	---
WEST MARKET STREET												
East of Davis Road	4	35	AT	4.4%	7.7%	22,496	72.0	395	185	75	---	---
West of Lincoln Avenue	4	35	AT	4.4%	7.7%	26,452	72.5	428	200	83	---	---
MCKINNON STREET												
South of E. Boronda Road	1	35	AT	1.8%	0.7%	10,952	65.5	143	56	---	---	---
MONTEREY STREET												
South of E. Alisal Street	4	35	AT	1.8%	0.7%	15,114	66.0	155	62	---	---	---
North of E. Gabilan Street	4	35	AT	1.8%	0.7%	9,606	64.0	110	---	---	---	---

Table F-3, cont. Distance to CNEL Contour Lines for Buildout Without Roadway Improvements, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic Fut.	CNEL @ 50' From Near Lane C/L Fut.	Distance to Buildout Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
NATIVIDAD ROAD												
South of E. Alvin Drive	6	45	AT	1.8%	0.7%	41,924	72.5	428	200	83	---	---
North of E. Boronda Road	3	45	AT	1.8%	0.7%	19,775	70.0	300	130	50	---	---
South of E. Boronda Road	6	45	AT	1.8%	0.7%	21,323	69.5	278	120	---	---	---
North of E. Laurel Drive	6	45	AT	1.8%	0.7%	42,194	72.5	428	200	83	---	---
South of E. Laurel Drive	6	45	AT	1.8%	0.7%	42,404	72.5	428	200	83	---	---
OLD STAGE ROAD												
South of Natividad Road	3	65	AT	1.8%	0.7%	8,306	70.0	300	130	50	---	---
POST DRIVE												
West of Davis Road	4	35	AT	1.8%	0.7%	13,080	65.0	130	50	---	---	---
ROMIE LANE												
East of Los Palos Drive	4	35	AT	1.8%	0.7%	9,802	64.0	110	---	---	---	---
ROSSI STREET												
East of Davis Road	2	40	AT	1.8%	0.7%	11,934	67.0	185	75	---	---	---
RUSSELL ROAD												
East of Van Buren Avenue	1	35	AT	1.8%	0.7%	13,298	66.5	170	69	---	---	---
East of U.S. 101	1	35	AT	1.8%	0.7%	9,814	65.0	130	50	---	---	---
SALINAS STREET												
South of W. Alisal Street	4	35	AT	1.8%	0.7%	15,476	66.0	155	62	---	---	---
NORTH SANBORN ROAD												
West of Freedom Parkway	4	25	AT	1.8%	0.7%	7,890	60.0	50	---	---	---	---
South of Del Monte Avenue	4	35	AT	1.8%	0.7%	12,973	65.0	130	50	---	---	---
South of E. Laurel Drive	4	35	AT	5.0%	5.0%	24,979	71.0	340	155	62	---	---
SOUTH SANBORN ROAD												
North of U.S. 101	4	35	AT	5.0%	5.0%	32,697	72.5	428	200	83	---	---
South of U.S. 101	6	45	AT	5.0%	5.0%	32,434	74.0	520	255	110	---	---

Table F-3, cont. Distance to CNEL Contour Lines for Buildout Without Roadway Improvements, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic Fut.	CNEL @ 50' From Near Lane C/L Fut.	Distance to Buildout Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
SAN JUAN GRADE ROAD												
South of E. Boronda Road	4	35	AT	1.8%	0.7%	30,295	69.0	255	110	---	---	---
North of E. Boronda Road	3	45	AT	1.8%	0.7%	28,162	72.0	395	185	75	---	---
North of Russell Road	1	35	AT	1.8%	0.7%	22,742	68.5	235	100	---	---	---
SHERWOOD DRIVE												
North of U.S. 101	6	45	AT	1.8%	0.7%	29,824	71.0	340	155	62	---	---
TOWT STREET												
West of Freedom Parkway	1	35	AT	1.8%	0.7%	2,098	59.0	---	---	---	---	---
WILLIAMS ROAD												
South of Del Monte Drive	4	35	AT	5.0%	5.0%	37,549	73.0	460	215	90	---	---
North of E. Laurel Drive	4	35	AT	1.8%	0.7%	34,591	69.5	278	120	---	---	---
South of Freedom Parkway	4	35	AT	5.0%	5.0%	31,959	72.5	428	200	83	---	---
North of Freedom Parkway	1	35	AT	1.8%	0.7%	26,484	69.5	278	120	---	---	---
North of E. Boronda Road	4	35	AT	1.8%	0.7%	5,447	61.5	69	---	---	---	---
WORK STREET												
South of John Street	4	35	AT	1.8%	0.7%	6,634	62.5	83	---	---	---	---
West of S. Sanborn Road	4	35	AT	1.8%	0.7%	5,047	61.5	69	---	---	---	---
U. S. 101												
North of Russell-Espinosa	7	65	AT	4.7%	13.7%	66,439	80.5	1,100	640	320	143	56
North of Boronda Road	7	65	AT	4.7%	13.7%	81,484	81.5	1,200	720	368	170	69
North of Laurel Drive	7	65	AT	4.7%	13.7%	76,007	81.0	1,150	680	340	155	62
South of Laurel Drive	7	65	BELOW	4.7%	13.7%	67,712	73.5	490	98	---	---	---
South of N. Main Street	7	65	BELOW	4.7%	13.7%	69,381	80.5	1,100	640	298	---	---
South of Airport Boulevard	7	65	AT	4.7%	13.7%	34,457	77.5	810	428	200	83	---

* Arterial Types: 1) 2 lanes, 35 mph or less; 2) 2 lanes, 40 mph; 3) 2 lanes, 45 mph or more; 4) 4-6 lanes, 35 mph or less; 5) 4-6 lanes, 40 mph; 6) 4-6 lanes, 45 mph or more; 7) 4-6 lane freeway, 55 mph or more; 8) 8 lane freeway, 55 mph or more.

Notes:
AT', 'ABOVE', and 'BELOW' refer to the elevation of the surrounding area relative to the arterial.

Table F-4. Distance to CNEL Contour Lines for Buildout With the Prunedale Bypass, City of Salinas

						Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
ABBOTT STREET												
South of John Street	4	35	AT	1.8%	0.7%	34,858	69.5	278	120	---	---	---
North of Sanborn Road	4	35	AT	1.8%	0.7%	30,938	69.0	255	110	---	---	---
East of Harkins Road	6	45	AT	1.8%	0.7%	22,619	69.5	278	120	---	---	---
City Limits	6	45	AT	1.8%	0.7%	2,867	61.5	69	---	---	---	---
ACACIA STREET												
East of Davis Road	1	35	AT	1.8%	0.7%	8,520	64.5	120	---	---	---	---
AIRPORT BOULEVARD												
West of Moffett Street	6	45	AT	5.0%	5.0%	13,950	70.0	300	130	50	---	---
West of U.S. 101	6	45	AT	5.0%	5.0%	16,031	70.5	320	143	56	---	---
ALISAL ROAD												
South of Bardin Road	1	35	AT	5.0%	5.0%	12,113	69.5	278	120	---	---	---
EAST ALISAL STREET												
East of Front Street	4	35	AT	1.8%	0.7%	19,350	67.0	185	75	---	---	---
West of E. Market Street	1	35	AT	1.8%	0.7%	4,198	62.0	75	---	---	---	---
East of Monterey Street	4	35	AT	1.8%	0.7%	24,129	68.0	215	90	---	---	---
East of Sanborn Road	4	35	AT	1.8%	0.7%	19,905	67.0	185	75	---	---	---
West of Sanborn Road	4	35	AT	1.8%	0.7%	14,593	65.5	143	56	---	---	---
East of U.S. 101	4	35	AT	1.8%	0.7%	20,454	67.0	185	75	---	---	---
East of Work Street	4	35	AT	1.8%	0.7%	20,762	67.0	185	75	---	---	---
WEST ALISAL STREET												
West of Homestead Avenue	4	35	AT	1.8%	0.7%	20,267	67.0	185	75	---	---	---
North of Ambrose Drive	4	35	AT	1.8%	0.7%	15,854	66.0	155	62	---	---	---
EAST ALVIN DRIVE												
East of Cherokee Drive	4	35	AT	1.8%	0.7%	15,792	66.0	155	62	---	---	---
West of McKinnon Street	4	35	AT	1.8%	0.7%	12,479	65.0	130	50	---	---	---
West of Natividad Road	4	35	AT	1.8%	0.7%	16,582	66.0	155	62	---	---	---

Table F-4, cont. Distance to CNEL Contour Lines for Buildout With the Prunedale Bypass, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
				Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
BARDIN ROAD												
South of Williams Road	4	35	AT	5.0%	5.0%	13,906	69.0	255	110	---	---	---
BERNAL DRIVE												
East of N. Main Street	1	35	AT	1.8%	0.7%	17,061	67.5	200	83	---	---	---
BLANCO ROAD												
West of Davis Road	3	65	AT	1.8%	0.7%	33,212	76.5	720	368	170	69	---
EAST BLANCO ROAD												
East of S. Main Street	6	45	AT	5.0%	5.0%	29,780	73.5	490	235	100	---	---
East of La Mesa Way	6	45	AT	5.0%	5.0%	31,294	73.5	490	235	100	---	---
WEST BLANCO ROAD												
West of S. Main Street	6	45	AT	5.0%	5.0%	29,424	73.5	490	235	100	---	---
East of Davis Road	6	45	AT	5.0%	5.0%	30,618	73.5	490	235	100	---	---
EAST BORONDA ROAD												
East of Independence Blvd.	3	45	AT	5.0%	5.0%	23,555	73.5	490	235	100	---	---
East of McKinnon Street	3	45	AT	5.0%	5.0%	23,592	73.5	490	235	100	---	---
West of McKinnon Street	3	45	AT	5.0%	5.0%	33,120	75.0	600	300	130	50	---
East of Natividad Road	3	45	AT	5.0%	5.0%	22,748	73.5	490	235	100	---	---
East of Constitution Blvd.	3	45	AT	1.8%	0.7%	20,527	70.5	320	143	56	---	---
East of U.S. 101	6	45	AT	5.0%	5.0%	35,361	74.0	520	255	110	---	---
West of Williams Road	3	45	AT	1.8%	0.7%	24,335	71.0	340	155	62	---	---
CENTRAL AVENUE												
East of Davis Road	1	35	AT	1.8%	0.7%	1,988	59.0	---	---	---	---	---
CONSTITUTION BOULEVARD												
South of E. Boronda Road	6	45	AT	5.0%	5.0%	9,655	68.5	235	100	---	---	---
North of Laurel Road	6	45	AT	1.8%	0.7%	23,555	70.0	300	130	50	---	---

Table F-4, cont. Distance to CNEL Contour Lines for Buildout With the Prunedale Bypass, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
				Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
DAVIS ROAD												
South of W. Blanco Road	3	65	AT	1.8%	0.7%	8,410	70.5	320	143	56	---	---
North of W. Acacia Street	3	45	AT	5.0%	5.0%	1,675	62.0	75	---	---	---	---
North of Central Avenue	3	45	AT	5.0%	5.0%	1,927	62.5	83	---	---	---	---
N. DAVIS ROAD												
South of Boronda Road	6	45	AT	5.0%	5.0%	3,690	64.5	120	---	---	---	---
North of West Laurel Drive	6	45	AT	5.0%	5.0%	18,975	71.5	368	170	69	---	---
South of West Laurel Drive	6	45	AT	5.0%	5.0%	17,891	71.0	340	155	62	---	---
North of W. Market Street	6	45	AT	5.0%	5.0%	8,063	68.0	215	90	---	---	---
South of Post Drive	6	45	AT	5.0%	5.0%	16,726	71.0	340	155	62	---	---
DEL MONTE AVENUE												
West of N. Sanborn Road	1	25	AT	1.8%	0.7%	7,852	61.5	69	---	---	---	---
West of Williams Road	1	25	AT	1.8%	0.7%	9,793	62.0	75	---	---	---	---
EL DORADO DRIVE												
South of E. Boronda Road	1	35	AT	1.8%	0.7%	6,229	63.5	100	---	---	---	---
ESPINOSA ROAD												
West of U.S. 101	3	65	AT	1.8%	0.7%	15,868	73.0	460	215	90	---	---
FREEDOM PARKWAY												
East of Constitution Blvd.	4	35	AT	5.0%	5.0%	11,951	68.0	215	90	---	---	---
West of Williams Road	4	35	AT	5.0%	5.0%	7,190	66.0	155	62	---	---	---
FRONT STREET												
South of E. Alisal Street	4	35	AT	1.8%	0.7%	28,247	68.5	235	100	---	---	---
HARKINS ROAD												
South of Dayton Street	1	35	AT	1.8%	0.7%	10,278	65.5	143	56	---	---	---
HARRIS ROAD												
East of Abbott Street	1	35	AT	1.8%	0.7%	16,885	67.5	200	83	---	---	---

Table F-4, cont. Distance to CNEL Contour Lines for Buildout With the Prunedale Bypass, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic Fut.	CNEL @ 50' From Near Lane C/L Fut.	Distance to Buildout Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
HARRISON ROAD												
North of Russell Road	6	65	AT	1.8%	0.7%	8,520	69.5	278	120	---	---	---
HEBERT ROAD												
East of San Juan Grade Road	3	65	AT	1.8%	0.7%	11,665	72.0	395	185	75	---	---
INDEPENDENCE BOULEVARD												
South of E. Boronda Road	4	35	AT	1.8%	0.7%	9,368	64.0	110	---	---	---	---
JOHN STREET												
West of Sanborn Road	4	35	AT	1.8%	0.7%	11,099	64.5	120	---	---	---	---
East of S. Main Street	4	35	AT	3.8%	2.4%	10,306	66.0	155	62	---	---	---
West of Abbott Street	4	35	AT	3.8%	2.4%	12,225	66.5	170	69	---	---	---
West of U.S. 101	4	35	AT	3.8%	2.4%	28,151	70.0	300	130	50	---	---
LAS CASITAS DRIVE												
South of Constitution Blvd.	1	35	AT	1.8%	0.7%	7,558	64.0	110	---	---	---	---
EAST LAUREL DRIVE												
East of Constitution Blvd.	6	45	AT	5.0%	5.0%	28,400	73.0	460	215	90	---	---
West of Constitution Blvd.	6	45	AT	5.0%	5.0%	42,451	75.0	600	300	130	50	---
West of Loma Drive	4	35	AT	5.0%	5.0%	20,813	70.5	320	143	56	---	---
WEST LAUREL DRIVE												
East of U.S. 101	4	35	AT	5.0%	5.0%	18,453	70.0	300	130	50	---	---
West of U.S. 101	4	35	AT	5.0%	5.0%	33,373	72.5	428	200	83	---	---

Table F-4, cont. Distance to CNEL Contour Lines for Buildout With the Prunedale Bypass, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks		Avg. Daily Traffic	CNEL @ 50' From Near Lane C/L	Distance to Buildout Contours From Near Lane Centerline, feet				
				Med.	Hvy	Fut.	Fut.	60dB	65dB	70dB	75dB	80dB
NORTH MAIN STREET												
South of Alvin Drive	4	35	AT	1.8%	0.7%	31,392	69.0	255	110	---	---	---
North of Laurel Drive	6	45	AT	1.8%	0.7%	33,842	71.5	368	170	69	---	---
South of Laurel Drive	4	35	AT	1.8%	0.7%	34,685	69.5	278	120	---	---	---
North of Market Street	4	35	AT	6.2%	2.6%	40,965	72.5	428	200	83	---	---
North of U.S. 101	4	35	AT	1.8%	0.7%	43,630	70.5	320	143	56	---	---
South of E. Boronda Road	6	45	AT	1.8%	0.7%	14,884	68.0	215	90	---	---	---
South of San Juan Grade Road	6	45	AT	1.8%	0.7%	35,111	71.5	368	170	69	---	---
SOUTH MAIN STREET												
North of Blanco Road	4	35	AT	3.8%	2.4%	28,856	70.5	320	143	56	---	---
South of Blanco Road	4	35	AT	3.8%	2.4%	37400	71.5	368	170	69	---	---
South of John Street	4	35	AT	3.8%	2.4%	31,165	70.5	320	143	56	---	---
North of Romie Lane	4	35	AT	3.8%	2.4%	33,954	71.0	340	155	62	---	---
EAST MARKET STREET												
East of Hebbron Avenue	4	35	AT	1.8%	0.7%	21,117	67.0	185	75	---	---	---
West of Monterey Street	4	35	AT	1.8%	0.7%	21,966	67.5	200	83	---	---	---
East of Monterey Street	4	35	AT	1.8%	0.7%	21,284	67.5	200	83	---	---	---
East of Sherwood Drive	4	35	AT	1.8%	0.7%	21,513	67.5	200	83	---	---	---
East of N. Sanborn Road	4	25	AT	1.8%	0.7%	12,605	62.0	75	---	---	---	---
East of U.S. 101	4	35	AT	1.8%	0.7%	26,163	68.0	215	90	---	---	---
WEST MARKET STREET												
East of Davis Road	4	35	AT	4.4%	7.7%	20,407	71.5	368	170	69	---	---
West of Lincoln Avenue	4	35	AT	4.4%	7.7%	25,519	72.5	428	200	83	---	---
MCKINNON STREET												
South of E. Boronda Road	1	35	AT	1.8%	0.7%	15,173	67.0	185	75	---	---	---
MONTEREY STREET												
South of E. Alisal Street	4	35	AT	1.8%	0.7%	14,519	65.5	143	56	---	---	---
North of E. Gabilan Street	4	35	AT	1.8%	0.7%	44,574	70.5	320	143	56	---	---

Table F-4, cont. Distance to CNEL Contour Lines for Buildout With the Prunedale Bypass, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic Fut.	CNEL @ 50' From Near Lane C/L Fut.	Distance to Buildout Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
NATIVIDAD ROAD												
South of E. Alvin Drive	6	45	AT	1.8%	0.7%	37,302	72.0	395	185	75	---	---
North of E. Boronda Road	3	45	AT	1.8%	0.7%	14,343	68.5	235	100	---	---	---
South of E. Boronda Road	6	45	AT	1.8%	0.7%	20,063	69.0	255	110	---	---	---
North of E. Laurel Drive	6	45	AT	1.8%	0.7%	37,157	72.0	395	185	75	---	---
South of E. Laurel Drive	6	45	AT	1.8%	0.7%	39,978	72.5	428	200	83	---	---
OLD STAGE ROAD												
South of Natividad Road	3	65	AT	1.8%	0.7%	6,924	69.5	278	120	---	---	---
POST DRIVE												
West of Davis Road	4	35	AT	1.8%	0.7%	3,413	60.0	50	---	---	---	---
ROMIE LANE												
East of Los Palos Drive	4	35	AT	1.8%	0.7%	9,842	64.0	110	---	---	---	---
ROSSI STREET												
East of Davis Road	2	40	AT	1.8%	0.7%	10,232	66.5	170	69	---	---	---
RUSSELL ROAD												
East of Van Buren Avenue	1	35	AT	1.8%	0.7%	50,125	72.0	395	185	75	---	---
East of U.S. 101	1	35	AT	1.8%	0.7%	16,191	67.5	200	83	---	---	---
SALINAS STREET												
South of W. Alisal Street	4	35	AT	1.8%	0.7%	14,670	65.5	143	56	---	---	---
NORTH SANBORN ROAD												
West of Freedom Parkway	4	25	AT	1.8%	0.7%	7,200	60.0	50	---	---	---	---
South of Del Monte Avenue	4	35	AT	1.8%	0.7%	11,999	65.0	130	50	---	---	---
South of E. Laurel Drive	4	35	AT	5.0%	5.0%	23,073	71.0	340	155	62	---	---
SOUTH SANBORN ROAD												
North of U.S. 101	4	35	AT	5.0%	5.0%	28,848	72.0	395	185	75	---	---
South of U.S. 101	6	45	AT	5.0%	5.0%	28,591	73.5	490	235	100	---	---

Table F-4, cont. Distance to CNEL Contour Lines for Buildout With the Prunedale Bypass, City of Salinas

Arterial / Reach	Arterial Type*	Speed Limit, mph	Elev.	% Trucks Med.	% Trucks Hvy	Avg. Daily Traffic Fut.	CNEL @ 50' From Near Lane C/L Fut.	Distance to Buildout Contours From Near Lane Centerline, feet 60dB	65dB	70dB	75dB	80dB
SAN JUAN GRADE ROAD												
South of E. Boronda Road	4	35	AT	1.8%	0.7%	15,161	66.0	155	62	---	---	---
North of E. Boronda Road	3	45	AT	1.8%	0.7%	13,843	68.5	235	100	---	---	---
North of Russell Road	1	35	AT	1.8%	0.7%	16,945	67.5	200	83	---	---	---
SHERWOOD DRIVE												
North of U.S. 101	6	45	AT	1.8%	0.7%	26,736	70.5	320	143	56	---	---
TOWT STREET												
West of Freedom Parkway	1	35	AT	1.8%	0.7%	2,056	59.0	---	---	---	---	---
WILLIAMS ROAD												
South of Del Monte Drive	4	35	AT	5.0%	5.0%	34,230	72.5	428	200	83	---	---
North of E. Laurel Drive	4	35	AT	1.8%	0.7%	34,158	69.5	278	120	---	---	---
South of Freedom Parkway	4	35	AT	5.0%	5.0%	23,608	71.0	340	155	62	---	---
North of Freedom Parkway	1	35	AT	1.8%	0.7%	19,749	68.0	215	90	---	---	---
North of E. Boronda Road	4	35	AT	1.8%	0.7%	3,536	60.0	50	---	---	---	---
WORK STREET												
South of John Street	4	35	AT	1.8%	0.7%	6,824	62.5	83	---	---	---	---
West of S. Sanborn Road	4	35	AT	1.8%	0.7%	6,803	62.5	83	---	---	---	---
U. S. 101												
North of Russell-Espinosa	7	65	AT	4.7%	13.7%	77,536	81.5	1,200	720	368	170	69
North of Boronda Road	7	65	AT	4.7%	13.7%	77,536	81.5	1,200	720	368	170	69
North of Laurel Drive	7	65	AT	4.7%	13.7%	68,173	80.5	1,100	640	320	143	56
South of Laurel Drive	7	65	BELOW	4.7%	13.7%	72,547	74.0	520	195	---	---	---
South of N. Main Street	7	65	BELOW	4.7%	13.7%	67,768	80.5	1,100	640	298	---	---
South of Airport Boulevard	7	65	AT	4.7%	13.7%	39,414	78.0	860	460	215	90	---

* Arterial Types: 1) 2 lanes, 35 mph or less; 2) 2 lanes, 40 mph; 3) 2 lanes, 45 mph or more; 4) 4-6 lanes, 35 mph or less; 5) 4-6 lanes, 40 mph; 6) 4-6 lanes, 45 mph or more; 7) 4-6 lane freeway, 55 mph or more; 8) 8 lane freeway, 55 mph or more.

Notes:
AT', 'ABOVE', and 'BELOW' refer to the elevation of the surrounding area relative to the arterial.

Appendix D:
Biological Resources Report

BIOLOGICAL RESOURCES

INTRODUCTION

The City of Salinas General Plan project area is located in the mid portion of Monterey County. The project area is situated both north and south of Highway 101. The project area includes areas currently part of the City as well as proposed growth expansion areas. To date, land uses for these expansion areas have not been identified.

Kathleen Lyons (plant ecologist) and Dana Bland (wildlife biologist) conducted a reconnaissance-level assessment of the biotic resources of the General Plan project area in August 2001.

Specific tasks conducted for this study include:

- Characterize the major plant communities within the project area;
- Identify sensitive biotic resources, including plant and wildlife species of concern, within the project area, and
- Evaluate the City's General Plan Goals and Policies in avoiding potential effects of the proposed development on sensitive biotic resources and recommend additional measures, if necessary, to avoid or reduce such impacts to a level of less-than-significant.

METHODOLOGY

The biotic resources of the Salinas General Plan project area were assessed through literature review and reconnaissance-level field observations. The major plant communities within the undeveloped portions of the project area, based on the classification system developed in Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986), were identified during the field reconnaissance visit. The general conditions of the habitats on the site were recorded and all species observed were recorded in a field notebook. Areas were viewed from public roads and binoculars were used to aid in observations.

To assess the potential occurrence of special status biotic resources, two electronic databases were accessed to determine recorded occurrences of sensitive plant communities and sensitive species. Information was obtained from the California Native Plant Society's (CNPS) Electronic Inventory (CNPS, 2000), and California Department of Fish & Game's (CDFG) RareFind 2 database (CDFG, 2001) for the greater Salinas area.

Kathleen Lyons (plant ecologist) and Dana Bland (wildlife biologist) conducted a reconnaissance-level assessment of the biotic resources of the project area on August 16,

2001. The project area is a mixture of retail, commercial, residential, agricultural and undeveloped land uses.

This section summarizes the findings of the reconnaissance-level biotic assessment. The potential impacts of the proposed general plan alternatives on sensitive biotic resources are discussed below (*Note: this section not included in initial draft*). Measures to reduce significant impacts to a level of insignificance are recommended, as applicable (*Note: this section not included in initial draft*).

ENVIRONMENTAL CONDITIONS

The project study area lies within and immediately adjacent to the city of Salinas. The project study area is depicted on Figure 1. The habitat types of the undeveloped parcels within the project area include riparian woodland, in-stream and seasonal wetlands, grassland, and oak woodland. Previously disturbed and/or developed areas support non-native landscape trees, row crop agricultural, orchards, and barren areas; rural residential land uses and commercial/industrial areas also occur within the study area. The distribution of the habitat types within the undeveloped portions of the project area is depicted on Figure 1, Plant Community Map.

Riparian Woodland

The riparian woodland in the project area occurs along the myriad of watercourses that traverse through both the developed and undeveloped portions on the study area. The two major watercourses are Gabilan Creek and Natividad Creek. The main stem of these two creeks traverse the developed portion of the City; a portion of their tributaries traverse agricultural lands and grasslands in the northeastern portion of the project area (proposed growth expansion areas). The northern portion of the study area supports several tributaries to Alisal and Tembladero Sloughs. These tributaries traverse agricultural lands and some urban areas. Alisal Slough occurs in the southern portion of project area.

Native trees and shrubs dominate the riparian woodlands within the project area. As depicted on Figure 1, many of the watercourses within the project area support riparian woodland vegetation. The principal plant species are cottonwood (Populus sp.), willows (*Salix* sp.), box elder (*Acer negundo*) and coast live oak (*Quercus agrifolia*). Associated understory plants include California blackberry (*Rubus ursinus*), poison hemlock (*Conium maculatum*) and young willows. The areas adjacent to the low-flow channel can be dominated by wetland vegetation. Typical vegetation includes rabbitsfoot grass (*Polypogon monspeliensis*), umbrella sedge (*Cyperus eragrostis*), rush (*Juncus* sp.), watercress (*Rorippa aquaticum*) and willow herb (*Epilobium ciliatum*).

Wildlife Resources of Willow Riparian. The riparian habitat is one of the highest value habitats for wildlife species diversity and abundance in California. Factors which contribute to the high wildlife value include the presence of surface water, the variety of niches provided by the high structural complexity of the habitat, and the abundance of plant growth. Riparian habitat within the Salinas General Plan area may be used by a diversity of wildlife species for food, water, escape cover, nesting, migration and dispersal corridors, and thermal cover. The value of riparian areas to wildlife is underscored by the limited amount of remaining habitat which has not been disturbed or substantially altered by flood control projects, agriculture, and urbanization.

Common wildlife species that are expected to inhabit the riparian habitat within the Salinas General Plan area include Pacific treefrog *(Hyla regilla),* bullfrog (*Rana catesbeiana*), western aquatic garter snake (*Thamnophis couchii*), Wilson's warbler *(Wilsonia pusilla),* Bewick's wren (*Thryomanes bewickii*), green heron (*Butorides striatus*), tree swallow (*Tachycineta bicolor*), red-shouldered hawk (*Buteo lineatus*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), and California myotis (*Myotis californicus*).

Special status wildlife species that may inhabit the riparian area along the Salinas General Plan area include steelhead (*Oncorhynchus mykiss*), California red-legged frog (*Rana aurora draytonii*), southwestern pond turtle (*Clemmys marmorata pallida*), Cooper's hawk (*Accipiter cooperii*), yellow warbler (*Dendroica petechia brewsteri*), yellow-breasted chat (*Icteria virens*), pallid bat (*Antrozous pallidus pacificus*), and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*). Several other species of neotropical migrant birds (protected under the Migratory Bird Treaty Act) also may use these riparian habitats during spring and fall migrations.

In-Stream Wetlands and Seasonal Wetlands

Where riparian woodland vegetation is absent along the watercourses, in-stream wetlands are often found. These wetlands occur in the bottom of channelized watercourses within the project area, such as the lower portions of Gabilan Creek and portions of Alisal Slough. In many areas where a widened earthen channel has been created, the channel supports a dense growth of umbrella sedge (*Cyperus eragrostis)*, bull rush (*Scirpus* sp.), and cattail (*Typha* sp.).

Seasonal wetlands also occur in several depressions within grasslands, and possibly in other undeveloped lands within the project area. These depressions may be seasonally wet and support plant species adapted to such conditions, such as pennyroyal (*Mentha pulegium*), rabbitsfoot grass (*Polypogon monspessulanus*) and curly dock (*Rumex crispus*).

Wetland habitats provide important foraging and breeding areas for a variety of wildlife species. The presence of wetland plants such as cattails and bull rush increases the wildlife value by providing cover, breeding sites and a food base for a diversified aquatic invertebrate fauna, which form a link in many food webs. Special status wildlife species that may occur in wetland habitat in the Project area include California tiger salamander, California red-legged frog, southwestern pond turtle, and tricolored blackbird.

Grassland

Parcels of non-native grassland are scattered throughout the project area. The grasslands are dominated by annual and perennial non-native plant species, including wild oat (*Avena sativa)*, Italian ryegrass (*Lolium multiflorum)*, field bindweed (*Convolulus arvensis)*, yellow star thistle (*Centaurea solstitialis)*, English plantain (*Plantago lanceolata)* and black mustard (*Brassica nigra)*. Grasslands in the project area may also support native plant species, including special status species, yet due to property access limitations these areas were not surveyed to ascertain presence or absence.

Ruderal (or weedy) areas within the project area occur adjacent to the existing roadways. Non-native grasses and forbs dominate these areas. The dominant plant species were Italian ryegrass, prickly sow thistle (*Sonchus asper)*, common plantain (*Plantago lanceolata)*, bristly ox-tongue (*Picris echioides),* field mustard, field bindweed, stinging nettle (*Urtica dioica)* and Italian thistle (*Carduus pynocephalus*).

Grasslands also occur along the upper banks and terraces of the seasonal drainage ditches.

Wildlife Resources of Grasslands. Grasslands provide an important foraging resource for a wide variety of wildlife species. The grasses and forbs produce an abundance of seeds and attract numerous insects, providing food for granivorous and insectivorous wildlife. Sparrows, rabbits and rodents are commonly found in this habitat. Consequently, grasslands are valuable foraging sites for raptors such as hawks and owls, and other predators including coyote, fox, skunk and snakes. Aerial foraging species that occur over grasslands include bats and swallows.

Common wildlife species expected to inhabit and/or utilize the grasslands for foraging within the Salinas General Plan area include western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis melanoleucus*), house finch (*Carpodacus mexicanus*), American goldfinch (*Carduelis tristis*), western meadowlark *(Sturnella neglecta*), American robin (*Turdus migratorius*), cliff swallow (*Hirundo pyrrhonota*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), barn owl (*Tyto alba*), California ground squirrel *(Spermophilus beecheyi*), black-tailed jackrabbit (*Lepus californicus*), Botta's pocket gopher (*Thomomys bottae*), California vole (*Microtus californicus*), coyote (*Canis latrans*), and several species of bats.

Special status wildlife species that may inhabit grasslands in the Salinas General Plan area include California tiger salamander (*Ambystoma californiense*), western burrowing owl (*Athene cunicularia hypugea*), and northern harrier *(Circus cyaneus*). Several special status raptors may forage over the grasslands, including northern harrier and white-tailed kite (*Elanus leucurus*).

Oak Woodland Habitat

The oak woodland habitat in the project area is limited to a grove along Williams Road and a grove along San Juan Road (Figure 1). Native coast live oaks dominate these woodland areas. The understory is comprised of grasses and forbs (i.e., non-grass herbaceous plants) and some shrubs, such as poison oak (*Toxicodendron diversilobum).*

Wildlife Resources of Oak Woodlands. There are only remnant oak woodlands within the Salinas General Plan area, all surrounded by agricultural and/or rural residential uses. Although large tracts of oak woodland do provide high value habitat for wildlife, the small fragments of remaining oak woodland in the Salinas area, and the adjacent intensive agricultural uses reduce the overall value of this habitat type for native wildlife in the plan area. Acorns from oaks provide an important food resource for many wildlife species, and natural cavities in the oaks provide nesting opportunities for some birds and mammals. Snags are an important component of oak woodlands to some wildlife such as woodpeckers, which excavate nests in snags and holes for storing acorns. Downed decaying logs and limbs add to the structural complexity of the habitat, and are important cover, nesting, roosting, and foraging substrate for some species.

Common wildlife species expected to occur in oak woodlands within the Salinas General Plan area include California slender salamander (*Batrachoseps attenuatus*), scrub jay (*Aphelocoma coerulescens*), California quail (*Callipepla californica*), red-tailed hawk (*Buteo jamaicensis*), several species of bats, western gray squirrel (*Sciurus griseus*), and black-tailed deer (*Odocoileus hemionus*).

Special status wildlife species that may inhabit oak woodland in the Salinas General Plan area include white-tailed kite (*Elanus leucurus*) and Cooper's hawk (*Accipiter cooperii*).

Agricultural Fields and Landscape Trees

The agricultural lands are primarily row crops, however some orchards and other crops were observed during the August field reconnaissance. The rural residential areas support numerous landscape and orchard trees. Trees observed along the roadways include blue gum eucalyptus (*Eucalyptus globulus*), various *Prunus* sp., remnant native coast live oaks and other various landscape trees and shrubs.

Wildlife Resources of Landscaping. Wildlife use of the landscaping plants is expected to be low because many are non-native plants not frequented by native wildlife species, and most are only single shrubs or trees interspersed among an otherwise urbanized and developed area providing little vegetative cover for wildlife. Urban adapted species such as scrub jay (*Aphelocoma coerulescens*) and European starling (*Sturnus vulgaris*) may use the landscaped areas as perches, and these as well as other birds may occasionally forage on berries or nectar of some plants.

Wildlife Resources of Agriculture Fields. The agricultural lands in the Salinas General Plan area provide limited habitat for native wildlife. The disking of the soil for row crops reduces habitat for ground burrowing animals and the application of pesticides may reduce the invertebrate fauna that several types of wildlife depend upon for forage. Agricultural fields also often attract non-native wildlife such as European starling

(*Sturnus vulgaris*), Norway rat (*Rattus norvegicus*), and feral pigs (*Sus scrofa*), which compete with native wildlife for habitat and food resources. Probably the most valuable aspect of the agricultural lands for native wildlife is the open space to allow unobstructed movement of wildlife between other natural features such as Gabilan and Natividad Creeks.

SENSITIVE BIOTIC RESOURCES

Sensitive Habitats

Sensitive habitats are defined by local, State, or Federal agencies as those habitats that support special status species, provide important habitat value for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity. The habitats meeting these criteria in the project area are: the riparian woodland; in-stream wetlands; seasonal wetlands; and oak woodland.

A delineation of Water's of the U.S., including wetlands, as per U.S. Army Corps of Engineers (COE) criteria was not conducted for the project area. However, based on the preliminary review of site conditions, the bed and/or side slopes of the intermittent and perennial watercourses may meet the criteria of wetlands; the channel beds of these watercourses are likely "Other Waters". Activities occurring in these locations may be within COE jurisdiction and subject to permitting. Other seasonal wetlands may occur in the undeveloped grassland areas, but these areas were not evident during the August 2001 field review.

Special Status Plant Species

Plant species of concern include those listed by either the Federal or State resource agencies as well as those identified as rare by CNPS (Skinner and Pavlik 1994). The search of the CNPS and CNDDB inventories for the area resulted in seven special status plant species of concern known, or with potential, to occur within the project area (Table 1).

Table 1. Special Status Plant Species with Potential to Occur in Vicinity of the City of Salinas General plan Project Area

Species	Status	Habitat Requirements	Known or Potential Habitat within Project Area?
Congdon's tarplant (*Centromadia parryi* ssp. *congdonii)*	Federal: None State: None CNPS: List 1B	Valley and foothill grasslands, including non-native grasslands	Yes; Known occurrences in grasslands within and adjacent to project area; grasslands within the proposed expansion areas provide suitable habitat
Contra Costa goldfields (*Lasthenia conjugens)*	Federal: Endangered State: None CNPS: List 1B	Mesic grasslands	Not recorded, but potential habitat within grasslands; species known from lands SW of Salinas
Pinnacles buckwheat (*Eriogonum nortonii)*	Federal: None State: None CNPS: List 1B	Chaparral and valley/foothill grasslands; known occurrence on Fremont Peak	Not recorded from area; rocky grasslands may provide suitable habitat
Alkali milk-vetch (*Astragalus tener* var. *tener*)	Federal: None State: None CNPS: List 1B	Mesic grasslands	Not recorded, but potential habitat within grasslands; historic occurrence 1 mile NE of Salinas
Santa Cruz clover (*Trifolium buckwestiorum*)	Federal: Endangered State: None CNPS: List 1B	Mesic grasslands	Not recorded, but potential habitat within grasslands; species known from lands SW of Salinas
Hutchinson's larkspur (*Delphinium hutchinsoniae*)	Federal: Endangered State: None CNPS: List 1B	Grasslands and oak woodlands	Not recorded, but potential habitat within grasslands and oak woodlands; historic occurrence near Spreckels
Kellogg's horkelia (*Horkelia cuneata* ssp. *sericea*)	Federal: Endangered State: None CNPS: List 1B	Grasslands and oak woodlands	Not recorded, but potential habitat within grasslands and oak woodlands; known from Ft. Ord lands.

Special Status Wildlife species

Special status wildlife species are those that are listed as threatened or endangered by state or federal agencies, those proposed for listing, candidates for listing, as well as those species listed as Species of Special Concern by state and federal agencies due to declining numbers and/or habitat. The species with potential to occur in the project area was developed from occurrences listed in the Natural Diversity Data Base (CDFG 2001), from a general knowledge of special status species usually associated with the habitats present within the plan area, from consultation with resource agencies, and from previous wildlife surveys conducted within the plan area. Each species is briefly described below.

The following special status wildlife species were evaluated for possible occurrence within the Salinas General Plan area, but are considered unlikely to occur there because the area lacks suitable habitat: western spadefoot toad (*Scaphiopus hammondii*), foothill yellow-legged frog (*Rana boylii*), golden eagle (*Aquila chrysaetos*), California horned lark (*Eremophila alpestris actia*), loggerhead shrike (*Lanius ludovicianus*), and San Joaquin kit fox (*Vulpes macrotis mutica*), woodrat (*Neotoma fuscipes annectens*).

Steelhead is a State Species of Special Concern and Federally listed as threatened (South-Central California Coast Evolutionary Significant Unit). Steelhead are anadramous fish, that migrate from the ocean up freshwater creeks and rivers to spawn. The young steelhead typically remain in the freshwater for two years before migrating to the ocean or bay. They typically spend 2-3 years in marine waters before returning to their natal stream to spawn (National Marine Fisheries Service 1997). Steelhead often spawn more than once before they die, and spawning usually occurs between December and June. Eggs are laid in gravels of streams, and take 1.5 to 4 months to hatch. The hatchlings are called alevins and remain in the gravels until their yolk sac is absorbed, at which time they emerge from the gravels as "fry" and begin actively feeding. After 1-4 years, the steelhead migrate to the ocean as "smolts."

Steelhead were found during recent fish surveys of upper Gabilan Creek (Gary Flossy, CDFG, pers. comm.).

The California tiger salamander is a Federal Candidate for listing as endangered and a State species of special concern. This tiger salamander is a permanent resident of annual grasslands, foothill-valley woodlands, and is occasionally found along streams. Adults spend most of the year in mammal burrows in grasslands, coming out at night to forage. The first heavy rains of winter initiate the migration of adults to permanent and temporary ponds, where breeding takes place from December to February (Stebbins 1985). Agricultural and urban development have reduced much of the former habitat of this species. Introduction of non-native fish which prey on the salamander larvae has significantly reduced some local populations.

Harvey & Associates (1997) identified a pond/marsh area along lower Natividad Creek just north of Laurel Drive as potential habitat for this species. Recent aquatic surveys for amphibian larvae found no California tiger salamanders, and numerous predatory non-native fish in the Sunfish family were found (Bryan Mori, pers. comm.). There are no known occurrences of this salamander listed on the CNDDB for the Salinas area (CDFG 2001). The area between Natividad and Gabilan Creeks within the City limits is mostly tilled agricultural fields and residential development; these surrounding land uses and the presence of predatory fish in the pond near Natividad Creek lower the value of this habitat for California tiger salamander (CTS). Areas within the Salinas General Plan area that may still support CTS populations include the oak/grassland with agricultural ponds nearby on the far northeastern side of Salinas and the grassland/seasonal marsh area on the eastern area just west of Old Stage Road.

The California red-legged frog is a State species of special concern and Federally listed as threatened. This species is found in quiet pools along streams, in marshes, and ponds. Red-legged frogs are closely tied to aquatic environments, and favor intermittent streams which include some areas with water at least 0.7 meters deep, a largely intact emergent or shoreline vegetation, and a lack of introduced bullfrogs and non-native fishes. They are generally found on streams having a small drainage area and low gradient (Hayes and Jennings 1988). The red-legged frog occurs west of the Sierra Nevada-Cascade crest and in the Coast Ranges along the entire length of the state. Much of its habitat has undergone significant alterations in recent years, leading to extirpation of many populations. Other factors contributing to its decline include its former exploitation as food, water pollution, and predation and competition by the introduced bullfrog and green sunfish (Moyle 1973, Hayes and Jennings 1988). This species' breeding season spans January to April (Stebbins 1985). Females deposit 1000 to 4000 eggs on submerged vegetation at or near the surface.

There are no known occurrences of California red-legged frog within the General Plan area. Recent surveys for this species on Natividad Creek found a very large population of the predatory bullfrog, but no red-legged frogs (Biotic Resources Group 1998). This native frog is probably extirpated from within the developed Salinas area. This frog may still occur along portions of the Salinas River (David Pereksta, pers. comm.).

The southwestern pond turtle is a Federal and State Species of Special Concern. This aquatic turtle inhabits ponds, lakes, streams, marshes, and other permanent waters located in woodland, grassland, and open forests below 6,000 ft (Stebbins 1985). Pond turtles can often be seen basking in the sun on partially submerged logs, rocks, mats of floating vegetation or mud banks. During cold weather, they hibernate in bottom mud. The diet of these turtles consists of aquatic vegetation, insects, fish, worms, and carrion. Females dig soil nests in or near stream banks, and in open grasslands and disturbed areas near their perennial aquatic habitat (Nussbaum et *al.* 1983, Dr. Jerry Smith, pers. comm.). Eggs are deposited between April and August. One factor in the decline of this species is the introduction of non-native fish that prey on hatchlings and juveniles.

No occurrences of pond turtles are known from the Salinas area. It is possible that this species has been extirpated from the area due to intense agricultural and residential land uses which are incompatible with the nesting requirements of the turtle.

The burrowing owl is a Federal and State Species of Special Concern (breeding population). Burrowing owls use open grassland habitats with low-growing vegetation. They prefer areas interspersed with bare ground, and raised areas used as rest/perch sites. Small mammals and insects are their primary prey. Abandoned burrows, especially of ground squirrels, are used as roost and nest sites. Breeding occurs from March to August, and clutches average 5-6 eggs. Agricultural, industrial, and urban development have resulted in a significant decline of suitable habitat for this species throughout California (Remsen 1978). Programs to control burrowing mammals with poison and burrow destruction have also reduced owl populations (Zarn 1974).

Burrowing owls are known to occur at the Salinas Airport and on the west side of the City near Highway 183 (CDFG 2001).

The white-tailed kite is listed as a fully protected species by the CDFG. This bird usually nests in trees along riparian areas, including Eucalyptus, willows and live oaks, and also occasionally in oak savannah. They prefer nest trees with adjacent open fields for hunting. The male does all the hunting while the female kite incubates the eggs and broods the young. The favored prey of white-tailed kites is voles and mice. Nesting occurs from April through July. During fall and winter, kites form communal roosts (Roberson and Tenney 1993).

This species was observed nesting in the riparian woodland along Natividad Creek (Harvey & Assoc. 1997). They may also nest along portions of Gabilan Creek, and the adjacent grasslands provide foraging habitat.

The northern harrier is a State Species of Special Concern. This bird is an uncommon permanent resident in open grasslands, marshy areas, and edges of estuaries in Monterey County (Roberson and Tenney 1993). Nesting begins in late March with young fledged during June and July. They build nests of sticks and grass on the ground hidden by tall grass or reeds. Harriers hunt a wide variety of prey, including other birds and small mammals. Primary threats to this species include loss of habitat, egg predation by non-native red fox, and poisoning by rodenticides and pesticides (Roberson and Tenney 1993).

Northern harrier may nest in the denser grassland areas within the plan area, and the grassland habitat provides suitable foraging habitat for this species.

Cooper's hawk is an uncommon migrant and winter visitor in San Benito County, and is rare and locally distributed during the breeding season. Migrant and wintering individuals occur in a variety of habitats, including oak woodland, conifer and mixed broadleaf forests, grasslands, residential areas, riparian woodland, and marshes. Breeding pairs favor wooded and forested habitats, but have recently been observed in the well-vegetated suburban habitats of northwestern Santa Clara County and the Willow Glen district of San Jose. Cooper's hawks feed primarily on small birds, but also take small mammals, reptiles, and amphibians. Foraging occurs in both dense cover, and open habitats. Nests are constructed in a variety of trees, but stands of live oaks may be preferred. The nest site is vigorously defended by the adults.

The denser portion of the riparian woodland and the oak woodland habitat within the Salinas General Plan area may provide nesting and foraging habitat for Cooper's hawk, and the grasslands provide foraging habitat.

Merlin is a State Species of Special Concern. This bird is a rare to uncommon spring and fall transient and winter visitor, occurring in California between late September to mid-April (Small 1994). They do not nest in California. Wintering individuals occur in a variety of habitats, including riparian, open woodlands, grasslands and agricultural fields, tidal estuaries, marshes, and developed areas. Merlins prey primarily on small birds, but also take small mammals and insects. Because they prey mostly on birds, merlins may be threatened by the use of pesticides (Remsen 1978).

Merlin may establish winter roosts in the oak woodlands within the plan area, and may forage over the open grassland areas.

Yellow warblers, a State Species of Special Concern, are common during spring and fall migration in central California, and are locally common during the summer breeding season (Roberson and Tenney 1993). Breeding pairs are closely associated with riparian habitat along streams and lakes, and are most numerous where substantial areas of riparian habitat remain along major creeks and rivers. A variety of riparian trees are used during foraging, but habitats with willows and cottonwoods or willows and sycamores, with dense undergrowth, seem to be favored. The yellow warbler's diet consists of spiders and insects, which it gleans from understory vegetation and the canopies of deciduous trees. Nests are constructed low in trees, typically from 2-12 feet above the ground (Harrison 1978), and nesting takes place from April to mid-June. Yellow warblers are much reduced in numbers over much of their California breeding range, largely due to loss of riparian habitat and nest parasitism by the brown-headed cowbird (Remsen 1978).

Yellow warblers may nest in the riparian woodland along Gabilan and Natividad Creeks where the understory is dense.

The yellow-breasted chat, a State Species of Special Concern, was once a fairly common summer resident in riparian woodland throughout California. In central California, yellow-breasted chats appear to prefer dense riparian habitats dominated by willows, sycamores, and cottonwoods, with a well-developed understory, and are considered a riparian obligate species (Roberson and Tenney 1993). They inhabit the area from April to early August (Roberson and Tenney 1993). Yellow-breasted chats forage at various heights in dense riparian foliage, gleaning insects from leaves and bark, and feeding on small fruits. They build their nest in dense vegetation, typically from 1-8 feet above the ground (Harrison 1978, Ehrlich *et al.* 1988). This species' numbers have declined dramatically in many parts of California, primarily due to loss and alteration of riparian habitat, and possibly nest parasitism by brown-headed cowbirds (Remsen 1978).

Yellow-breasted chat may nest in the riparian woodland along Gabilan and Natividad Creeks where the understory is dense.

Tricolored blackbird is a Federal and State Species of Special Concern. This bird is an uncommon local permanent resident in Monterey County (Roberson and Tenney 1993). They inhabit freshwater marshes, stock ponds, and willow thickets. They prefer dense cattails, tules and rushes where they build deep cup nests. They breed in large colonies of 50-100+ pairs, from April to mid-May. During fall and winter, tricolored blackbirds are nomadic and may be observed in pastures, grasslands, cattle pens and marshes throughout the county (Roberson and Tenney 1993). Extensive alteration of the Salinas River floodplain, and drainage of marshes for agriculture and urban development are the main threats to this species (Roberson and Tenney 1993).

It is unlikely that tricolored blackbirds nest within the plan area due to limited marsh areas and surrounding development. However, flocks of tricolored blackbirds may rest and forage in the grasslands within the plan area.

The pallid bat is a State Species of Special Concern. Pallid bats are found in a variety of habitats. This species moves about locally on a seasonal basis, but is not considered to be migratory (Jameson and Peeters 1988). During the day pallid bats roost in buildings, crevices, caves, mines, and hollow trees. Maternity roosts are colonial, while males and feeding bats roost singly. This species is very sensitive to disturbances at roost sites (E. Pierson, pers. comm.). During the night, pallid bats glean moths from leaves and forage on the ground for invertebrates, especially Jerusalem crickets.

Pallid bats may roost in the oak woodland or riparian habitat along the plan area, and may forage along the creeks and nearby grasslands.

Long-eared myotis is a Federal species of concern. This bat emerges later in the night, after dark, and captures flying insects 4-6 feet above ground (Jameson and Peeters 1988). Long-eared myotis roost in caves, buildings, crevices, spaces under bark, and in snags. They usually roost singly, but nurseries occur as small colonies. Mating occurs in the fall and the single young are born from May to July. This myotis occurs in brush, woodland and forest habitats from sea level to 9,000 feet (Zeiner *et al.* 1990).

Potential roosting habitat for long-eared myotis exists in the riparian and oak woodland in the plan area.

Long-legged myotis is a Federal species of concern. This bat is most common in woodland and forest habitats and occurs from sea level to 11,400 feet (Zeiner *et al.* 1990). The long-legged myotis emerges early, long before dark, and feeds on flying insects, primarily moths (Jameson and Peeters 1988). Mating occurs in the fall, and a single young is born in June or July. This bat roosts in rock crevices, buildings, under tree bark, in snags, mines and caves; trees are the most important day roost. These bats form large nursery colonies of hundreds of individuals usually under bark or in hollow trees (Zeiner *et al.* 1990).

Potential roosting habitat for long-legged myotis exists in the riparian and oak woodland in the plan area.

The Townsend's western big-eared bat is a state species of special concern. Big-eared bats occur in a variety of plant communities throughout California, including coastal conifer and broad-leaf forests, oak and conifer woodlands, arid grasslands and high elevation forests (Williams 1986). In coastal California, the big-eared bat is primarily associated with riparian forests, where it gleans insects from leaf surfaces. Roosting sites for Townsend's big-eared bat include limestone caves, lava tubes, mine tunnels, buildings, and other human-made structures within 100m of riparian habitat (Williams 1986, Pierson 1988). Townsend's big-eared bats are extremely sensitive to human disturbances at roost sites.

Townsend's western big-eared bat may roost in the riparian and oak woodlands along the plan area.

Yuma myotis is a federal and state Species of Special Concern. It inhabits a wide variety of habitats at lower elevations and is a year-round resident in California. This bat feeds on emergent aquatic insects, and foraging takes place over the surface of calm waters of ponds, streams and rivers (Heady 2000).

Yuma myotis may roost in the riparian and oak woodlands along the plan area.

San Francisco dusky-foot woodrat is also a State Species of Special Concern. These small mammals build large stick nests at the bases of trees and shrubs. They prefer forested habitat with a moderate canopy and brushy understory, and are often found on the upper banks of riparian forests. This woodrat feeds on a variety of woody plants, fungi, flowers and seeds.

This woodrat may occur in the riparian woodland habitat along the plan area.

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IMPACTS AND MITIGATION DISCUSSION

IMPACT CRITERIA

The thresholds of significance presented in the California Environmental Quality Act (CEQA) were used to evaluate the potential impacts from implementation of the General Plan Amendment developments and to determine if the project poses significant impacts to biological resources. For this analysis, significant impacts are those that substantially affect either:

- A species (or its habitat) listed or proposed for listing by State or Federal governments as rare or endangered (e.g., California red-legged frog,);
- Breeding/nesting habitat for a State species of special concern (e.g., California tiger salamander);
- A plant considered rare (i.e., List 1B) by CNPS;
- A habitat regulated by State or Federal law (i.e., waterways, riparian habitat, wetlands), or
- A habitat or resource recognized as sensitive by CDFG and/or the City of Salinas (i.e., waterways, riparian habitat, native trees).

POTENTIAL IMPACTS AND MITIGATION MEASURES

The proposed General Plan Amendment has the potential to result in significant impacts to biological resources. Impacts would occur as a result of grading, excavation, and construction activities associated with the implementation of the building of community facilities, private developments, street improvements, and utility improvements.

Impacts are considered significant if there is a loss of riparian habitat, seasonal wetlands and/or loss of habitat for special status species. The removal of large-sized native trees is also considered a significant impact to botanical resources, due to the value of these mature trees as habitat and their botanical significance. Similarly, these trees may be utilized by raptors for nesting, such that removal of the tree during nesting season would be a significant adverse impact.

Impacts were not considered significant to vegetation communities or habitats that are not protected, are generally common, and do not support special status species. Within the Salinas General Plan area, removal of ruderal areas, intensively used agricultural lands (i.e., row cropped land) or landscape trees are not considered significant impacts to biotic resources.

The following mitigation measures are identified to avoid and/or minimize impacts to sensitive biological resource from the proposed General Plan expansion area improvements. These measures are recommended to reduce potential impacts to biological resources from the proposed improvements to a less than significant level. The impacts and mitigation measures would be evaluated in more detail as part of the subsequent environmental review for specific projects.

Impact Bio-1. Development in a portion of the project's planning area will occur adjacent to creeks, riparian woodland and wetlands (i.e., other waters of the U.S. and wetlands). This development may result in significant direct or indirect impacts to riparian and wetland resources from habitat removal, noise, lighting, increased human uses and urban runoff.

> **Mitigation Bio-1.** ***Protect and enhance riparian corridors by requiring setbacks and open space easements within development areas along Gabilan and Natividad Creeks and other streams in the planning area. Protect and enhance wetlands by requiring setbacks and open space easements within development areas in the planning area*** A 100-foot setback area shall be established along Gabilan and Natividad Creeks and other unnamed creeks for future development with the General Plan Amendment area. The setback shall be measured from the top of bank, or outside edge of riparian woodland, whichever is greater. A 100-foot setback area shall be established along wetlands not associated with creeks (i.e., seasonal wetland swales or ponds) within the General Plan Amendment area. The riparian setback shall be measured from the top of bank, or outside edge of riparian woodland, whichever is greater. The wetland setback shall be measured from the outside edge of the wetland. Development activities would be prohibited in the setback area; the City shall consider exceptions where the setback would result in a property "takings" or for passive recreational uses (i.e., trails). The existing riparian woodland or wetland shall be protected from construction disturbance. Fencing shall be temporarily placed at the outside edge of the setback area. This fencing shall remain in-place until construction is complete. If recreational trails are placed within the buffer area, implement a revegetation program wherein a vegetative buffer is established between the trail and the outside edge of the riparian woodland. Successful implementation of these actions will reduce direct and indirect impacts to riparian and wetland resources to a less than significant level.

Impact Bio-2. Development in a portion of the project's planning area will occur adjacent to existing riparian woodland and wetlands (i.e., other waters of the U.S. and wetlands). In areas where development cannot avoid impacts to riparian/wetland resources, such as new road crossings, removal of riparian and/or wetland resources may occur. This may impact federally listed species (i.e., steelhead, California red-legged frog) or other special status species (i.e., California tiger salamander).

> **Mitigation Bio-2.** ***Retain creeks and wetlands in their natural channels rather than placing them in culverts or underground pipes. Where streambanks must be deepened, widened or straightened, they should be landscaped and revegetated afterward. Where wetlands are impacted, they should be re-created afterwards.*** If impacts are incurred to creeks and/or riparian woodlands as part of development within the General Plan Amendment area, the project applicant shall develop and implement a riparian/wetland habitat mitigation and management plan. The plan shall specify a minimum 3:1 replacement ratio for impacts to riparian resources and

a minimum 1:1 replacement ratio for impacts to wetland resources, pursuant to current state and federal policies. The project applicant shall receive authorization to fill wetlands and "other waters' from the US Army Corps of Engineers, pursuant to the requirements of the Clean Water Act. The project applicant shall also obtain a water quality certification (or waiver) from the Regional Water Quality Control Board, consistent with requirements of this State agency. The project applicant shall also obtain a 1601/1603 Streambed Alteration Agreement from the California Department of Fish and Game, pursuant to Fish and Game Code. These permits shall be received prior to any site grading that may occur in or immediately adjacent to creeks or wetlands.

The project applicant shall also receive authorization from the National Marine Fisheries Service for "take" of steelhead and from the U. S. Fish and Wildlife Service for "take" of California red-legged frog, if work cannot avoid impacts to creek resources and/or these species.

Pursuant to provisions of the Section 404 permit, 1601/1603 Streambed Alteration Agreement and State water quality certification (or waiver), the project applicant shall implement a riparian/wetland mitigation plan, and any other measures so identified by regulatory agencies. This plan shall identify measures for the applicant to compensate for unavoidable impacts to riparian or wetland resources. A minimum 1:1 replacement ratio is typically recommended for impacted wetland resources to satisfy requirements of the U.S Army Corps of Engineers and the Regional Water Quality Control Board (RWQCB). A minimum 3:1 replacement ratio is typically recommended for impacted riparian resources to satisfy requirements of the CDFG. The applicant shall also identify and implement a 5-year maintenance and monitoring program. Successful implementation of these actions will reduce impacts to riparian and wetland resources to a less than significant level.

The City shall consult with the Regional Water Quality Control Board and the Resource Conservation District to develop a plan to assist agricultural operations to reduce nitrate and sediment input to creeks. Such a plan will enhance the water quality and benefit aquatic plants and wildlife within the plan area as well as downstream.

Impact Bio-3. If trees are removed for a project, the project may impact breeding raptors if they are nesting in the trees. Additionally, oak woodland habitat, including singular trees, are considered a significant biological resource due to their value to wildlife

Mitigation Bio-3. ***Retain coast live oak and valley oak trees within General Plan Amendment Area, including oaks within new development areas.*** If impacts are incurred to oak trees and/or oak woodlands as part of implementation of the specific plan, the project applicant shall develop and implement an oak tree/woodland mitigation and management plan. The plan shall specify a minimum 2:1 replacement ratio for individual trees and a minimum 2:1 replacement ratio for impacts to oak woodland habitat (acres). All coast live oak and valley oak trees scheduled for removal should be surveyed prior to construction to determine if any raptor nests are present and active. If active nests are observed, the construction should be postponed until the end of the fledgling.

Impact Bio-4. Development within the grasslands within the General Plan Amendment Area may impact species status species, if such species are confirmed to be present. In general, the loss of non-native grassland is not considered a significant impact. This is due to the prevalence of non-native plant species and lack of special status plants species. Loss of non-native grassland may however be significant if special status species are utilizing it, such as:

- Congdon's tarplant (*Centromadia parryi* ssp. *congdonii)*
- Contra Costa goldfields (*Lasthenia conjugens)*,
- Pinnacles buckwheat (*Eriogonum nortonii)*
- Alkali milk-vetch (*Astragalus tener* var. *tener*)
- Santa Cruz clover (*Trifolium buckwestiorum*)
- Hutchinson's larkspur (*Delphinium hutchinsoniae*)
- Kellogg's horkelia (*Horkelia cuneata* ssp. *sericea*)
- Burrowing owl
- California tiger salamander

Mitigation BIO-4. ***Protect and enhance special status species habitat by requiring setbacks and open space easements within development areas. Protect and enhance special status species habitat by requiring management of the habitat to ensure persistence of the species within the setback areas.***

Surveys shall be conducted at the appropriate season to ascertain whether the habitats within the proposed project area supports special status species. If special status species are observed, avoidance measures shall be implemented.

A qualified biologist shall conduct a biological assessment of all habitat areas to assess the potential for the following special status species (see list above). If suitable habitat for any of these species is observed, then focused surveys during the appropriate season should be conducted. Such surveys would include winter and spring surveys for tiger salamander, spring surveys for spadefoot toad, protocol presence/absence surveys for burrowing owl, and spring/summer surveys for special status plant species. The California Department of Fish and Game shall be consulted regarding the appropriate level of effort and protocol prior to conducting focused wildlife species surveys. If any of these species are found to inhabit the survey area, the City shall require the preparation and implementation of a Habitat Management Plan to provide protection for the habitat. If impacts to occurrences are deemed unavoidable, the plan shall identify mitigation measures to compensate for impacts to the species. As part of the Habitat Management Plan, a 100-foot buffer shall be established around rare plant occurrences. The plan shall include measures to manage the rare plant occurrences for their protection and persistence at the site. The Habitat Management Plan shall be reviewed and approved by California Department of Fish and Game and/or USFWS prior to issuance of any permits by the City.

Prior to any proposed development within 150 feet of the stream corridors, protocol presence/absence surveys for California red-legged frog, pond turtle, and nesting birds should be conducted. If these species are observed, the CDFG and the USFWS should be consulted regarding appropriate measures to avoid and mitigate potential impacts of the project on these species. The City shall not issue any permits prior to obtaining written approval from the CDFG and/or USFWS that the proposed mitigation plan has been approved.

Prior to any proposed development within or adjacent to oak woodland, a qualified biologist should conduct surveys to determine if protected wildlife species are nesting in the oak woodland, e.g., nesting raptors. If trees are to be removed, a qualified bat biologist should evaluate the trees as potential bat roost sites prior to removal, and recommend measures to avoid impacts to bats, such as exclusionary devices.

Appendix E:
Cultural Resources Report

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CULTURAL RESOURCES BACKGROUND RECORDS SEARCH FOR THE CITY OF SALINAS GENERAL PLAN, SALINAS, MONTEREY COUNTY, CALIFORNIA

by

Mary Doane, B.A., and Gary S. Breschini, RPA

November 16, 2001

Prepared for

Cotton/Bridges/Associates

SUMMARY: PROJECT 3133
RESULTS: SEE TEXT
SITES: SEE TEXT
UTMG: N. 6.2472/40.7045, E. 6.2747/40.6218, S. 6.2426/40.5550, & W. 6.1760/40.5850
MAPS: USGS 7.5 MINUTE SALINAS , NATIVIDAD, SAN JUAN BAUTISTA AND PRUNEDALE QUADRANGLES

Note: *SOPA,* the Society of Professional Archaeologists, has been superseded by the new Registry of Professional Archaeologists. Registered Professional Archaeologists are designated by RPA.

INTRODUCTION

In August 2001 Archaeological Consulting was authorized by Yara Fisher of Cotton/Bridges/Associates to prepare a Background Record Search report for the General Plan of the City of Salinas, Monterey County, California.

As our methodology in the preparation of this report, we have conducted a background records search at the Northwest Regional Information Center of the California Archaeological Inventory, located at Sonoma State University, Rohnert Park. The following report contains the results of these investigations as well as our conclusions and recommendations.

PROJECT LOCATION AND DESCRIPTION

The project area includes the currently incorporated lands and the adjoining potential growth areas under consideration for future inclusion in the City of Salinas, Monterey County, California (see Map 1). The Universal Transverse Mercator Grid (UTMG) coordinates for the approximate limits of the project area are: North 6.2472/40.7045, East 6.2747/40.6218, South 6.2426/40.5550, and West 6.1760/40.5850 on the USGS 7.5 minute San Juan Bautista Quadrangle (1955, photorevised 1980), Natividad and Salinas Quadrangles (1947, photorevised 1984). The project proposes to update the City of Salinas General Plan. The focused growth areas within the city and the future growth areas currently outside the city boundary are the subject areas for this report.

PROJECT METHODOLOGY

Background Research

The background research for this project included an examination of the archaeological site records, maps, and project files of the Northwest Regional Information Center of the California Archaeological Inventory, located at Sonoma State University, Rohnert Park, California. In addition, our own extensive personal files and maps were examined for supplemental information, such as rumors of historic or prehistoric resources within the general project area.

The Regional Information Centers have been established by the California Office of Historic Preservation as the local repository for all archaeological reports which are prepared under cultural resource management regulations. The background literature search at the appropriate Regional Information Center is required by state guidelines and current professional standards. Following completion of the project, a copy of the report also must be deposited with that organization.

These literature searches are undertaken to determine if there are any previously recorded archaeological resources or other cultural resources within the project area, and whether the area has been included within any previous archaeological or cultural resources research or reconnaissance projects.

Field Reconnaissance

No field reconnaissance was requested or conducted in this project.

RESULTS OF THE RECORDS SEARCH

Background Research

The record search of the files at the Northwest Regional Information Center, and the examination of our own records, showed that there are no prehistoric archaeological sites recorded within the project area. Ten recorded historic archaeological sites are located within the current incorporated areas of Salinas and three of these, CA-MNT-1146H, -1157H & -1168H, are within the Central City focused growth area (see Map 1 & Attachment 1). However, no cultural resources have been recorded within the areas under consideration for annexation into the city. Major portions of the proposed future growth areas have had no prior cultural resources assessments. Some of these areas have a reasonable potential for producing evidence of significant cultural resources.

The background search found records of previous archaeological and cultural resources reconnaissance surveys and evaluations which have bordered or included small portions of the future growth areas. Prior studies have included portions of the following project areas; a) the West Boronda Road area (Haversat & Breschini 1979, Breschini, Seavey & Haversat 1979, Bourdeau 1984 & 1985, Dietz 1985, Runnings & Breschini 1989 & 1991, Doane & Haversat 2000 & 2001, Doane 2000), b) future growth area 10 (Roop 1978, Biosystems 1989, Nelson & Carpenter 2000), and c) the proposed Rancho San Juan specific plan area (Chavez 1980, Whitlow & Breschini 1982, Waldron 1986, Runnings & Haversat 1988, Busby et al 1993, Costello & Simpson-Smith 1999).

Numerous other studies have included portions of several focused growth areas within the city as follows: a) West Laurel Drive @ North Main (SAIC 2000), b) North Main Street-Soledad Street (Breschini 1988, SAIC 2000), c) Central City (Seavey 1979 & 1980, Hampson Breschini & Haversat 1985, Hampson & Breschini 1985, Cartier Crane & James 1991, Laffey 1991, Runnings & Haversat 1991 & 1996, Owens Runnings & Haversat 1997, Cartier 2000, SAIC 2000), d) South Main Street (SAIC 2000), and e) North Davis Road @ West Laurel Road (Haversat & Breschini 1980, Doane & Haversat 1999). Studies within the city but not within focused growth areas are not included in the report bibliography.

In addition, the California Inventory of Historical Resources (March 1976), California Historical Landmarks, and the National Register of Historic Places was checked for listed cultural resources which might be present in the project area (see Attachments 2, 3, & 4). The Boronda Adobe, California Rodeo, Salinas City Bank and Steinbeck House are found in the California Inventory.

The following are listed in the National Register as individual properties: the Sheriff Nesbitt house at 66 Capitol Street, the Peter Bontadelli house (Empire house) at 119 Cayuga Street, the John Steinbeck House at 132 Central Avenue, the Krough house at 146 Central Avenue, the B. V. Sargent house at 154 Central Avenue, and the Samuel M. Black house at 418 Pajaro Street. (The listed Jose Boronda Adobe on Boronda Road lies outside the proposed West Boronda Road future growth area.) Other properties determined eligible for listing as separate properties include the residence at 275 Blanco Road, the Margaret Hart Surbeck residence at 322 Blanco Road, the Thomas Bunn Residence at 425 Blanco Road and the structure at 124 San Luis Street.

Many other structures have been found ineligible for listing in the National Register of Historic Places but have been evaluated and listed in the 1989 Historical and Architectural Resources Survey and Preservation Plan: City of Salinas.

Prehistoric ethnography

The project area lies within the currently recognized ethnographic territory of the Costanoan (often called Ohlone) linguistic group. Discussions of this group and their territorial boundaries can be found in Breschini, Haversat, and Hampson (1983), Kroeber (1925), Levy (1978), Margolin (1978), and other sources. In brief, the group followed a general hunting and gathering subsistence pattern with partial dependence on the natural acorn crop. Habitation is considered to have been semi-sedentary and occupation sites can be expected most often at the confluence of streams, other areas of similar topography along streams, or in the vicinity of springs. These original sources of water may no longer be present or adequate. Also, resource gathering and processing areas, and associated temporary campsites, are frequently found on the coast and in other locations containing resources utilized by the group. Factors which influence the location of these sites include the presence of suitable exposures of rock for bedrock mortars or other milling activities, ecotones, the presence of specific resources (oak groves, marshes, quarries, game trails, trade routes, etc.), proximity to water, and the availability of shelter. Temporary camps or other activity areas can also be found along ridges or other travel corridors.

CONCLUSIONS AND RECOMMENDATIONS

Based upon the background research, we conclude that the majority of the project future growth areas have not been subject to previous archaeological or other cultural resources studies. The background records search found no record of prehistoric archaeological resources and few records of historic archaeological resources within the focused growth areas within the city. Many historic structures within the city have been evaluated for historic and architectural significance but structures in proposed growth areas have not been. Therefore we make the following recommendations:

- Structures or properties with a potential for historic or architectural significance should be evaluated by a qualified historic architect or architectural historian.

- Project areas with a potential for prehistoric or historic archaeological sensitivity should be subject to a preliminary field reconnaissance in order to identify archaeological resources for planning purposes.

Because of the possibility of unidentified (e.g., buried) cultural resources being found during construction, we recommend that the following standard language, or the equivalent, be included in any future permits issued within the project area:

- If historic or prehistoric archaeological resources or human remains are accidentally discovered during construction, work shall be halted within 50 meters (150 feet) of the find until it can be evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.

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Sources: City of Salinas, CBA, Inc.

Focused Growth Areas

- 1 W. Laurel Drive @ N. Main Street
- 2 N. Main Street - Soledad Street
- 3 Central City
- 4 S. Main Street
- 5 Abbott Street
- 6 E. Alisal Street
- 7 E. Market Street
- 8 N. Davis Road @ W. Laurel Drive

Future Growth Areas

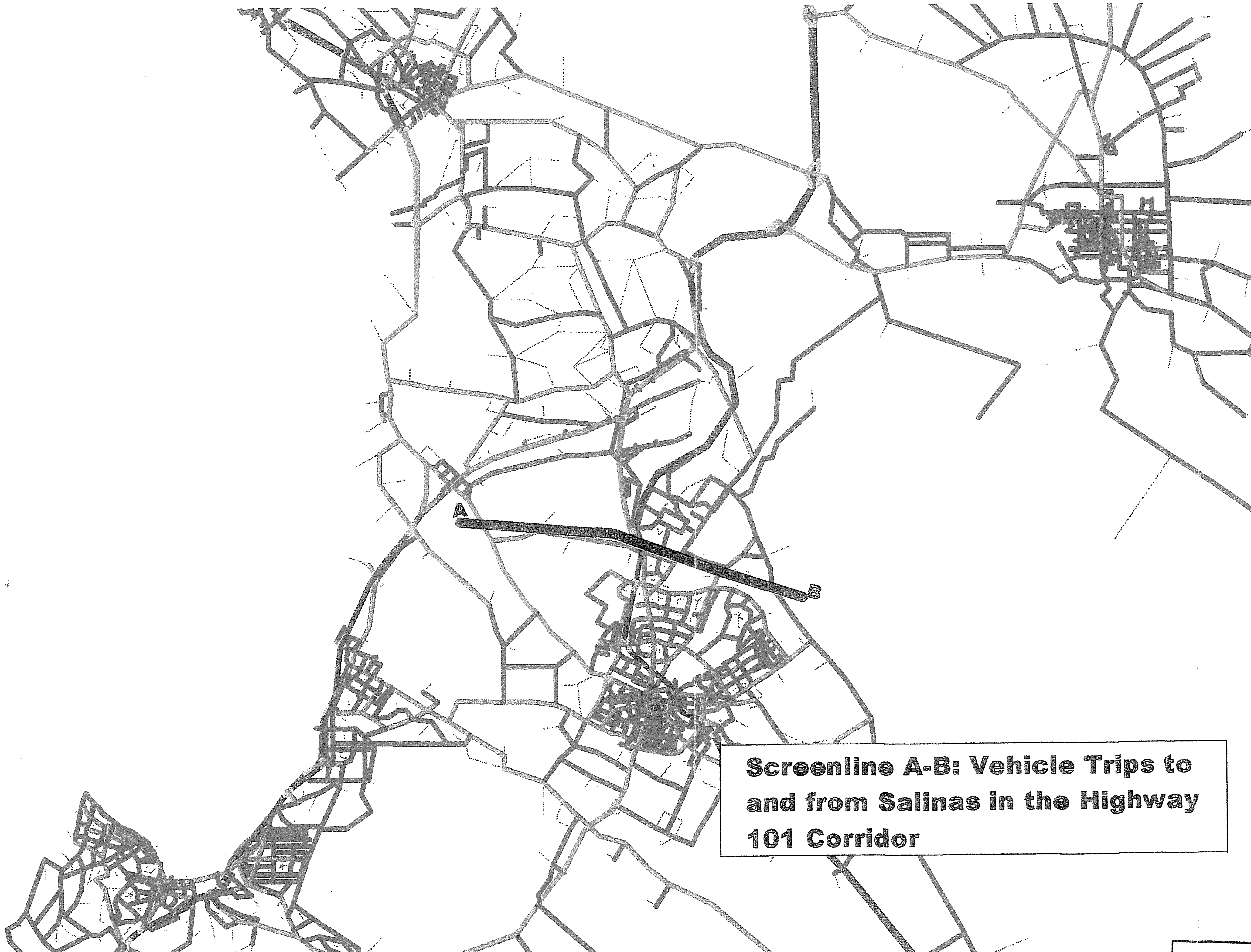
- 9 West Boronda Road
- 10 Future Growth Area 9
- 11 Future Growth Area 10
- 12 Proposed Rancho San Juan Specific Plan Area
- 15 Eastern Bypass Expressway
- 16 Eastern Bypass Arterial Extensions

City Boundary

Growth Area Boundary
(Varies by land use alternative as noted)

Base Map
Salinas General Plan Program

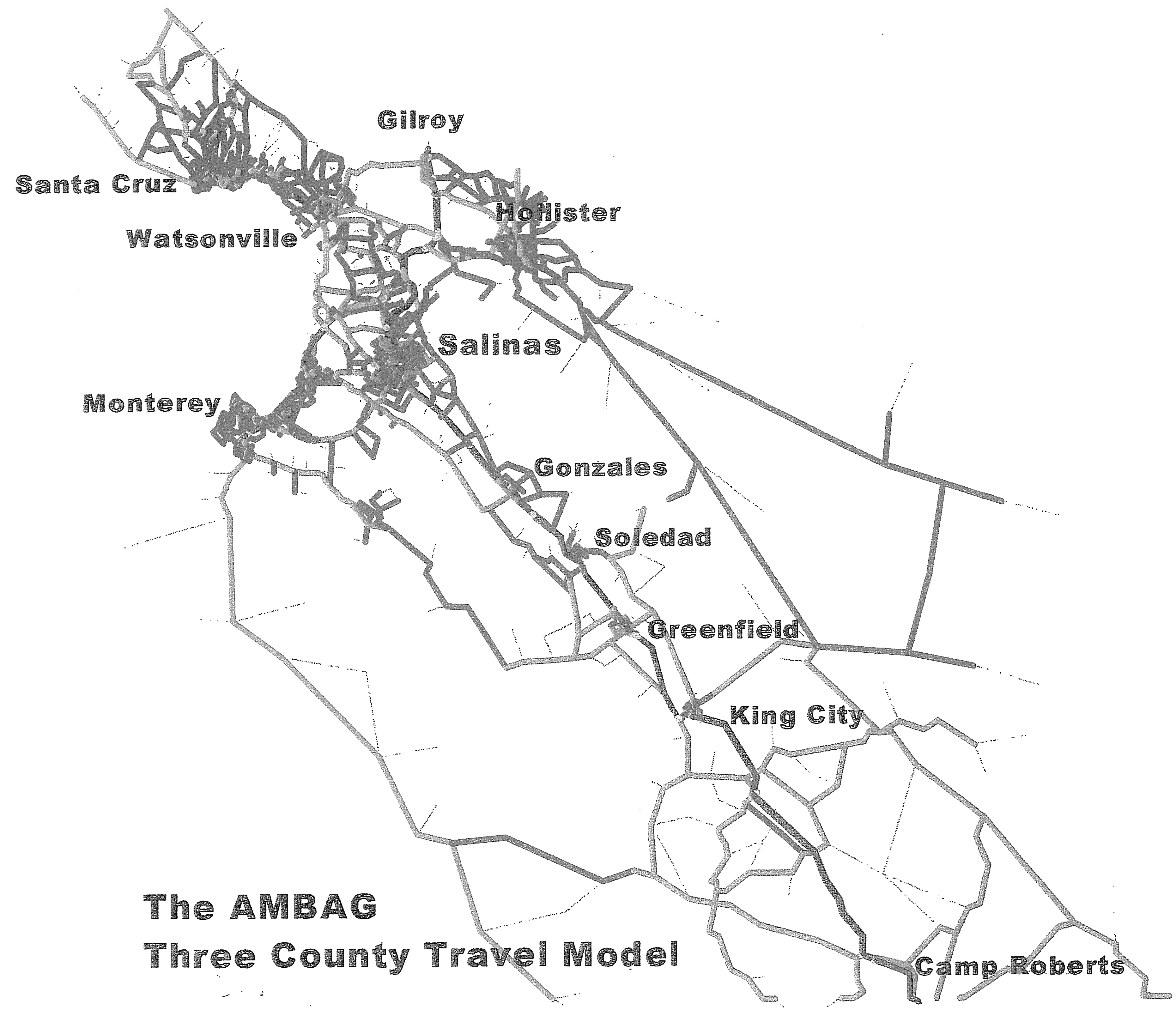
July 3, 2001



Screenline A-B: Vehicle Trips to and from Salinas in the Highway 101 Corridor

Appendix C

Note: For traffic volumes across Screen line A-B, refer to Section III.K.3 - Future Network Alternatives



Appendix B
AMBAG Regional Travel Model Network

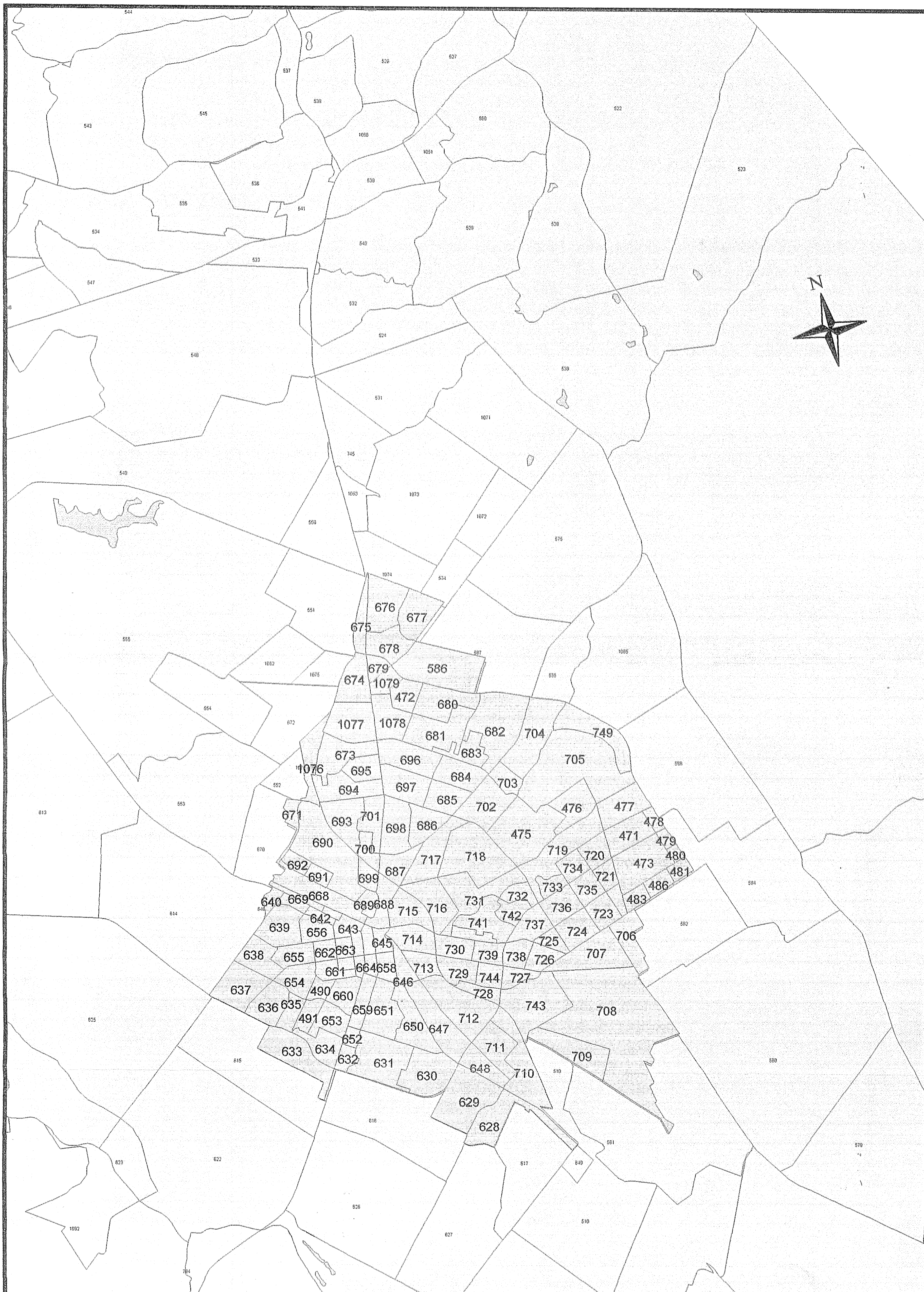


Figure 1 **Traffic Analysis Zones in the City of Salinas**
Year 2000

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TABLE C
Alco Water Service
Projected Annual Water Production Capacity 2000 to 2020

Wells	2000		2001		2002		2003		2004		2005		2010		2015		2020	
	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM
Alisal High	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00
Alma	210.24	400.00	210.24	400.00	210.24	400.00	210.24	400.00	210.24	400.00	210.24	400.00	210.24	400.00	210.24	400.00	210.24	400.00
Boronda	788.40	1500.00	788.40	1500.00	788.40	1500.00	788.40	1500.00	788.40	1500.00	788.40	1500.00	788.40	1500.00	788.40	1500.00	788.40	1500.00
County	1314.00	2500.00	1314.00	2500.00	1314.00	2500.00	1314.00	2500.00	1314.00	2500.00	1314.00	2500.00	1314.00	2500.00	1314.00	2500.00	1314.00	2500.00
Kilbreth	-	-	1103.76	2100.00	1103.76	2100.00	1103.76	2100.00	1103.76	2100.00	1103.76	2100.00	1103.76	2100.00	1103.76	2100.00	1103.76	2100.00
Las Casitas	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00	1156.32	2200.00
Laurel Heights	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00
Nogal	1051.20	2000.00	1051.20	2000.00	1051.20	2000.00	1051.20	2000.00	1051.20	2000.00	1051.20	2000.00	1051.20	2000.00	1051.20	2000.00	1051.20	2000.00
Santana	535.06	1018.00	535.06	1018.00	535.06	1018.00	535.06	1018.00	535.06	1018.00	535.06	1018.00	535.06	1018.00	535.06	1018.00	535.06	1018.00
MV #1 *	-	-	-	-	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00
MV #2 *	-	-	-	-	-	-	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00
MV#3 *	-	-	-	-	-	-	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00
MV#4 *	-	-	-	-	-	-	-	-	-	-	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00
WR #2 *	-	-	-	-	-	-	-	-	1103.76	2100.00	1103.76	2100.00	1103.76	2100.00	1103.76	2100.00	1103.76	2100.00
WR #3 *	-	-	-	-	-	-	-	-	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00	525.60	1000.00
Hibino *	-	-	-	-	-	-	-	-	-	-	1314.00	2500.00	1314.00	2500.00	1314.00	2500.00	1314.00	2500.00
Totals	6737.14	12818.00	7840.90	14918.00	8366.50	15918.00	9417.70	17918.00	11047.06	21018.00	12886.66	24518.00	12886.66	24518.00	12886.66	24518.00	12886.66	24518.00

* These are the projected wells to meet growth demand.

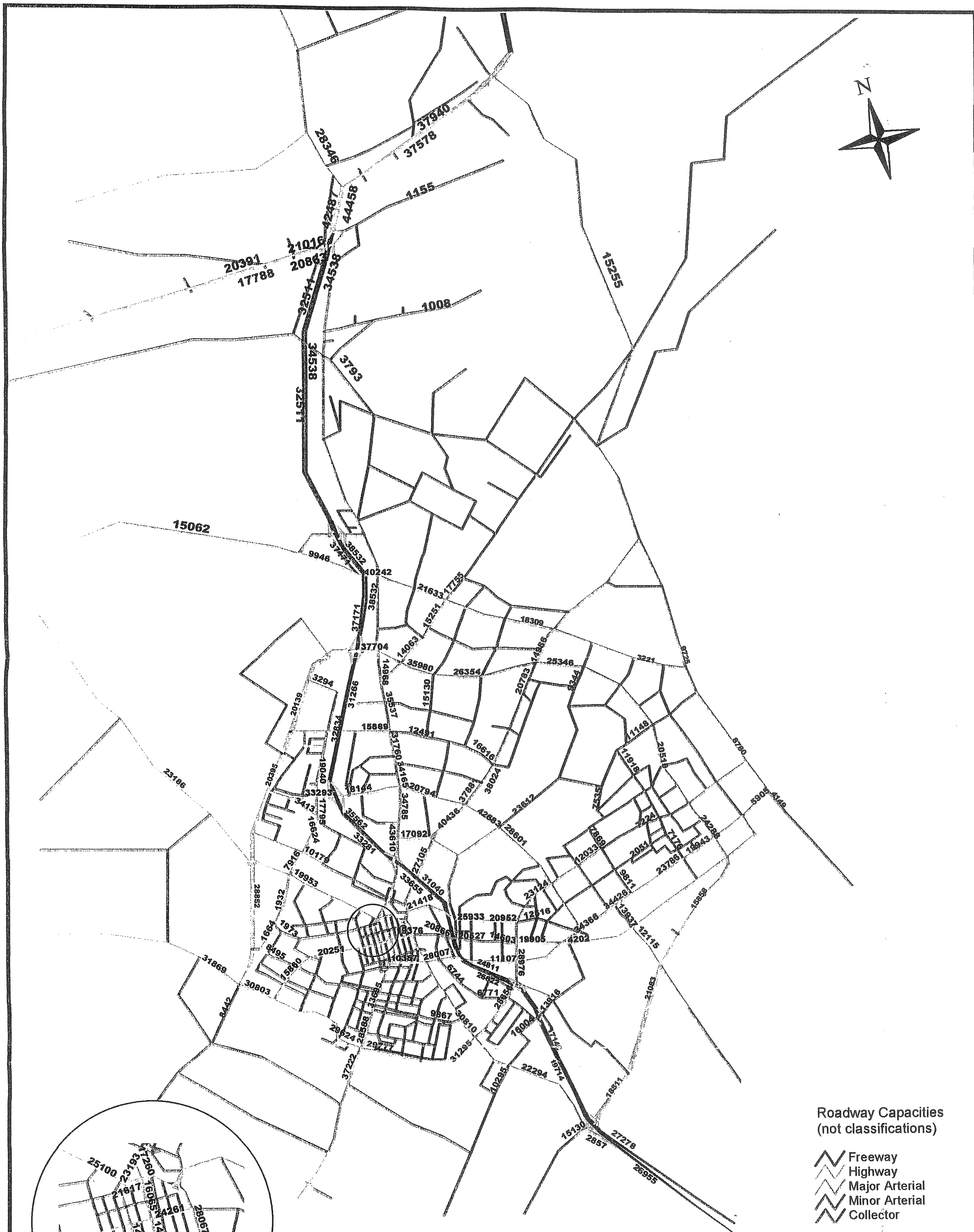

FIGURE 7

ADT Volumes under General Plan Buildout with the 210 Roadway Improvements Scenario

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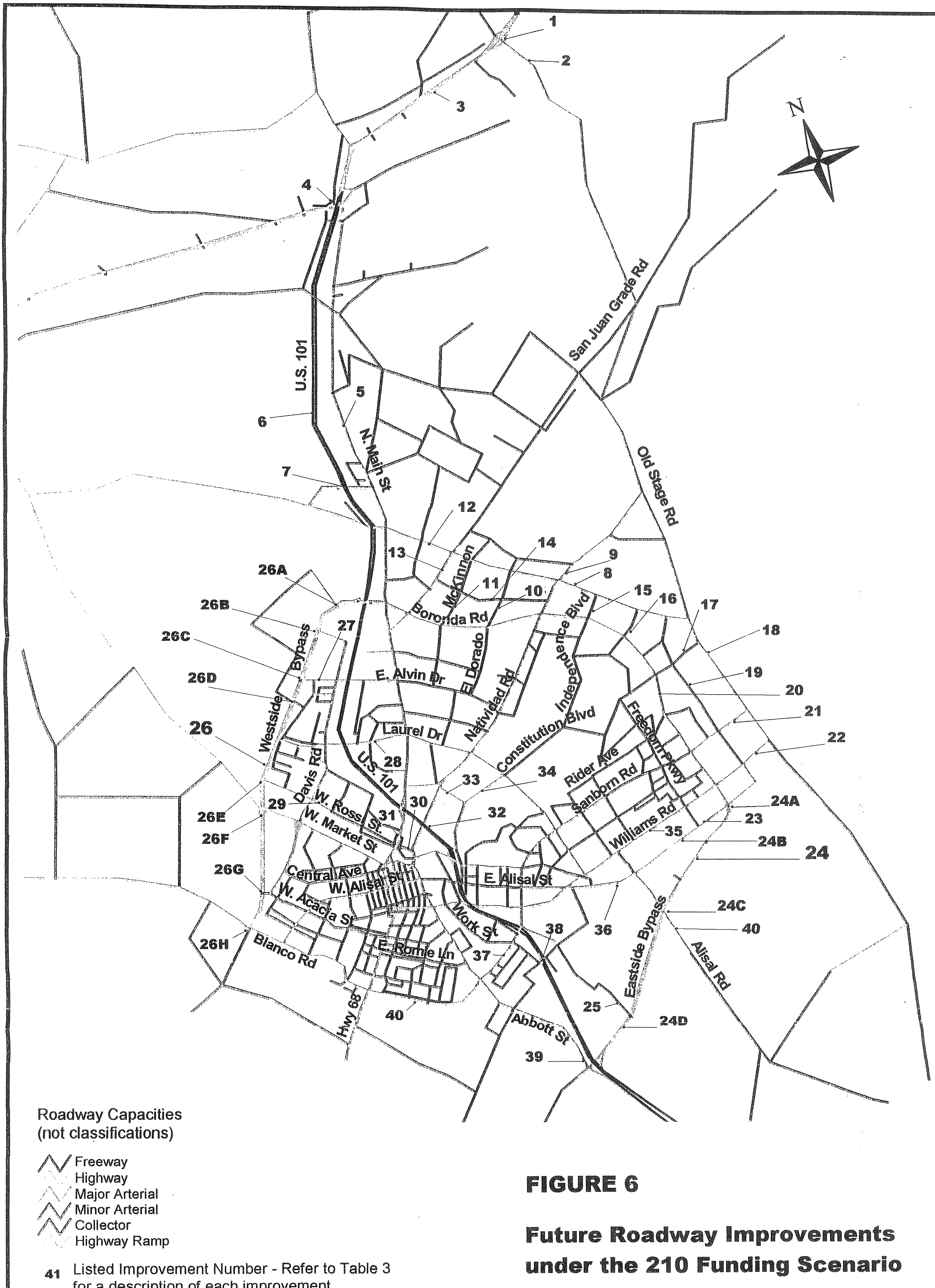

FIGURE 6

Future Roadway Improvements under the 210 Funding Scenario

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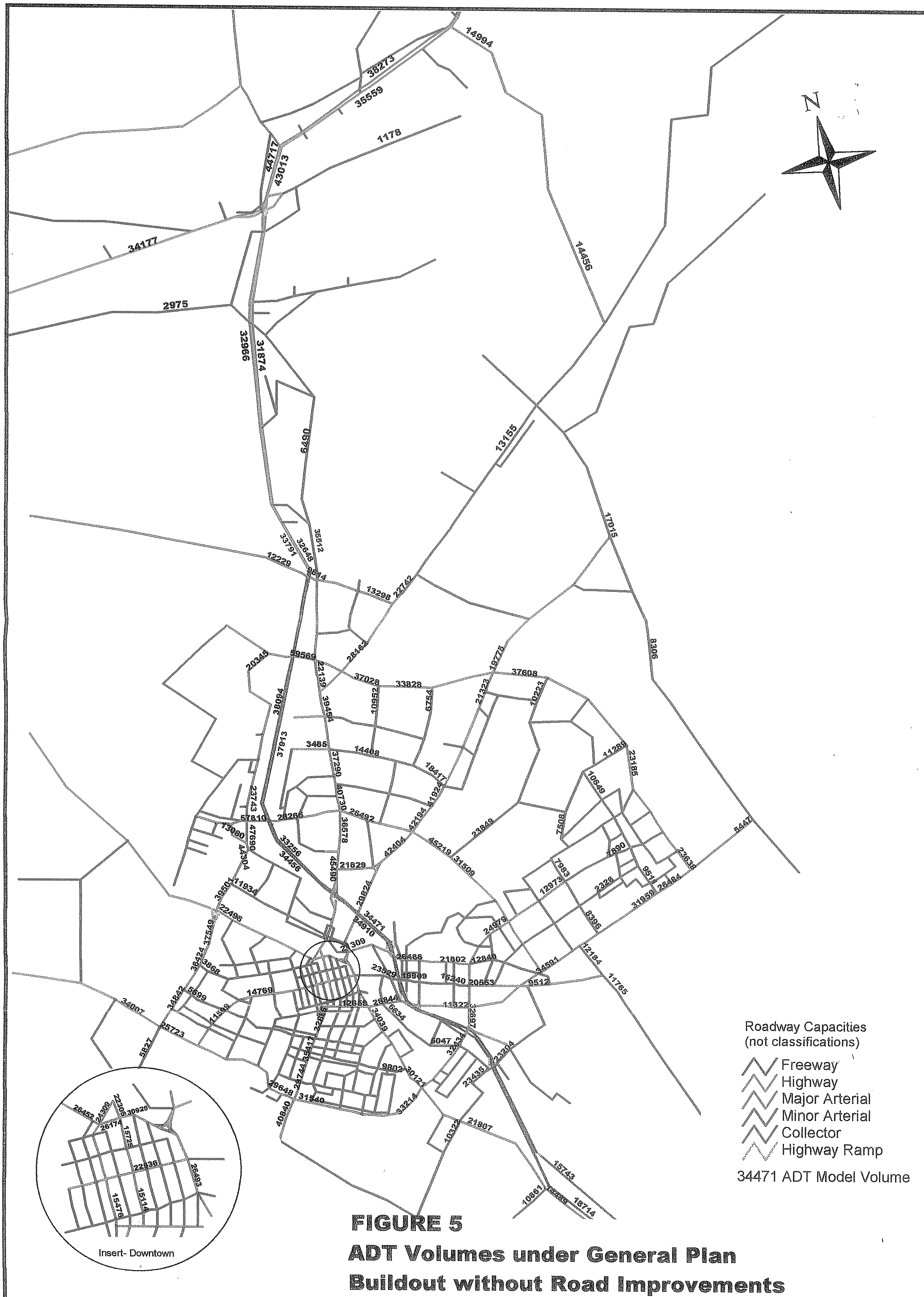

FIGURE 5

ADT Volumes under General Plan Buildout without Road Improvements

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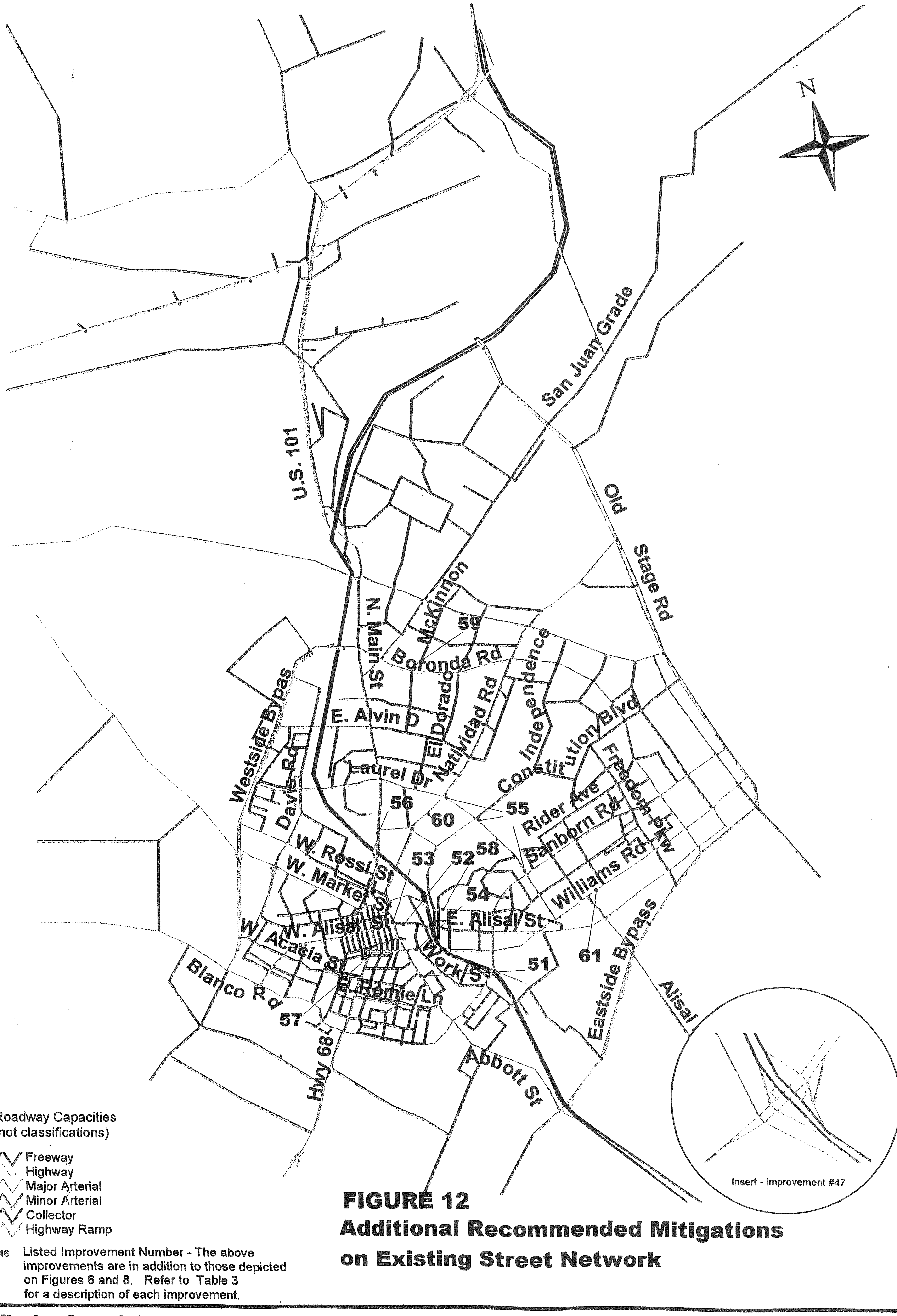

Roadway Capacities
(not classifications)

- Freeway
- Highway
- Major Arterial
- Minor Arterial
- Collector
- Highway Ramp

46 Listed Improvement Number - The above improvements are in addition to those depicted on Figures 6 and 8. Refer to Table 3 for a description of each improvement.

FIGURE 12
Additional Recommended Mitigations on Existing Street Network

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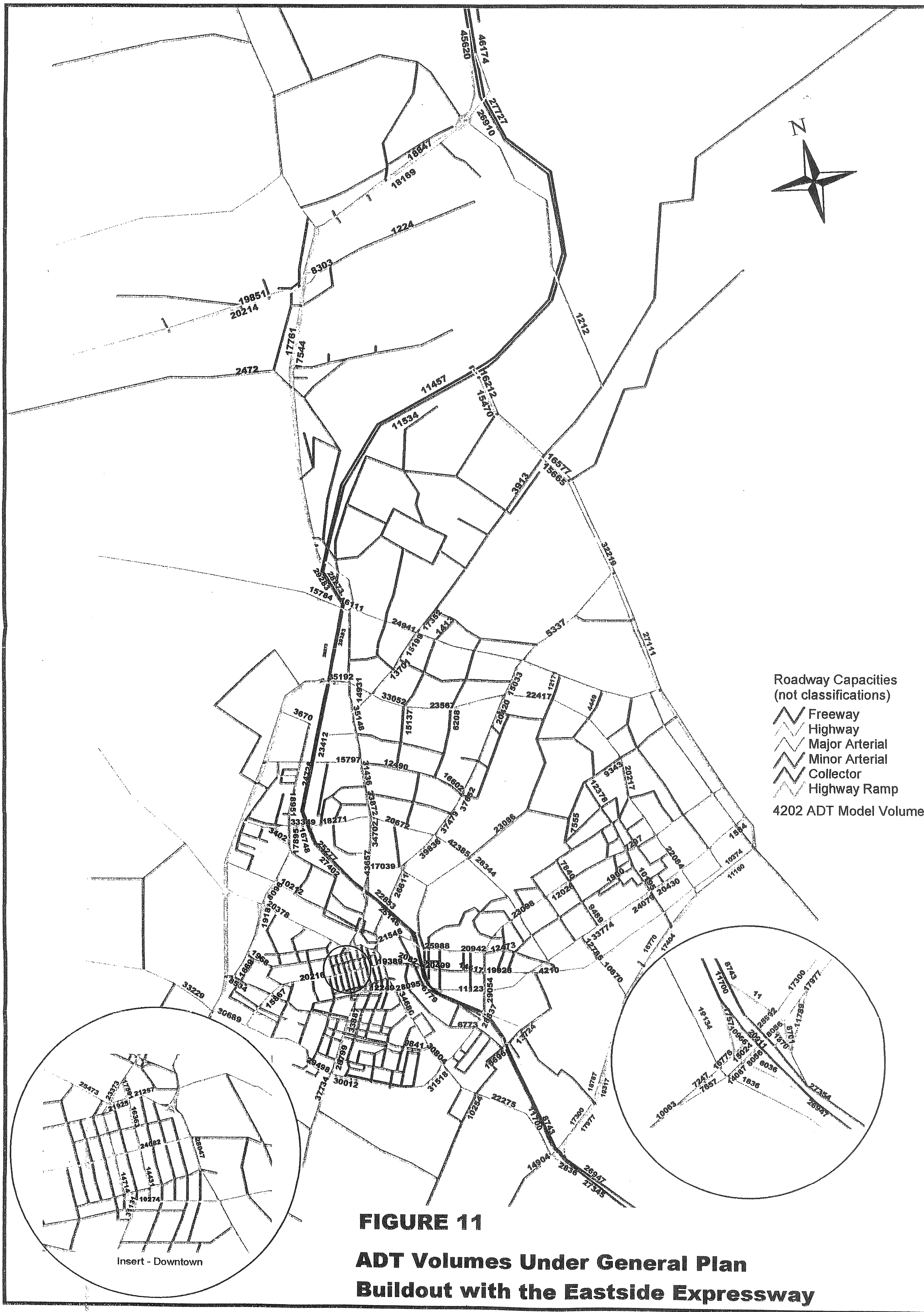

FIGURE 11

ADT Volumes Under General Plan Buildout with the Eastside Expressway

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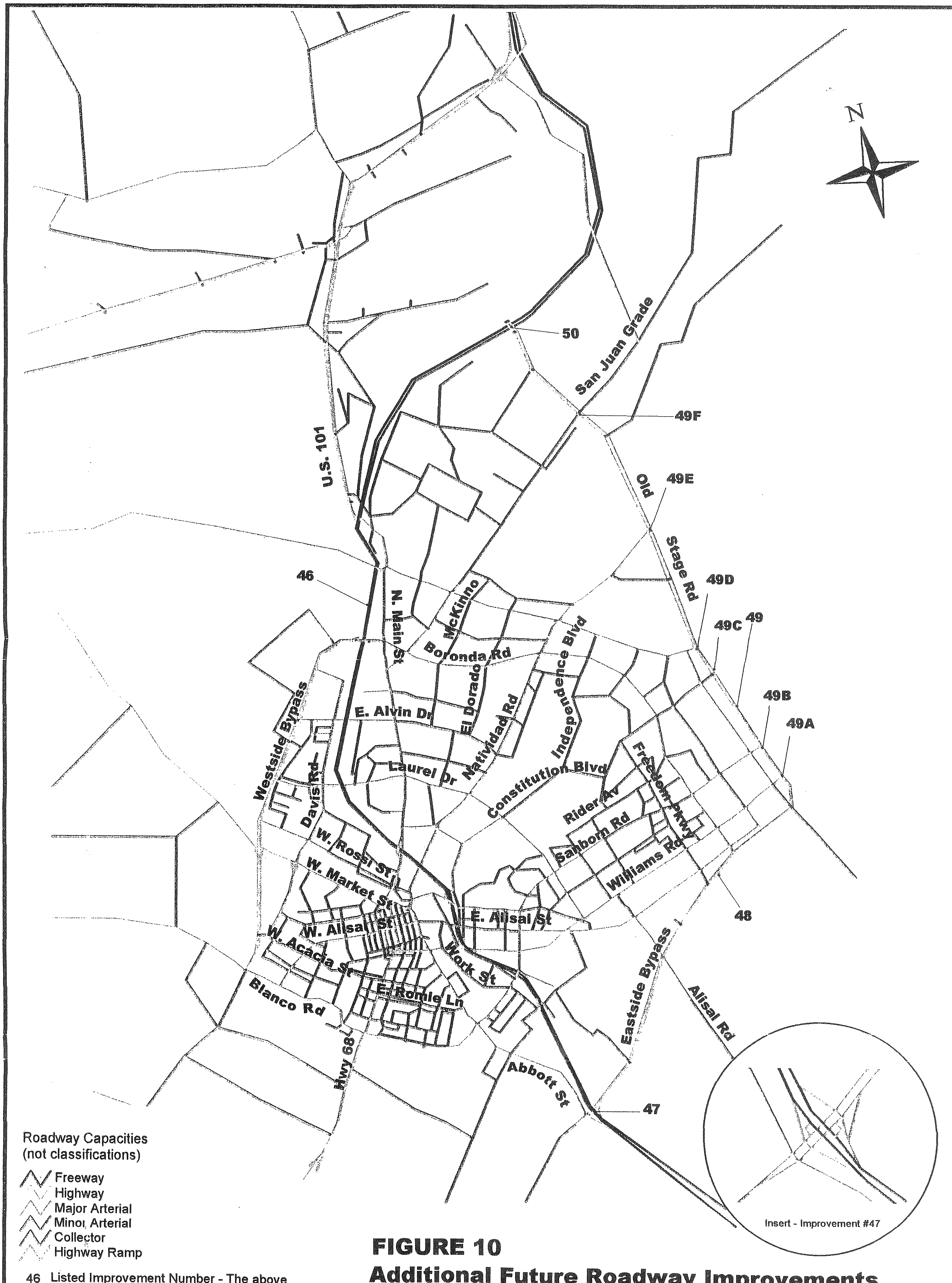

46 Listed Improvement Number - The above improvements are in addition to those depicted on Figures 6 and 8. Refer to Table 3 for a description of each improvement.

FIGURE 10
Additional Future Roadway Improvements under the Eastside Expressway Scenario

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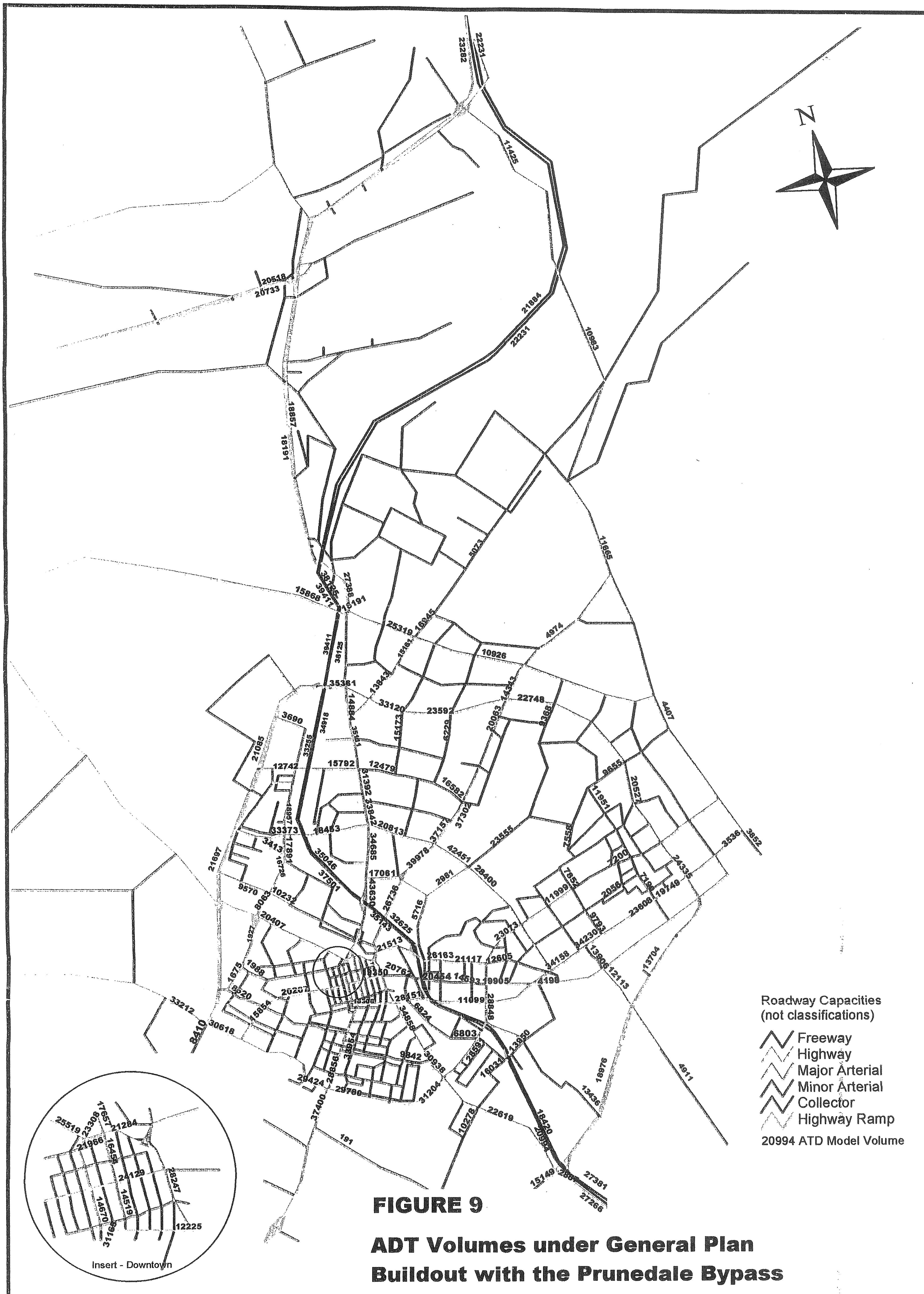

FIGURE 9

ADT Volumes under General Plan Buildout with the Prunedale Bypass

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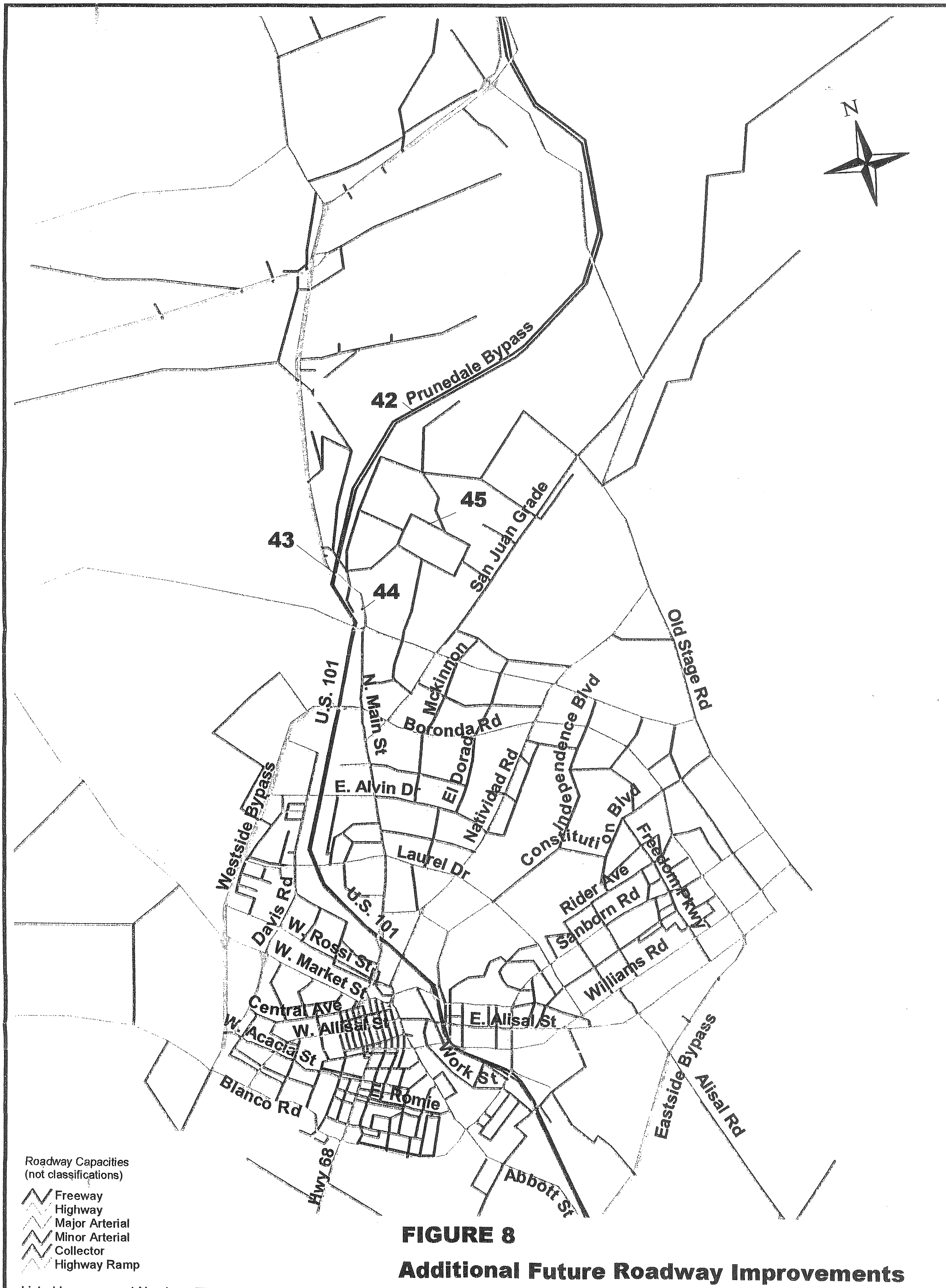

Listed Improvement Number - The above improvements are in addition to those depicted on Figure 6. Refer to Table 3 for a description of each improvement.

FIGURE 8

Additional Future Roadway Improvements under the Prunedale Bypass Scenario

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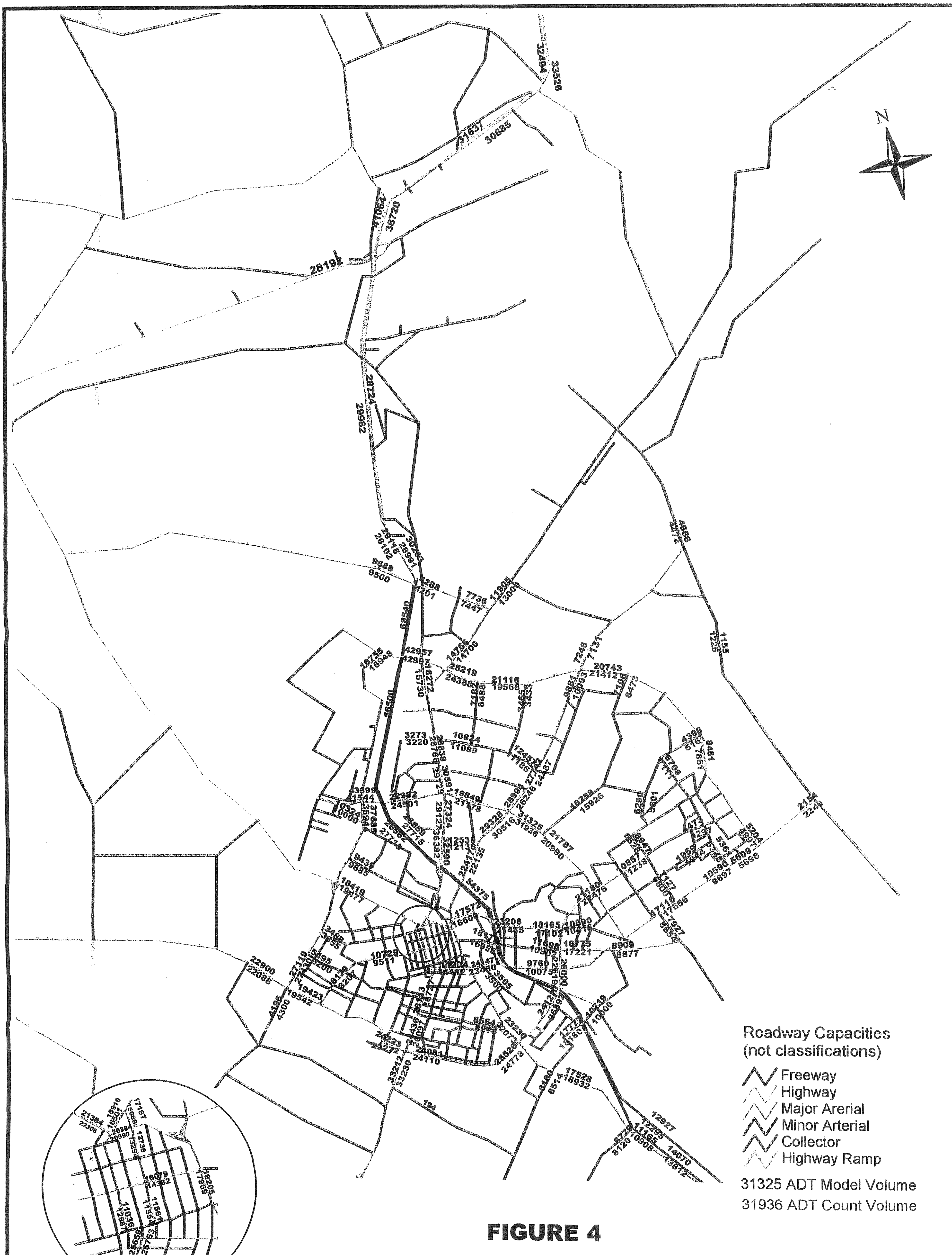

FIGURE 4

Existing (2000) ADT Volumes Based on Traffic Counts and Model Validation

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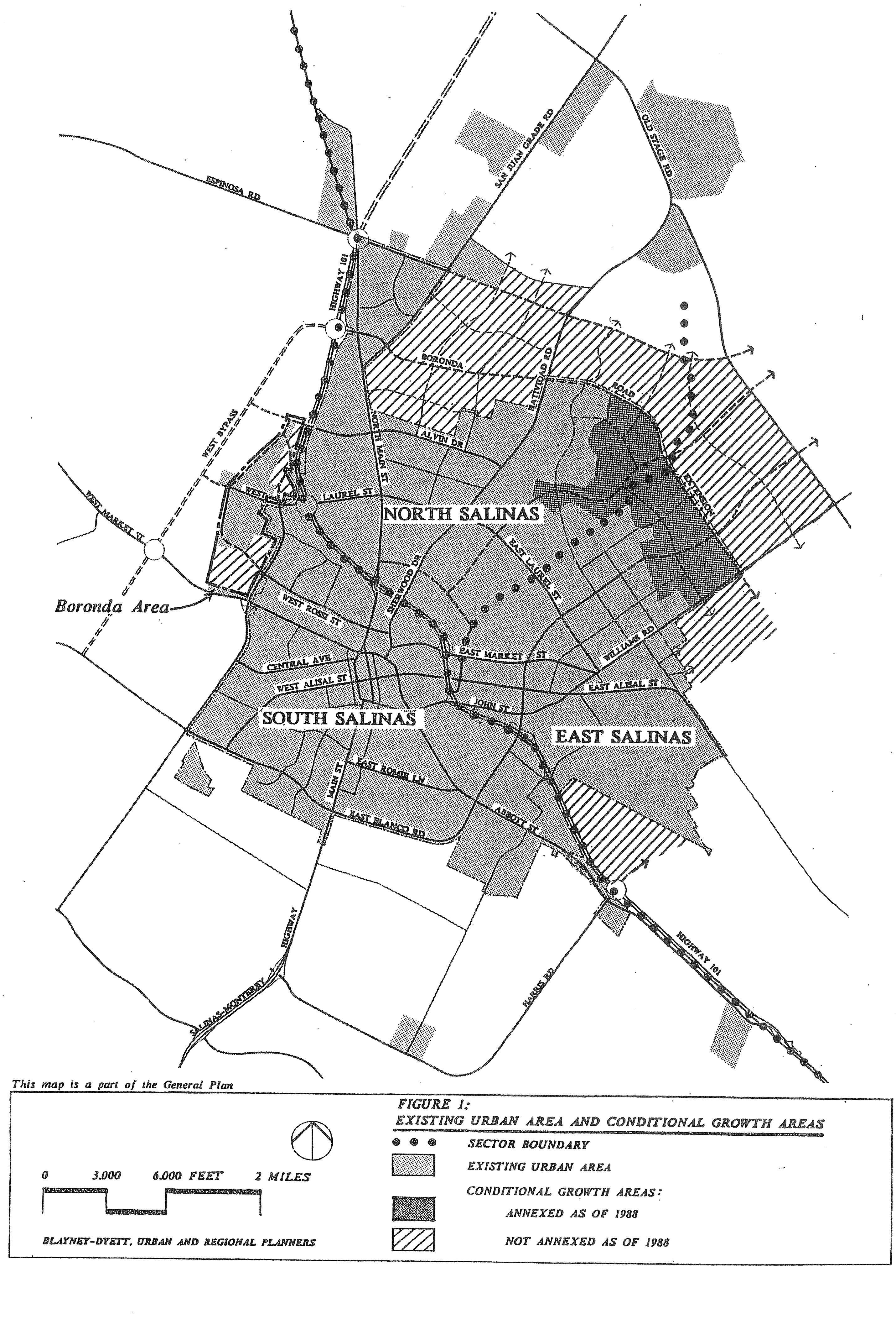


Source: Salinas General Plan, 1988

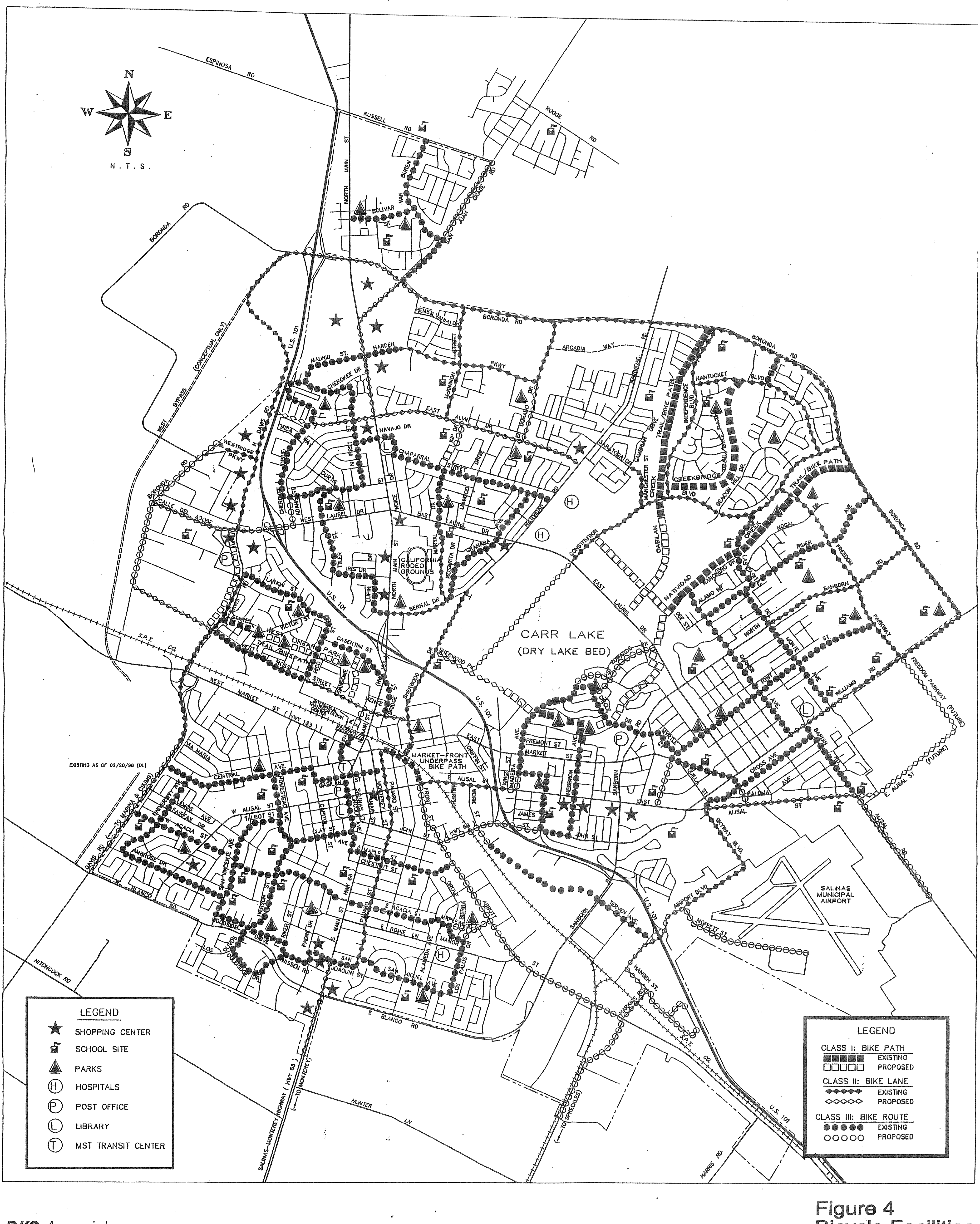
FIGURE 3

Conditional Growth Areas

Source:
California State
Automobile
Association, 1999

FIGURE 2

Existing Salinas Street Map



DKS *Associates*

Figure 4
Bicycle Facilities

Appendix D:
Biological Resources Report

BIOLOGICAL RESOURCES

INTRODUCTION

The City of Salinas General Plan project area is located in the mid portion of Monterey County. The project area is situated both north and south of Highway 101. The project area includes areas currently part of the City as well as proposed growth expansion areas. To date, land uses for these expansion areas have not been identified.

Kathleen Lyons (plant ecologist) and Dana Bland (wildlife biologist) conducted a reconnaissance-level assessment of the biotic resources of the General Plan project area in August 2001.

Specific tasks conducted for this study include:

- Characterize the major plant communities within the project area;
- Identify sensitive biotic resources, including plant and wildlife species of concern, within the project area, and
- Evaluate the City's General Plan Goals and Policies in avoiding potential effects of the proposed development on sensitive biotic resources and recommend additional measures, if necessary, to avoid or reduce such impacts to a level of less-than-significant.

METHODOLOGY

The biotic resources of the Salinas General Plan project area were assessed through literature review and reconnaissance-level field observations. The major plant communities within the undeveloped portions of the project area, based on the classification system developed in Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986), were identified during the field reconnaissance visit. The general conditions of the habitats on the site were recorded and all species observed were recorded in a field notebook. Areas were viewed from public roads and binoculars were used to aid in observations.

To assess the potential occurrence of special status biotic resources, two electronic databases were accessed to determine recorded occurrences of sensitive plant communities and sensitive species. Information was obtained from the California Native Plant Society's (CNPS) Electronic Inventory (CNPS, 2000), and California Department of Fish & Game's (CDFG) RareFind 2 database (CDFG, 2001) for the greater Salinas area.

Kathleen Lyons (plant ecologist) and Dana Bland (wildlife biologist) conducted a reconnaissance-level assessment of the biotic resources of the project area on August 16,

2001. The project area is a mixture of retail, commercial, residential, agricultural and undeveloped land uses.

This section summarizes the findings of the reconnaissance-level biotic assessment. The potential impacts of the proposed general plan alternatives on sensitive biotic resources are discussed below *(Note: this section not included in initial draft)*. Measures to reduce significant impacts to a level of insignificance are recommended, as applicable *(Note: this section not included in initial draft)*.

ENVIRONMENTAL CONDITIONS

The project study area lies within and immediately adjacent to the city of Salinas. The project study area is depicted on Figure 1. The habitat types of the undeveloped parcels within the project area include riparian woodland, in-stream and seasonal wetlands, grassland, and oak woodland. Previously disturbed and/or developed areas support non-native landscape trees, row crop agricultural, orchards, and barren areas; rural residential land uses and commercial/industrial areas also occur within the study area. The distribution of the habitat types within the undeveloped portions of the project area is depicted on Figure 1, Plant Community Map.

Riparian Woodland

The riparian woodland in the project area occurs along the myriad of watercourses that traverse through both the developed and undeveloped portions on the study area. The two major watercourses are Gabilan Creek and Natividad Creek. The main stem of these two creeks traverse the developed portion of the City; a portion of their tributaries traverse agricultural lands and grasslands in the northeastern portion of the project area (proposed growth expansion areas). The northern portion of the study area supports several tributaries to Alisal and Tembladero Sloughs. These tributaries traverse agricultural lands and some urban areas. Alisal Slough occurs in the southern portion of project area.

Native trees and shrubs dominate the riparian woodlands within the project area. As depicted on Figure 1, many of the watercourses within the project area support riparian woodland vegetation. The principal plant species are cottonwood (Populus sp.), willows (*Salix* sp.), box elder (*Acer negundo*) and coast live oak (*Quercus agrifolia*). Associated understory plants include California blackberry (*Rubus ursinus*), poison hemlock (*Conium maculatum*) and young willows. The areas adjacent to the low-flow channel can be dominated by wetland vegetation. Typical vegetation includes rabbitsfoot grass (*Polypogon monspeliensis),* umbrella sedge (*Cyperus eragrostis),* rush (*Juncus* sp.), watercress (*Rorippa aquaticum)* and willow herb (*Epilobium ciliatum)*.

Wildlife Resources of Willow Riparian. The riparian habitat is one of the highest value habitats for wildlife species diversity and abundance in California. Factors which contribute to the high wildlife value include the presence of surface water, the variety of niches provided by the high structural complexity of the habitat, and the abundance of plant growth. Riparian habitat within the Salinas General Plan area may be used by a diversity of wildlife species for food, water, escape cover, nesting, migration and dispersal corridors, and thermal cover. The value of riparian areas to wildlife is underscored by the limited amount of remaining habitat which has not been disturbed or substantially altered by flood control projects, agriculture, and urbanization.

Common wildlife species that are expected to inhabit the riparian habitat within the Salinas General Plan area include Pacific treefrog *(Hyla regilla),* bullfrog (*Rana catesbeiana*), western aquatic garter snake (*Thamnophis couchii*), Wilson's warbler *(Wilsonia pusilla),* Bewick's wren (*Thryomanes bewickii*), green heron (*Butorides striatus*), tree swallow (*Tachycineta bicolor*), red-shouldered hawk (*Buteo lineatus*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), and California myotis (*Myotis californicus*).

Special status wildlife species that may inhabit the riparian area along the Salinas General Plan area include steelhead (*Oncorhynchus mykiss*), California red-legged frog (*Rana aurora draytonii*), southwestern pond turtle (*Clemmys marmorata pallida*), Cooper's hawk (*Accipiter cooperii*), yellow warbler (*Dendroica petechia brewsteri*), yellow-breasted chat (*Icteria virens*), pallid bat (*Antrozous pallidus pacificus*), and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*). Several other species of neotropical migrant birds (protected under the Migratory Bird Treaty Act) also may use these riparian habitats during spring and fall migrations.

In-Stream Wetlands and Seasonal Wetlands

Where riparian woodland vegetation is absent along the watercourses, in-stream wetlands are often found. These wetlands occur in the bottom of channelized watercourses within the project area, such as the lower portions of Gabilan Creek and portions of Alisal Slough. In many areas where a widened earthen channel has been created, the channel supports a dense growth of umbrella sedge (*Cyperus eragrostis)*, bull rush (*Scirpus* sp.), and cattail (*Typha* sp.).

Seasonal wetlands also occur in several depressions within grasslands, and possibly in other undeveloped lands within the project area. These depressions may be seasonally wet and support plant species adapted to such conditions, such as pennyroyal (*Mentha pulegium*), rabbitsfoot grass (*Polypogon monspessulanus*) and curly dock (*Rumex crispus*).

Wetland habitats provide important foraging and breeding areas for a variety of wildlife species. The presence of wetland plants such as cattails and bull rush increases the wildlife value by providing cover, breeding sites and a food base for a diversified aquatic invertebrate fauna, which form a link in many food webs. Special status wildlife species that may occur in wetland habitat in the Project area include California tiger salamander, California red-legged frog, southwestern pond turtle, and tricolored blackbird.

Grassland

Parcels of non-native grassland are scattered throughout the project area. The grasslands are dominated by annual and perennial non-native plant species, including wild oat (*Avena sativa)*, Italian ryegrass (*Lolium multiflorum)*, field bindweed (*Convolulus arvensis)*, yellow star thistle (*Centaurea solstitialis)*, English plantain (*Plantago lanceolata)* and black mustard (*Brassica nigra)*. Grasslands in the project area may also support native plant species, including special status species, yet due to property access limitations these areas were not surveyed to ascertain presence or absence.

Ruderal (or weedy) areas within the project area occur adjacent to the existing roadways. Non-native grasses and forbs dominate these areas. The dominant plant species were Italian ryegrass, prickly sow thistle (*Sonchus asper)*, common plantain (*Plantago lanceolata)*, bristly ox-tongue (*Picris echioides),* field mustard, field bindweed, stinging nettle (*Urtica dioica)* and Italian thistle (*Carduus pynocephalus*).

Grasslands also occur along the upper banks and terraces of the seasonal drainage ditches.

Wildlife Resources of Grasslands. Grasslands provide an important foraging resource for a wide variety of wildlife species. The grasses and forbs produce an abundance of seeds and attract numerous insects, providing food for granivorous and insectivorous wildlife. Sparrows, rabbits and rodents are commonly found in this habitat. Consequently, grasslands are valuable foraging sites for raptors such as hawks and owls, and other predators including coyote, fox, skunk and snakes. Aerial foraging species that occur over grasslands include bats and swallows.

Common wildlife species expected to inhabit and/or utilize the grasslands for foraging within the Salinas General Plan area include western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis melanoleucus*), house finch (*Carpodacus mexicanus*), American goldfinch (*Carduelis tristis*), western meadowlark (*Sturnella neglecta*), American robin (*Turdus migratorius*), cliff swallow (*Hirundo pyrrhonota*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), barn owl (*Tyto alba*), California ground squirrel (*Spermophilus beecheyi*), black-tailed jackrabbit (*Lepus californicus*), Botta's pocket gopher (*Thomomys bottae*), California vole (*Microtus californicus*), coyote (*Canis latrans*), and several species of bats.

Special status wildlife species that may inhabit grasslands in the Salinas General Plan area include California tiger salamander (*Ambystoma californiense*), western burrowing owl (*Athene cunicularia hypugea*), and northern harrier (*Circus cyaneus*). Several special status raptors may forage over the grasslands, including northern harrier and white-tailed kite (*Elanus leucurus*).

Oak Woodland Habitat

The oak woodland habitat in the project area is limited to a grove along Williams Road and a grove along San Juan Road (Figure 1). Native coast live oaks dominate these woodland areas. The understory is comprised of grasses and forbs (i.e., non-grass herbaceous plants) and some shrubs, such as poison oak (*Toxicodendron diversilobum)*.

Wildlife Resources of Oak Woodlands. There are only remnant oak woodlands within the Salinas General Plan area, all surrounded by agricultural and/or rural residential uses. Although large tracts of oak woodland do provide high value habitat for wildlife, the small fragments of remaining oak woodland in the Salinas area, and the adjacent intensive agricultural uses reduce the overall value of this habitat type for native wildlife in the plan area. Acorns from oaks provide an important food resource for many wildlife species, and natural cavities in the oaks provide nesting opportunities for some birds and mammals. Snags are an important component of oak woodlands to some wildlife such as woodpeckers, which excavate nests in snags and holes for storing acorns. Downed decaying logs and limbs add to the structural complexity of the habitat, and are important cover, nesting, roosting, and foraging substrate for some species.

Common wildlife species expected to occur in oak woodlands within the Salinas General Plan area include California slender salamander (*Batrachoseps attenuatus*), scrub jay (*Aphelocoma coerulescens*), California quail (*Callipepla californica*), red-tailed hawk (*Buteo jamaicensis*), several species of bats, western gray squirrel (*Sciurus griseus*), and black-tailed deer (*Odocoileus hemionus*).

Special status wildlife species that may inhabit oak woodland in the Salinas General Plan area include white-tailed kite (*Elanus leucurus*) and Cooper's hawk (*Accipiter cooperii*).

Agricultural Fields and Landscape Trees

The agricultural lands are primarily row crops, however some orchards and other crops were observed during the August field reconnaissance. The rural residential areas support numerous landscape and orchard trees. Trees observed along the roadways include blue gum eucalyptus (*Eucalyptus globulus*), various *Prunus* sp., remnant native coast live oaks and other various landscape trees and shrubs.

Wildlife Resources of Landscaping. Wildlife use of the landscaping plants is expected to be low because many are non-native plants not frequented by native wildlife species, and most are only single shrubs or trees interspersed among an otherwise urbanized and developed area providing little vegetative cover for wildlife. Urban adapted species such as scrub jay (*Aphelocoma coerulescens*) and European starling (*Sturnus vulgaris*) may use the landscaped areas as perches, and these as well as other birds may occasionally forage on berries or nectar of some plants.

Wildlife Resources of Agriculture Fields. The agricultural lands in the Salinas General Plan area provide limited habitat for native wildlife. The disking of the soil for row crops reduces habitat for ground burrowing animals and the application of pesticides may reduce the invertebrate fauna that several types of wildlife depend upon for forage. Agricultural fields also often attract non-native wildlife such as European starling

(*Sturnus vulgaris*), Norway rat (*Rattus norvegicus*), and feral pigs (*Sus scrofa*), which compete with native wildlife for habitat and food resources. Probably the most valuable aspect of the agricultural lands for native wildlife is the open space to allow unobstructed movement of wildlife between other natural features such as Gabilan and Natividad Creeks.

SENSITIVE BIOTIC RESOURCES

Sensitive Habitats

Sensitive habitats are defined by local, State, or Federal agencies as those habitats that support special status species, provide important habitat value for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity. The habitats meeting these criteria in the project area are: the riparian woodland; in-stream wetlands; seasonal wetlands; and oak woodland.

A delineation of Water's of the U.S., including wetlands, as per U.S. Army Corps of Engineers (COE) criteria was not conducted for the project area. However, based on the preliminary review of site conditions, the bed and/or side slopes of the intermittent and perennial watercourses may meet the criteria of wetlands; the channel beds of these watercourses are likely "Other Waters". Activities occurring in these locations may be within COE jurisdiction and subject to permitting. Other seasonal wetlands may occur in the undeveloped grassland areas, but these areas were not evident during the August 2001 field review.

Special Status Plant Species

Plant species of concern include those listed by either the Federal or State resource agencies as well as those identified as rare by CNPS (Skinner and Pavlik 1994). The search of the CNPS and CNDDB inventories for the area resulted in seven special status plant species of concern known, or with potential, to occur within the project area (Table 1).

Table 1. Special Status Plant Species with Potential to Occur in Vicinity of the City of Salinas General plan Project Area

Species	Status	Habitat Requirements	Known or Potential Habitat within Project Area?
Congdon's tarplant (*Centromadia parryi* ssp. *congdonii)*	Federal: None State: None CNPS: List 1B	Valley and foothill grasslands, including non-native grasslands	Yes; Known occurrences in grasslands within and adjacent to project area; grasslands within the proposed expansion areas provide suitable habitat
Contra Costa goldfields (*Lasthenia conjugens)*	Federal: Endangered State: None CNPS: List 1B	Mesic grasslands	Not recorded, but potential habitat within grasslands; species known from lands SW of Salinas
Pinnacles buckwheat (*Eriogonum nortonii)*	Federal: None State: None CNPS: List 1B	Chaparral and valley/foothill grasslands; known occurrence on Fremont Peak	Not recorded from area; rocky grasslands may provide suitable habitat
Alkali milk-vetch (*Astragalus tener* var. *tener*)	Federal: None State: None CNPS: List 1B	Mesic grasslands	Not recorded, but potential habitat within grasslands; historic occurrence 1 mile NE of Salinas
Santa Cruz clover (*Trifolium buckwestiorum*)	Federal: Endangered State: None CNPS: List 1B	Mesic grasslands	Not recorded, but potential habitat within grasslands; species known from lands SW of Salinas
Hutchinson's larkspur (*Delphinium hutchinsoniae*)	Federal: Endangered State: None CNPS: List 1B	Grasslands and oak woodlands	Not recorded, but potential habitat within grasslands and oak woodlands; historic occurrence near Spreckels
Kellogg's horkelia (*Horkelia cuneata* ssp. *sericea*)	Federal: Endangered State: None CNPS: List 1B	Grasslands and oak woodlands	Not recorded, but potential habitat within grasslands and oak woodlands; known from Ft. Ord lands.

Special Status Wildlife species

Special status wildlife species are those that are listed as threatened or endangered by state or federal agencies, those proposed for listing, candidates for listing, as well as those species listed as Species of Special Concern by state and federal agencies due to declining numbers and/or habitat. The species with potential to occur in the project area was developed from occurrences listed in the Natural Diversity Data Base (CDFG 2001), from a general knowledge of special status species usually associated with the habitats present within the plan area, from consultation with resource agencies, and from previous wildlife surveys conducted within the plan area. Each species is briefly described below.

The following special status wildlife species were evaluated for possible occurrence within the Salinas General Plan area, but are considered unlikely to occur there because the area lacks suitable habitat: western spadefoot toad (*Scaphiopus hammondii*), foothill yellow-legged frog (*Rana boylii*), golden eagle (*Aquila chrysaetos*), California horned lark (*Eremophila alpestris actia*), loggerhead shrike (*Lanius ludovicianus*), and San Joaquin kit fox (*Vulpes macrotis mutica*), woodrat (*Neotoma fuscipes annectens*).

Steelhead is a State Species of Special Concern and Federally listed as threatened (South-Central California Coast Evolutionary Significant Unit). Steelhead are anadramous fish, that migrate from the ocean up freshwater creeks and rivers to spawn. The young steelhead typically remain in the freshwater for two years before migrating to the ocean or bay. They typically spend 2-3 years in marine waters before returning to their natal stream to spawn (National Marine Fisheries Service 1997). Steelhead often spawn more than once before they die, and spawning usually occurs between December and June. Eggs are laid in gravels of streams, and take 1.5 to 4 months to hatch. The hatchlings are called alevins and remain in the gravels until their yolk sac is absorbed, at which time they emerge from the gravels as "fry" and begin actively feeding. After 1-4 years, the steelhead migrate to the ocean as "smolts."

Steelhead were found during recent fish surveys of upper Gabilan Creek (Gary Flossy, CDFG, pers. comm.).

The California tiger salamander is a Federal Candidate for listing as endangered and a State species of special concern. This tiger salamander is a permanent resident of annual grasslands, foothill-valley woodlands, and is occasionally found along streams. Adults spend most of the year in mammal burrows in grasslands, coming out at night to forage. The first heavy rains of winter initiate the migration of adults to permanent and temporary ponds, where breeding takes place from December to February (Stebbins 1985). Agricultural and urban development have reduced much of the former habitat of this species. Introduction of non-native fish which prey on the salamander larvae has significantly reduced some local populations.

Harvey & Associates (1997) identified a pond/marsh area along lower Natividad Creek just north of Laurel Drive as potential habitat for this species. Recent aquatic surveys for amphibian larvae found no California tiger salamanders, and numerous predatory non-native fish in the Sunfish family were found (Bryan Mori, pers. comm.). There are no known occurrences of this salamander listed on the CNDDB for the Salinas area (CDFG 2001). The area between Natividad and Gabilan Creeks within the City limits is mostly tilled agricultural fields and residential development; these surrounding land uses and the presence of predatory fish in the pond near Natividad Creek lower the value of this habitat for California tiger salamander (CTS). Areas within the Salinas General Plan area that may still support CTS populations include the oak/grassland with agricultural ponds nearby on the far northeastern side of Salinas and the grassland/seasonal marsh area on the eastern area just west of Old Stage Road.

The California red-legged frog is a State species of special concern and Federally listed as threatened. This species is found in quiet pools along streams, in marshes, and ponds. Red-legged frogs are closely tied to aquatic environments, and favor intermittent streams which include some areas with water at least 0.7 meters deep, a largely intact emergent or shoreline vegetation, and a lack of introduced bullfrogs and non-native fishes. They are generally found on streams having a small drainage area and low gradient (Hayes and Jennings 1988). The red-legged frog occurs west of the Sierra Nevada-Cascade crest and in the Coast Ranges along the entire length of the state. Much of its habitat has undergone significant alterations in recent years, leading to extirpation of many populations. Other factors contributing to its decline include its former exploitation as food, water pollution, and predation and competition by the introduced bullfrog and green sunfish (Moyle 1973, Hayes and Jennings 1988). This species' breeding season spans January to April (Stebbins 1985). Females deposit 1000 to 4000 eggs on submerged vegetation at or near the surface.

There are no known occurrences of California red-legged frog within the General Plan area. Recent surveys for this species on Natividad Creek found a very large population of the predatory bullfrog, but no red-legged frogs (Biotic Resources Group 1998). This native frog is probably extirpated from within the developed Salinas area. This frog may still occur along portions of the Salinas River (David Pereksta, pers. comm.).

The southwestern pond turtle is a Federal and State Species of Special Concern. This aquatic turtle inhabits ponds, lakes, streams, marshes, and other permanent waters located in woodland, grassland, and open forests below 6,000 ft (Stebbins 1985). Pond turtles can often be seen basking in the sun on partially submerged logs, rocks, mats of floating vegetation or mud banks. During cold weather, they hibernate in bottom mud. The diet of these turtles consists of aquatic vegetation, insects, fish, worms, and carrion. Females dig soil nests in or near stream banks, and in open grasslands and disturbed areas near their perennial aquatic habitat (Nussbaum et *al.* 1983, Dr. Jerry Smith, pers. comm.). Eggs are deposited between April and August. One factor in the decline of this species is the introduction of non-native fish that prey on hatchlings and juveniles.

No occurrences of pond turtles are known from the Salinas area. It is possible that this species has been extirpated from the area due to intense agricultural and residential land uses which are incompatible with the nesting requirements of the turtle.

The burrowing owl is a Federal and State Species of Special Concern (breeding population). Burrowing owls use open grassland habitats with low-growing vegetation. They prefer areas interspersed with bare ground, and raised areas used as rest/perch sites. Small mammals and insects are their primary prey. Abandoned burrows, especially of ground squirrels, are used as roost and nest sites. Breeding occurs from March to August, and clutches average 5-6 eggs. Agricultural, industrial, and urban development have resulted in a significant decline of suitable habitat for this species throughout California (Remsen 1978). Programs to control burrowing mammals with poison and burrow destruction have also reduced owl populations (Zarn 1974).

Burrowing owls are known to occur at the Salinas Airport and on the west side of the City near Highway 183 (CDFG 2001).

The white-tailed kite is listed as a fully protected species by the CDFG. This bird usually nests in trees along riparian areas, including Eucalyptus, willows and live oaks, and also occasionally in oak savannah. They prefer nest trees with adjacent open fields for hunting. The male does all the hunting while the female kite incubates the eggs and broods the young. The favored prey of white-tailed kites is voles and mice. Nesting occurs from April through July. During fall and winter, kites form communal roosts (Roberson and Tenney 1993).

This species was observed nesting in the riparian woodland along Natividad Creek (Harvey & Assoc. 1997). They may also nest along portions of Gabilan Creek, and the adjacent grasslands provide foraging habitat.

The northern harrier is a State Species of Special Concern. This bird is an uncommon permanent resident in open grasslands, marshy areas, and edges of estuaries in Monterey County (Roberson and Tenney 1993). Nesting begins in late March with young fledged during June and July. They build nests of sticks and grass on the ground hidden by tall grass or reeds. Harriers hunt a wide variety of prey, including other birds and small mammals. Primary threats to this species include loss of habitat, egg predation by non-native red fox, and poisoning by rodenticides and pesticides (Roberson and Tenney 1993).

Northern harrier may nest in the denser grassland areas within the plan area, and the grassland habitat provides suitable foraging habitat for this species.

Cooper's hawk is an uncommon migrant and winter visitor in San Benito County, and is rare and locally distributed during the breeding season. Migrant and wintering individuals occur in a variety of habitats, including oak woodland, conifer and mixed broadleaf forests, grasslands, residential areas, riparian woodland, and marshes. Breeding pairs favor wooded and forested habitats, but have recently been observed in the well-vegetated suburban habitats of northwestern Santa Clara County and the Willow Glen district of San Jose. Cooper's hawks feed primarily on small birds, but also take small mammals, reptiles, and amphibians. Foraging occurs in both dense cover, and open habitats. Nests are constructed in a variety of trees, but stands of live oaks may be preferred. The nest site is vigorously defended by the adults.

The denser portion of the riparian woodland and the oak woodland habitat within the Salinas General Plan area may provide nesting and foraging habitat for Cooper's hawk, and the grasslands provide foraging habitat.

Merlin is a State Species of Special Concern. This bird is a rare to uncommon spring and fall transient and winter visitor, occurring in California between late September to mid-April (Small 1994). They do not nest in California. Wintering individuals occur in a variety of habitats, including riparian, open woodlands, grasslands and agricultural fields, tidal estuaries, marshes, and developed areas. Merlins prey primarily on small birds, but also take small mammals and insects. Because they prey mostly on birds, merlins may be threatened by the use of pesticides (Remsen 1978).

Merlin may establish winter roosts in the oak woodlands within the plan area, and may forage over the open grassland areas.

Yellow warblers, a State Species of Special Concern, are common during spring and fall migration in central California, and are locally common during the summer breeding season (Roberson and Tenney 1993). Breeding pairs are closely associated with riparian habitat along streams and lakes, and are most numerous where substantial areas of riparian habitat remain along major creeks and rivers. A variety of riparian trees are used during foraging, but habitats with willows and cottonwoods or willows and sycamores, with dense undergrowth, seem to be favored. The yellow warbler's diet consists of spiders and insects, which it gleans from understory vegetation and the canopies of deciduous trees. Nests are constructed low in trees, typically from 2-12 feet above the ground (Harrison 1978), and nesting takes place from April to mid-June. Yellow warblers are much reduced in numbers over much of their California breeding range, largely due to loss of riparian habitat and nest parasitism by the brown-headed cowbird (Remsen 1978).

Yellow warblers may nest in the riparian woodland along Gabilan and Natividad Creeks where the understory is dense.

The yellow-breasted chat, a State Species of Special Concern, was once a fairly common summer resident in riparian woodland throughout California. In central California, yellow-breasted chats appear to prefer dense riparian habitats dominated by willows, sycamores, and cottonwoods, with a well-developed understory, and are considered a riparian obligate species (Roberson and Tenney 1993). They inhabit the area from April to early August (Roberson and Tenney 1993). Yellow-breasted chats forage at various heights in dense riparian foliage, gleaning insects from leaves and bark, and feeding on small fruits. They build their nest in dense vegetation, typically from 1-8 feet above the ground (Harrison 1978, Ehrlich *et al.* 1988). This species' numbers have declined dramatically in many parts of California, primarily due to loss and alteration of riparian habitat, and possibly nest parasitism by brown-headed cowbirds (Remsen 1978).

Yellow-breasted chat may nest in the riparian woodland along Gabilan and Natividad Creeks where the understory is dense.

Tricolored blackbird is a Federal and State Species of Special Concern. This bird is an uncommon local permanent resident in Monterey County (Roberson and Tenney 1993). They inhabit freshwater marshes, stock ponds, and willow thickets. They prefer dense cattails, tules and rushes where they build deep cup nests. They breed in large colonies of 50-100+ pairs, from April to mid-May. During fall and winter, tricolored blackbirds are nomadic and may be observed in pastures, grasslands, cattle pens and marshes throughout the county (Roberson and Tenney 1993). Extensive alteration of the Salinas River floodplain, and drainage of marshes for agriculture and urban development are the main threats to this species (Roberson and Tenney 1993).

It is unlikely that tricolored blackbirds nest within the plan area due to limited marsh areas and surrounding development. However, flocks of tricolored blackbirds may rest and forage in the grasslands within the plan area.

The pallid bat is a State Species of Special Concern. Pallid bats are found in a variety of habitats. This species moves about locally on a seasonal basis, but is not considered to be migratory (Jameson and Peeters 1988). During the day pallid bats roost in buildings, crevices, caves, mines, and hollow trees. Maternity roosts are colonial, while males and feeding bats roost singly. This species is very sensitive to disturbances at roost sites (E. Pierson, pers. comm.). During the night, pallid bats glean moths from leaves and forage on the ground for invertebrates, especially Jerusalem crickets.

Pallid bats may roost in the oak woodland or riparian habitat along the plan area, and may forage along the creeks and nearby grasslands.

Long-eared myotis is a Federal species of concern. This bat emerges later in the night, after dark, and captures flying insects 4-6 feet above ground (Jameson and Peeters 1988). Long-eared myotis roost in caves, buildings, crevices, spaces under bark, and in snags. They usually roost singly, but nurseries occur as small colonies. Mating occurs in the fall and the single young are born from May to July. This myotis occurs in brush, woodland and forest habitats from sea level to 9,000 feet (Zeiner *et al.* 1990).

Potential roosting habitat for long-eared myotis exists in the riparian and oak woodland in the plan area.

Long-legged myotis is a Federal species of concern. This bat is most common in woodland and forest habitats and occurs from sea level to 11,400 feet (Zeiner *et al.* 1990). The long-legged myotis emerges early, long before dark, and feeds on flying insects, primarily moths (Jameson and Peeters 1988). Mating occurs in the fall, and a single young is born in June or July. This bat roosts in rock crevices, buildings, under tree bark, in snags, mines and caves; trees are the most important day roost. These bats form large nursery colonies of hundreds of individuals usually under bark or in hollow trees (Zeiner *et al.* 1990).

Potential roosting habitat for long-legged myotis exists in the riparian and oak woodland in the plan area.

The Townsend's western big-eared bat is a state species of special concern. Big-eared bats occur in a variety of plant communities throughout California, including coastal conifer and broad-leaf forests, oak and conifer woodlands, arid grasslands and high elevation forests (Williams 1986). In coastal California, the big-eared bat is primarily associated with riparian forests, where it gleans insects from leaf surfaces. Roosting sites for Townsend's big-eared bat include limestone caves, lava tubes, mine tunnels, buildings, and other human-made structures within 100m of riparian habitat (Williams 1986, Pierson 1988). Townsend's big-eared bats are extremely sensitive to human disturbances at roost sites.

Townsend's western big-eared bat may roost in the riparian and oak woodlands along the plan area.

Yuma myotis is a federal and state Species of Special Concern. It inhabits a wide variety of habitats at lower elevations and is a year-round resident in California. This bat feeds on emergent aquatic insects, and foraging takes place over the surface of calm waters of ponds, streams and rivers (Heady 2000).

Yuma myotis may roost in the riparian and oak woodlands along the plan area.

San Francisco dusky-foot woodrat is also a State Species of Special Concern. These small mammals build large stick nests at the bases of trees and shrubs. They prefer forested habitat with a moderate canopy and brushy understory, and are often found on the upper banks of riparian forests. This woodrat feeds on a variety of woody plants, fungi, flowers and seeds.

This woodrat may occur in the riparian woodland habitat along the plan area.

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IMPACTS AND MITIGATION DISCUSSION

IMPACT CRITERIA

The thresholds of significance presented in the California Environmental Quality Act (CEQA) were used to evaluate the potential impacts from implementation of the General Plan Amendment developments and to determine if the project poses significant impacts to biological resources. For this analysis, significant impacts are those that substantially affect either:

- A species (or its habitat) listed or proposed for listing by State or Federal governments as rare or endangered (e.g., California red-legged frog,);
- Breeding/nesting habitat for a State species of special concern (e.g., California tiger salamander);
- A plant considered rare (i.e., List 1B) by CNPS;
- A habitat regulated by State or Federal law (i.e., waterways, riparian habitat, wetlands), or
- A habitat or resource recognized as sensitive by CDFG and/or the City of Salinas (i.e., waterways, riparian habitat, native trees).

POTENTIAL IMPACTS AND MITIGATION MEASURES

The proposed General Plan Amendment has the potential to result in significant impacts to biological resources. Impacts would occur as a result of grading, excavation, and construction activities associated with the implementation of the building of community facilities, private developments, street improvements, and utility improvements.

Impacts are considered significant if there is a loss of riparian habitat, seasonal wetlands and/or loss of habitat for special status species. The removal of large-sized native trees is also considered a significant impact to botanical resources, due to the value of these mature trees as habitat and their botanical significance. Similarly, these trees may be utilized by raptors for nesting, such that removal of the tree during nesting season would be a significant adverse impact.

Impacts were not considered significant to vegetation communities or habitats that are not protected, are generally common, and do not support special status species. Within the Salinas General Plan area, removal of ruderal areas, intensively used agricultural lands (i.e., row cropped land) or landscape trees are not considered significant impacts to biotic resources.

The following mitigation measures are identified to avoid and/or minimize impacts to sensitive biological resource from the proposed General Plan expansion area improvements. These measures are recommended to reduce potential impacts to biological resources from the proposed improvements to a less than significant level. The impacts and mitigation measures would be evaluated in more detail as part of the subsequent environmental review for specific projects.

Impact Bio-1. Development in a portion of the project's planning area will occur adjacent to creeks, riparian woodland and wetlands (i.e., other waters of the U.S. and wetlands). This development may result in significant direct or indirect impacts to riparian and wetland resources from habitat removal, noise, lighting, increased human uses and urban runoff.

> **Mitigation Bio-1.** ***Protect and enhance riparian corridors by requiring setbacks and open space easements within development areas along Gabilan and Natividad Creeks and other streams in the planning area. Protect and enhance wetlands by requiring setbacks and open space easements within development areas in the planning area*** A 100-foot setback area shall be established along Gabilan and Natividad Creeks and other unnamed creeks for future development with the General Plan Amendment area. The setback shall be measured from the top of bank, or outside edge of riparian woodland, whichever is greater. A 100-foot setback area shall be established along wetlands not associated with creeks (i.e., seasonal wetland swales or ponds) within the General Plan Amendment area. The riparian setback shall be measured from the top of bank, or outside edge of riparian woodland, whichever is greater. The wetland setback shall be measured from the outside edge of the wetland. Development activities would be prohibited in the setback area; the City shall consider exceptions where the setback would result in a property "takings" or for passive recreational uses (i.e., trails). The existing riparian woodland or wetland shall be protected from construction disturbance. Fencing shall be temporarily placed at the outside edge of the setback area. This fencing shall remain in-place until construction is complete. If recreational trails are placed within the buffer area, implement a revegetation program wherein a vegetative buffer is established between the trail and the outside edge of the riparian woodland. Successful implementation of these actions will reduce direct and indirect impacts to riparian and wetland resources to a less than significant level.

Impact Bio-2. Development in a portion of the project's planning area will occur adjacent to existing riparian woodland and wetlands (i.e., other waters of the U.S. and wetlands). In areas where development cannot avoid impacts to riparian/wetland resources, such as new road crossings, removal of riparian and/or wetland resources may occur. This may impact federally listed species (i.e., steelhead, California red-legged frog) or other special status species (i.e., California tiger salamander).

> **Mitigation Bio-2.** ***Retain creeks and wetlands in their natural channels rather than placing them in culverts or underground pipes. Where streambanks must be deepened, widened or straightened, they should be landscaped and revegetated afterward. Where wetlands are impacted, they should be re-created afterwards.*** If impacts are incurred to creeks and/or riparian woodlands as part of development within the General Plan Amendment area, the project applicant shall develop and implement a riparian/wetland habitat mitigation and management plan. The plan shall specify a minimum 3:1 replacement ratio for impacts to riparian resources and

a minimum 1:1 replacement ratio for impacts to wetland resources, pursuant to current state and federal policies. The project applicant shall receive authorization to fill wetlands and "other waters' from the US Army Corps of Engineers, pursuant to the requirements of the Clean Water Act. The project applicant shall also obtain a water quality certification (or waiver) from the Regional Water Quality Control Board, consistent with requirements of this State agency. The project applicant shall also obtain a 1601/1603 Streambed Alteration Agreement from the California Department of Fish and Game, pursuant to Fish and Game Code. These permits shall be received prior to any site grading that may occur in or immediately adjacent to creeks or wetlands.

The project applicant shall also receive authorization from the National Marine Fisheries Service for "take" of steelhead and from the U. S. Fish and Wildlife Service for "take" of California red-legged frog, if work cannot avoid impacts to creek resources and/or these species.

Pursuant to provisions of the Section 404 permit, 1601/1603 Streambed Alteration Agreement and State water quality certification (or waiver), the project applicant shall implement a riparian/wetland mitigation plan, and any other measures so identified by regulatory agencies. This plan shall identify measures for the applicant to compensate for unavoidable impacts to riparian or wetland resources. A minimum 1:1 replacement ratio is typically recommended for impacted wetland resources to satisfy requirements of the U.S Army Corps of Engineers and the Regional Water Quality Control Board (RWQCB). A minimum 3:1 replacement ratio is typically recommended for impacted riparian resources to satisfy requirements of the CDFG. The applicant shall also identify and implement a 5-year maintenance and monitoring program. Successful implementation of these actions will reduce impacts to riparian and wetland resources to a less than significant level.

The City shall consult with the Regional Water Quality Control Board and the Resource Conservation District to develop a plan to assist agricultural operations to reduce nitrate and sediment input to creeks. Such a plan will enhance the water quality and benefit aquatic plants and wildlife within the plan area as well as downstream.

Impact Bio-3. If trees are removed for a project, the project may impact breeding raptors if they are nesting in the trees. Additionally, oak woodland habitat, including singular trees, are considered a significant biological resource due to their value to wildlife

Mitigation Bio-3. ***Retain coast live oak and valley oak trees within General Plan Amendment Area, including oaks within new development areas.*** If impacts are incurred to oak trees and/or oak woodlands as part of implementation of the specific plan, the project applicant shall develop and implement an oak tree/woodland mitigation and management plan. The plan shall specify a minimum 2:1 replacement ratio for individual trees and a minimum 2:1 replacement ratio for impacts to oak woodland habitat (acres). All coast live oak and valley oak trees scheduled for removal should be surveyed prior to construction to determine if any raptor nests are present and active. If active nests are observed, the construction should be postponed until the end of the fledgling.

Impact Bio-4. Development within the grasslands within the General Plan Amendment Area may impact species status species, if such species are confirmed to be present. In general, the loss of non-native grassland is not considered a significant impact. This is due to the prevalence of non-native plant species and lack of special status plants species. Loss of non-native grassland may however be significant if special status species are utilizing it, such as:

- Congdon's tarplant (*Centromadia parryi* ssp. *congdonii)*
- Contra Costa goldfields (*Lasthenia conjugens),*
- Pinnacles buckwheat (*Eriogonum nortonii)*
- Alkali milk-vetch (*Astragalus tener* var. *tener*)
- Santa Cruz clover (*Trifolium buckwestiorum*)
- Hutchinson's larkspur (*Delphinium hutchinsoniae*)
- Kellogg's horkelia (*Horkelia cuneata* ssp. *sericea*)
- Burrowing owl
- California tiger salamander

Mitigation BIO-4. ***Protect and enhance special status species habitat by requiring setbacks and open space easements within development areas. Protect and enhance special status species habitat by requiring management of the habitat to ensure persistence of the species within the setback areas.***

Surveys shall be conducted at the appropriate season to ascertain whether the habitats within the proposed project area supports special status species. If special status species are observed, avoidance measures shall be implemented.

A qualified biologist shall conduct a biological assessment of all habitat areas to assess the potential for the following special status species (see list above). If suitable habitat for any of these species is observed, then focused surveys during the appropriate season should be conducted. Such surveys would include winter and spring surveys for tiger salamander, spring surveys for spadefoot toad, protocol presence/absence surveys for burrowing owl, and spring/summer surveys for special status plant species. The California Department of Fish and Game shall be consulted regarding the appropriate level of effort and protocol prior to conducting focused wildlife species surveys. If any of these species are found to inhabit the survey area, the City shall require the preparation and implementation of a Habitat Management Plan to provide protection for the habitat. If impacts to occurrences are deemed unavoidable, the plan shall identify mitigation measures to compensate for impacts to the species. As part of the Habitat Management Plan, a 100-foot buffer shall be established around rare plant occurrences. The plan shall include measures to manage the rare plant occurrences for their protection and persistence at the site. The Habitat Management Plan shall be reviewed and approved by California Department of Fish and Game and/or USFWS prior to issuance of any permits by the City.

Prior to any proposed development within 150 feet of the stream corridors, protocol presence/absence surveys for California red-legged frog, pond turtle, and nesting birds should be conducted. If these species are observed, the CDFG and the USFWS should be consulted regarding appropriate measures to avoid and mitigate potential impacts of the project on these species. The City shall not issue any permits prior to obtaining written approval from the CDFG and/or USFWS that the proposed mitigation plan has been approved.

Prior to any proposed development within or adjacent to oak woodland, a qualified biologist should conduct surveys to determine if protected wildlife species are nesting in the oak woodland, e.g., nesting raptors. If trees are to be removed, a qualified bat biologist should evaluate the trees as potential bat roost sites prior to removal, and recommend measures to avoid impacts to bats, such as exclusionary devices.

Appendix E:
Cultural Resources Report

ARCHAEOLOGICAL CONSULTING

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CULTURAL RESOURCES BACKGROUND RECORDS SEARCH FOR THE CITY OF SALINAS GENERAL PLAN, SALINAS, MONTEREY COUNTY, CALIFORNIA

by

Mary Doane, B.A., and Gary S. Breschini, RPA

November 16, 2001

Prepared for

Cotton/Bridges/Associates

SUMMARY: PROJECT 3133
RESULTS: SEE TEXT
SITES: SEE TEXT
UTMG: N. 6.2472/40.7045, E. 6.2747/40.6218, S. 6.2426/40.5550, & W. 6.1760/40.5850
MAPS: USGS 7.5 MINUTE SALINAS , NATIVIDAD, SAN JUAN BAUTISTA AND PRUNEDALE QUADRANGLES

Note: *SOPA,* the Society of Professional Archaeologists, has been superseded by the new Registry of Professional Archaeologists. Registered Professional Archaeologists are designated by RPA.

INTRODUCTION

In August 2001 Archaeological Consulting was authorized by Yara Fisher of Cotton/Bridges/Associates to prepare a Background Record Search report for the General Plan of the City of Salinas, Monterey County, California.

As our methodology in the preparation of this report, we have conducted a background records search at the Northwest Regional Information Center of the California Archaeological Inventory, located at Sonoma State University, Rohnert Park. The following report contains the results of these investigations as well as our conclusions and recommendations.

PROJECT LOCATION AND DESCRIPTION

The project area includes the currently incorporated lands and the adjoining potential growth areas under consideration for future inclusion in the City of Salinas, Monterey County, California (see Map 1). The Universal Transverse Mercator Grid (UTMG) coordinates for the approximate limits of the project area are: North 6.2472/40.7045, East 6.2747/40.6218, South 6.2426/40.5550, and West 6.1760/40.5850 on the USGS 7.5 minute San Juan Bautista Quadrangle (1955, photorevised 1980), Natividad and Salinas Quadrangles (1947, photorevised 1984). The project proposes to update the City of Salinas General Plan. The focused growth areas within the city and the future growth areas currently outside the city boundary are the subject areas for this report.

PROJECT METHODOLOGY

Background Research

The background research for this project included an examination of the archaeological site records, maps, and project files of the Northwest Regional Information Center of the California Archaeological Inventory, located at Sonoma State University, Rohnert Park, California. In addition, our own extensive personal files and maps were examined for supplemental information, such as rumors of historic or prehistoric resources within the general project area.

The Regional Information Centers have been established by the California Office of Historic Preservation as the local repository for all archaeological reports which are prepared under cultural resource management regulations. The background literature search at the appropriate Regional Information Center is required by state guidelines and current professional standards. Following completion of the project, a copy of the report also must be deposited with that organization.

These literature searches are undertaken to determine if there are any previously recorded archaeological resources or other cultural resources within the project area, and whether the area has been included within any previous archaeological or cultural resources research or reconnaissance projects.

Field Reconnaissance

No field reconnaissance was requested or conducted in this project.

RESULTS OF THE RECORDS SEARCH

Background Research

The record search of the files at the Northwest Regional Information Center, and the examination of our own records, showed that there are no prehistoric archaeological sites recorded within the project area. Ten recorded historic archaeological sites are located within the current incorporated areas of Salinas and three of these, CA-MNT-1146H, -1157H & -1168H, are within the Central City focused growth area (see Map 1 & Attachment 1). However, no cultural resources have been recorded within the areas under consideration for annexation into the city. Major portions of the proposed future growth areas have had no prior cultural resources assessments. Some of these areas have a reasonable potential for producing evidence of significant cultural resources.

The background search found records of previous archaeological and cultural resources reconnaissance surveys and evaluations which have bordered or included small portions of the future growth areas. Prior studies have included portions of the following project areas; a) the West Boronda Road area (Haversat & Breschini 1979, Breschini, Seavey & Haversat 1979, Bourdeau 1984 & 1985, Dietz 1985, Runnings & Breschini 1989 & 1991, Doane & Haversat 2000 & 2001, Doane 2000), b) future growth area 10 (Roop 1978, Biosystems 1989, Nelson & Carpenter 2000), and c) the proposed Rancho San Juan specific plan area (Chavez 1980, Whitlow & Breschini 1982, Waldron 1986, Runnings & Haversat 1988, Busby et al 1993, Costello & Simpson-Smith 1999).

Numerous other studies have included portions of several focused growth areas within the city as follows: a) West Laurel Drive @ North Main (SAIC 2000), b) North Main Street-Soledad Street (Breschini 1988, SAIC 2000), c) Central City (Seavey 1979 & 1980, Hampson Breschini & Haversat 1985, Hampson & Breschini 1985, Cartier Crane & James 1991, Laffey 1991, Runnings & Haversat 1991 & 1996, Owens Runnings & Haversat 1997, Cartier 2000, SAIC 2000), d) South Main Street (SAIC 2000), and e) North Davis Road @ West Laurel Road (Haversat & Breschini 1980, Doane & Haversat 1999). Studies within the city but not within focused growth areas are not included in the report bibliography.

In addition, the California Inventory of Historical Resources (March 1976), California Historical Landmarks, and the National Register of Historic Places was checked for listed cultural resources which might be present in the project area (see Attachments 2, 3, & 4). The Boronda Adobe, California Rodeo, Salinas City Bank and Steinbeck House are found in the California Inventory.

The following are listed in the National Register as individual properties: the Sheriff Nesbitt house at 66 Capitol Street, the Peter Bontadelli house (Empire house) at 119 Cayuga Street, the John Steinbeck House at 132 Central Avenue, the Krough house at 146 Central Avenue, the B. V. Sargent house at 154 Central Avenue, and the Samuel M. Black house at 418 Pajaro Street. (The listed Jose Boronda Adobe on Boronda Road lies outside the proposed West Boronda Road future growth area.) Other properties determined eligible for listing as separate properties include the residence at 275 Blanco Road, the Margaret Hart Surbeck residence at 322 Blanco Road, the Thomas Bunn Residence at 425 Blanco Road and the structure at 124 San Luis Street.

Many other structures have been found ineligible for listing in the National Register of Historic Places but have been evaluated and listed in the <u>1989 Historical and Architectural Resources Survey and Preservation Plan: City of Salinas</u>.

Prehistoric ethnography

The project area lies within the currently recognized ethnographic territory of the Costanoan (often called Ohlone) linguistic group. Discussions of this group and their territorial boundaries can be found in Breschini, Haversat, and Hampson (1983), Kroeber (1925), Levy (1978), Margolin (1978), and other sources. In brief, the group followed a general hunting and gathering subsistence pattern with partial dependence on the natural acorn crop. Habitation is considered to have been semi-sedentary and occupation sites can be expected most often at the confluence of streams, other areas of similar topography along streams, or in the vicinity of springs. These original sources of water may no longer be present or adequate. Also, resource gathering and processing areas, and associated temporary campsites, are frequently found on the coast and in other locations containing resources utilized by the group. Factors which influence the location of these sites include the presence of suitable exposures of rock for bedrock mortars or other milling activities, ecotones, the presence of specific resources (oak groves, marshes, quarries, game trails, trade routes, etc.), proximity to water, and the availability of shelter. Temporary camps or other activity areas can also be found along ridges or other travel corridors.

CONCLUSIONS AND RECOMMENDATIONS

Based upon the background research, we conclude that the majority of the project future growth areas have not been subject to previous archaeological or other cultural resources studies. The background records search found no record of prehistoric archaeological resources and few records of historic archaeological resources within the focused growth areas within the city. Many historic structures within the city have been evaluated for historic and architectural significance but structures in proposed growth areas have not been. Therefore we make the following recommendations:

- Structures or properties with a potential for historic or architectural significance should be evaluated by a qualified historic architect or architectural historian.

- Project areas with a potential for prehistoric or historic archaeological sensitivity should be subject to a preliminary field reconnaissance in order to identify archaeological resources for planning purposes.

Because of the possibility of unidentified (e.g., buried) cultural resources being found during construction, we recommend that the following standard language, or the equivalent, be included in any future permits issued within the project area:

- If historic or prehistoric archaeological resources or human remains are accidentally discovered during construction, work shall be halted within 50 meters (150 feet) of the find until it can be evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.

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MAP 1. PROJECT AREA

Source: City of Salinas, CBA, Inc.

Focused Growth Areas

1 W. Laurel Drive @ N. Main Street
2 N. Main Street - Soledad Street
3 Central City
4 S. Main Street
5 Abbott Street
6 E. Alisal Street
7 E. Market Street
8 N. Davis Road @ W. Laurel Drive

Future Growth Areas

9 West Boronda Road
10 Future Growth Area 9
11 Future Growth Area 10
14 Proposed Rancho San Juan Specific Plan Area
15 Eastern Bypass Expressway
16 Eastern Bypass Arterial Extensions

City Boundary
Growth Area Boundary
(Varies by land use alternative as noted)

Base Map
Salinas General Plan Program

July 3, 2001