



SECTION ONE

INTRODUCTION

In September 2001, the County of Santa Clara Roads and Airports Department began work on the Comprehensive County Expressway Planning Study. The study's purpose was to provide a long-range plan for the improvement and maintenance of the expressways in Santa Clara County. It took almost two years to complete and culminated in the development of the *Implementation Plan*.

The *Implementation Plan* details the policies, improvement recommendations, priorities, and funding strategy for the expressway system. It is comprehensive and considers the needs of each expressway and the expressway system as a whole. Specific areas addressed in the plan include:

- ❖ Capital improvement program – consists of roadway, signal system enhancements, high-occupancy vehicle (HOV) facilities, bicycle, pedestrian, landscaping, and sound wall projects. Project lists vary from short sidewalk segments to extensive expressway segment improvements to freeway interchange reconstruction. The projects include both capacity needs and operational/safety improvements.
 - ❖ Maintenance and operations– identifies all activities and materials necessary to keep the expressways functioning and looking presentable. Improvements vary from signal coordination expansion to enhanced street sweeping intervals to pavement maintenance to infrastructure replacement.
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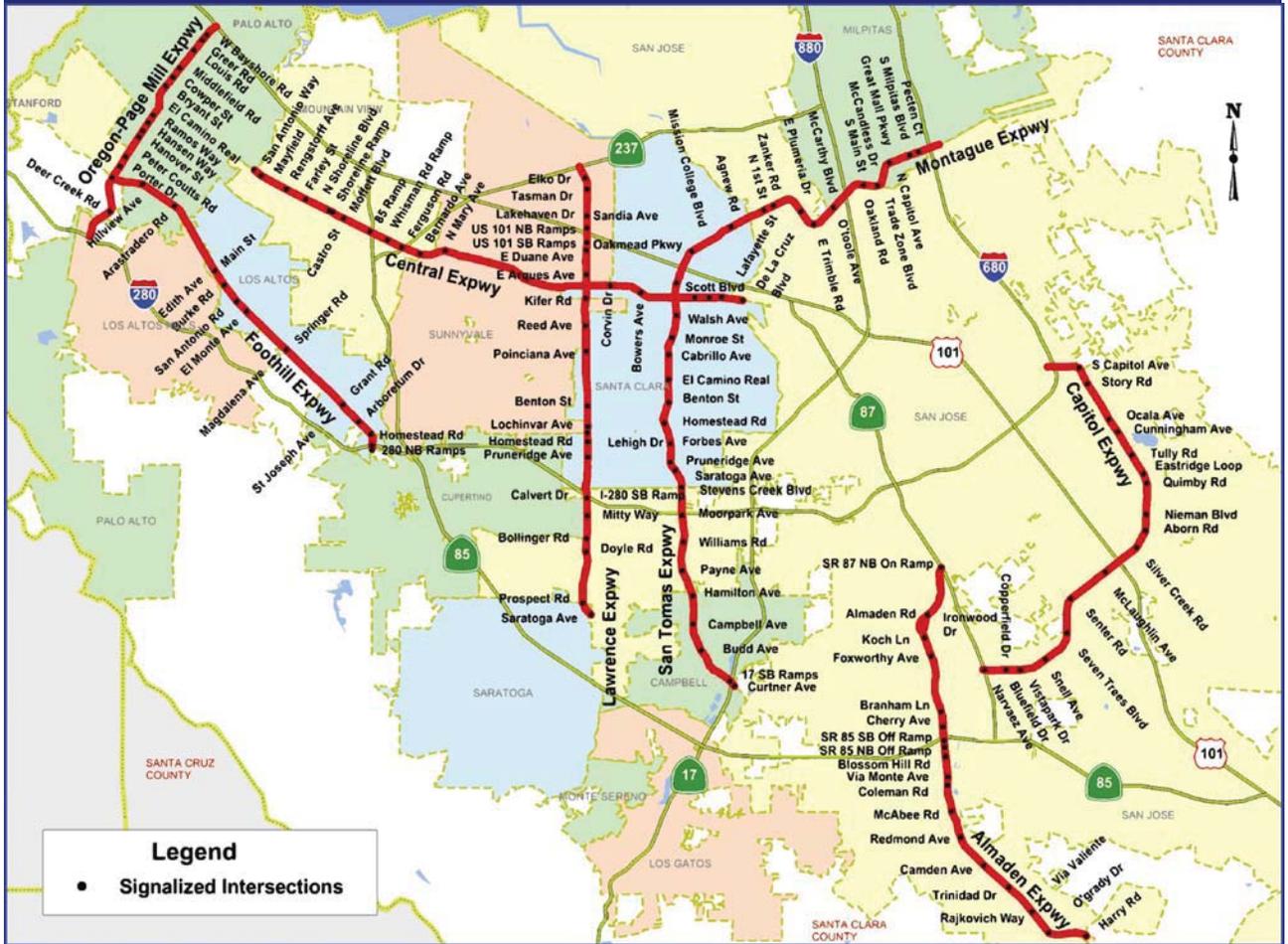
- ❖ Funding strategy – summarizes the costs of the recommendations included in the plan and describes existing, potential, and new funding sources for funding these recommendations. A list of funding strategies to pursue are recommended.
- ❖ Roadway improvement needs in South County, where Gilroy is constructing Santa Teresa Boulevard to expressway standards, were also considered during the study, and the *Implementation Plan* includes a recommendation for a separate South County Circulation Study.

Description of Expressway System

There are eight expressways operated by Santa Clara County: Almaden, Capitol, Central, Foothill, Lawrence, Montague, Oregon-Page Mill, and San Tomas (see Figure 1-1). Southwest Expressway was never part of the county system and is maintained as a city street. Santa Teresa Boulevard was originally planned to be a continuous expressway between South San Jose and US 101 south of Gilroy, but much of the alignment has been relinquished or annexed into San Jose, Morgan Hill, and Gilroy as those cities have grown and established their own circulation plans. The portion of Capitol Expressway between Almaden Expressway and State Route (SR) 85 was relinquished to San Jose as part of an auto dealer assessment district improvement plan.

The eight expressways provide significant capacity for local trips, with 1.5 million vehicle trips made on a daily basis. In a 2001 survey of county residents, 55% reported using an expressway on a daily basis. While providing for intracity trips (Almaden and Capitol are entirely within San Jose; Oregon-Page Mill is mostly within Palo Alto), the expressways are also important intercity facilities. Montague-San Tomas connects Milpitas to Campbell and terminates near Los Gatos; Central connects Palo Alto to San Jose; and, Lawrence connects Sunnyvale to Saratoga. Sixty-two (62) centerline miles in length, the expressways provide a vital connection among residential areas, industrial centers, and commercial districts.

Figure 1-1: Santa Clara County Expressway System



Previous Expressway Planning Efforts

The origin of the expressways dates back to 1956, when the Santa Clara County Board of Supervisors initiated a study to define future transportation needs for the county. The January 1959 *Trafficways Plan for Santa Clara County* concluded that the existing highways would not be able to handle projected vehicular traffic and recommended constructing various facilities, including the expressway system. To build the expressways, a \$70 million bond proposal was put to the voters and approved on March 28, 1961. As a result, the County of Santa Clara became the only county in the state to operate a high capacity roadway system through incorporated city areas.

The bond money allowed substantial work to proceed on the expressways, but skyrocketing property values reduced the program's purchasing power, and a Phase 2 funding proposal fell through. Ultimately, the existing system was built out by supplementing the program with federal revenues, by not obtaining full access control in some cases, and by not pursuing some expressway alignments (Hillsdale, for example).

Significant efforts were made to update expressway plans in 1971 (Future Width Line Study) and 1986 (Transportation 2000 or "T2000"). Most of T2000's highest priority, short-term expressway projects have been implemented. However, the long-range elements, especially the interchange projects, are no closer to construction than they were in 1986. The intersection problem areas identified in the T2000 study are essentially the same areas that are experiencing problems today. However, conditions and city plans have changed since T2000 making some of the T2000 recommendations unnecessary or impractical.

The need for a new comprehensive study of the expressway system became apparent during development of the Valley Transportation Plan (VTP) 2020, adopted in 2000 by the Santa Clara Valley Transportation Authority (VTA). The T2000 expressway recommendations were dated. In response to a general call for projects conducted as part of VTP 2020, the cities and County submitted over \$940 million worth of expressway projects. Some of these projects conflicted with another jurisdiction's preferences, some would have major impacts to surrounding neighborhoods, and some would just shift congestion to other expressway locations. What was lacking was a comprehensive approach to identifying, analyzing, and developing consensus on a list of expressway improvement projects.

VTP 2020's expenditure plan, therefore, allocated funding only to projects on Central and Montague Expressways which were considered to have well defined scope. VTP 2020 also recommended that each expressway be studied, similar to the 1999 Montague Expressway Study, to determine improvement needs and priorities for that expressway. The County Board of Supervisors, however, determined that a more comprehensive study was necessary to identify the full range of needs on all expressways and to set priorities in the context of systemwide needs. Consequently, an agreement was reached for the County to conduct the Expressway Study using a planning grant from VTA.

Expressway Study Process

The Expressway Study proceeded in two major phases. The first phase identified needs and resulted in individual expressway vision statements. In Phase 2, improvement strategies were developed and evolved into the *Implementation Plan*.

A collaborative planning process was used during the study to ensure the local cities and their residents would support the *Implementation Plan*. The foundation for the collaborative process was a solid technical analysis process. The study collected traffic data; provided analysis of existing conditions; projected 2025 traffic conditions; developed conceptual improvement strategies and designs; and used experts for block-by-block evaluation of study elements for pedestrian, bicycle, and sound wall needs and proposed improvements.

City and Community Participation

Study progress and direction was monitored and guided by a Policy Advisory Board (PAB). PAB membership consisted of two county supervisors, one council member each from twelve cities, two VTA board members, and two members of the County Roads Commission. The PAB met as a whole every two to three months to discuss study and systemwide issues and met twice in small groups to discuss issues and recommendations for individual expressways. County Supervisor James T. Beall, Jr., a leading advocate of the Expressway Study, served as the chair of the PAB.

A Technical Working Group (TWG) provided review and input to both study staff and the PAB. The TWG members included staff from twelve cities, Caltrans, Metropolitan Transportation Commission (MTC), and VTA. TWG meetings occurred every one to two months to prepare for PAB meetings, address specific issues, and achieve technical and administrative consensus.

Table 1-1 summarizes the study process by time period, activity, and purpose. Also shown are the community outreach activities, including telephone surveys, various neighborhood and business community meetings, and a project open house. Throughout the project, there was a project website with a link for public comment and a project telephone hotline. Comments received were summarized, made available to the PAB, and posted on the web site.

Table 1-1: Expressway Study Collaborative Planning Process

Time Period	Activity	Purpose
Sept. – Nov. 2001	2 TWG meetings; Met with VTA committees	Present and receive comments on Study's draft work scope
Nov. 2001 – Jan. 2002	Interviewed staff from 13 cities, VTA, Caltrans, and CHP	Gather city/agency input on key issues related to the expressways
Dec. 2001	Telephone survey #1	Determine public opinions about and usage of expressways
Jan – Mar. 2002	2 PAB meetings and 2 TWG meetings	Discuss current and projected traffic conditions, other technical information, and city/community input received
Feb. – Mar. 2002	5 project design meetings with cities' staffs	Develop roadway improvement design concepts
Mar. 2002	PAB South County small group workshop #1	Discuss South County's transportation needs
May – June 2002	4 PAB small group workshops	Discuss visions, potential improvements, and key issues for each expressway
June 2002	PAB South County small group workshop #2	Develop consensus for a South County Circulation Study
May – June 2002	1 PAB meeting and 2 TWG meetings	Discuss pedestrian, bicycle, sound wall, and landscaping issues
July – Oct. 2002	Briefed 9 city councils and Board of Supervisors	Review and comment on expressway visions and potential improvements
Sept. – Oct. 2002	4 community meetings	Review and comment on expressway visions and potential improvements
Sept. – Oct. 2002	1 PAB meeting and 1 TWG meeting	Discuss results of city/community outreach and expressway funding needs and options
Oct. – Nov. 2002	4 PAB small group workshops and 4 TWG small group meetings	Discuss recommendations and priorities for each expressway
Nov. 2002	PAB South County small group workshop #3 (part of VTA South County PAB meeting)	Present draft South County Working Paper
Nov. 2002	PAB Capitol small group joint workshop with VTA Downtown East Valley PAB	Develop consensus on proposed vision for Capitol Expressway
Nov. 2002 – Jan. 2003	Met with 3 chambers of commerce	Receive comments on preliminary recommendations and potential new funding sources
Jan. 2003	Telephone survey #2	Evaluate support for proposed improvements and funding sources
Dec. 2002 – Mar. 2003	2 PAB meetings and 4 TWG meetings	Discuss and approve elements of the Draft Implementation Plan

Table 1-1: Expressway Study Collaborative Planning Process (continued)

Time Period	Activity	Purpose
Mar. 2003	Board of Supervisors meeting	Release Draft Implementation Plan for review and comment
Mar. – Apr. 2003	Notified over 350 neighborhood associations/community groups, the Cities' Association, and the NAIOP about the Draft Plan's availability	Invite comments on Draft Plan and offer to meet with their groups upon request
Apr. – August 2003	Met with 10 city councils	Receive comments and request endorsement of Draft Plan
Apr. – July 2003	Met with 3 community groups, 3 VTA advisory committees, 1 chamber of commerce, and SVMG	Receive comments on Draft Plan
May 2003	Expressway Study Open House	Receive comments on Draft Plan
May 2003	1 PAB meeting and 1 TWG meeting	Approve revisions to Draft Plan and recommend approval of proposed Final Plan by Board of Supervisors
August 2003	Board of Supervisors meeting	Approve Final Plan for submittal to VTA for inclusion in the VTP 2020 Update
Throughout Study	Attended 6 meetings of VTA/County BPAC	Receive input during development of the bicycle and pedestrian elements
Throughout Study	Met with VTA staff frequently	Discuss specific issues related to the Study, including traffic modeling, South County, Capitol Expressway, bicycle/pedestrian planning, and transportation funding
Throughout Study	Met with community/business groups, city staff, city committees, and PAB members upon request	Discuss specific issues related to the expressways, including potential improvements, maintenance, signal operations, funding strategies, traffic modeling, and South County needs
Monthly	Attended County Roads Commission meetings	Provide updates on the Study
Continuously	Maintained Study web site and telephone hotline	Provide information and receive comments

BPAC = Bicycle and Pedestrian Advisory Committee
 CHP = California Highway Patrol
 NAIOP = National Association of Industrial and Office Properties
 PAB = Policy Advisory Board
 SVMG = Silicon Valley Manufacturing Group
 TWG = Technical Working Group
 VTA = Santa Clara Valley Transportation Authority
 VTP = Valley Transportation Plan

Process Results

The collaborative planning process was well received. It led to agreements on solid foundation concepts such as the vision statement for each expressway, and generated strong consensus on project scope to satisfy service issues consistent with the vision statements. There was clear and two-way communication of desirable operating standards and maintenance budget limitations, which help strengthen working relationships with all of the agencies involved.

Overall, the study has provided an educational experience for all participants. The lessons learned included:

- ❖ There was a shared desire among all participants that the expressways be “greener and cleaner, with smooth maintained pavement and synchronized traffic signals.”
- ❖ While there is a continuing emphasis on the benefits of signal system enhancements, there is recognition that many expressway segments have or are expected to exceed capacity, and signal timing efforts alone will not provide long-term service improvements.
- ❖ Some previous long-range plan elements are no longer needed or inconsistent with local preferences.
- ❖ In some cases, different types of expressway improvements could conflict, frequently due to limited right-of-way (e.g., sidewalk versus landscaping). Tradeoffs must be made in the context of each expressway’s particular conditions and local preferences.

These lessons helped shape the approach to and recommendations included in the *Implementation Plan*.

Organization of Document

The Expressway Study *Implementation Plan* is organized into specific elements reflecting the different types of improvements, needs, and transportation modes. Each element deals with systemwide needs, listing recommendations for individual expressways as appropriate. The plan also recognizes that there are inter-relationships between the elements. For example, many of the elements have both capital and maintenance/operations needs or can adversely

affect one another, such as mature landscaping infringing on pedestrian and bicycle travel areas.

The next section of the document (Section 2 “Expressway System Characteristics and Needs”) provides key information about the expressway system including current and projected traffic conditions, specific characteristics of each expressway, description of transit services on the expressways, system expansion and South County status, and each expressway’s vision statement.

Sections 3 to 9 detail recommendations for the seven elements: Capacity/Operational Improvements, Signals/Traffic Operations System (TOS), High-Occupancy Vehicle (HOV) System, Bicycle, Pedestrian, Finishing Program (sound walls and landscaping), and Maintenance/Operations. Section 10 provides the funding strategy and Section 11 lists key issues to be addressed in future plan updates. The document also includes three appendices: Appendix A provides a glossary, Appendix B summarizes all element recommendations by expressway, and Appendix C documents plan endorsements.

During the study, a number of technical reports and memorandums were prepared covering a full range of technical and collaborative planning details including traffic analysis, traffic modeling, sound walls, pedestrian facilities, bicycle improvements, funding issues, and community outreach findings. There are also supplemental formal reports available for more information. Table 1-2 lists these reports.

Table 1-2: Additional Reports Available	
Report Title	Content
Summary Brochure	Summarizes the Expressway Study Implementation Plan
South County Working Paper	Documents the study’s work and findings related to expressway planning in South County
Bicycle Accommodation Guidelines (BAG)	Provides detail diagrams and guidelines for bicycle treatments on expressways
Individual Expressway Reports (8 total)	Summarizes key information and all recommendations for each expressway