

Appendix A

Glossary of Terms

APPENDIX A

GLOSSARY OF TERMS

A

Access Control

The condition where the right of owners or occupants of abutting land to access a roadway is fully or partially controlled by public authority. Driveways or other access connections are limited or completely prohibited between intersections.

Alignment

The course of a road.

Arterial

A general term denoting a roadway primarily for through traffic usually on a continuous route.

At-grade

At the same level as the surrounding topography – often used to describe crossing streets which meet at signalized intersections as opposed to roadways separated by use of structures and ramps.

Auxiliary Lanes

A lane from one on-ramp or intersection to the next off-ramp or intersection to allow vehicles coming on the expressway or getting off the expressway to have more time to merge with the through lanes. These lanes are often installed for safety purposes (i.e., reduce merging accidents).

B

BAG (Bicycle Accommodation Guidelines)

A document providing detail diagrams and guidelines for bicycle treatments on expressways.

Board of Supervisors

The Board of Supervisors is the governing policy body for the County of Santa Clara. There are five (5) Supervisorial Districts in the County. The Supervisor for each district is duly elected by voters that reside within the boundaries of that specific district. Each elective term of service for County Supervisors is four years.

BPAC (Bicycle and Pedestrian Advisory Committee)

An advisory committee to the County that is responsible for providing input to County staff for work associated with bicycle and pedestrians plans, guidelines, projects, and programs.

Braided Ramp

A design feature where two nearly parallel ramps cross each other by use of a grade separation to avoid weaving or crossing at grade. Most often this occurs when an on-ramp from one nearby interchange is braided to avoid interfering with an off-ramp for the next one.

Bulb-out

Curb extensions at the corners of intersections that are often associated with elimination of right turn lanes and that may shorten pedestrian crossing distances.

C**Caltrain**

Commuter rail service running between Gilroy and San Francisco through San Jose. It is governed by the Peninsula Corridor Joint Powers Board (JPB).

Caltrans (California Department of Transportation)

The responsible owner/operator of the state highway system providing for its safe operation and maintenance.

Capacity

The maximum rate of flow that can be accommodated on a roadway segment under prevailing conditions. Rate of flow is the number of vehicles passing a point on a facility during some period of time, expressed in vehicles per hour or persons per hour.

Carpooling

An arrangement where two or more people share the use and cost of privately owned automobiles in traveling to and from pre-arranged destinations together.

CCTV (Closed-Circuit Television)

The common abbreviation for closed-circuit television.

Centerline Miles

Miles of roadway measured down the yellow stripe or centerline, in one direction. Centerline miles do not measure actual miles of traffic lanes. For example, one centerline mile of a two-lane road would equal two miles of traffic lanes.

Channelization

The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movement of both vehicles and pedestrians.

CHP (California Highway Patrol)

State agency responsible for law enforcement on the state highways and unincorporated roadways. The CHP also enforces the HOV lanes and general traffic rules on Lawrence, Montague, and San Tomas Expressways.

CIP (Capital Improvement Program)

A multi-year program of projects to maintain or improve a transportation system, such as the expressway system. Projects in the CIP are generally one-time capital investments rather than ongoing maintenance and operating expenses.

CMA (Congestion Management Agency)

The CMA is a countywide organization responsible for preparing and implementing the County's CMP (see definition below). CMAs came into existence as a result of state legislation and voter approval of Proposition 111 in 1990 (later legislation removed the statutory requirements of Proposition 111, making CMAs optional). In Santa Clara County, VTA is the designated CMA.

CMAQ (Congestion Mitigation and Air Quality Improvement Program)

A federal source of funding for projects and activities that reduce congestion and improve air quality, both in regions not yet attaining federal air quality standards and those engaged in efforts to preserve their attainment status. The San Francisco Bay Area region meets this qualification and receives CMAQ funds.

CMP (Congestion Management Program)

A comprehensive program designed to reduce traffic congestion, to enhance the effectiveness of land-use decision-making, and to improve air quality. The program must comply with CMP state statutes, and with state and federal Clean Air Acts. In Santa Clara County, VTA, acting as the CMA, develops the CMP.

CMS (Changeable Message Sign)

Electrically operated sign capable of displaying multiple messages.

Collaborative Planning

A planning process that involves working with all interested parties to develop consensus and broad-based support for decisions, recommendations, and/or some type of plan.

Commute

A home-to-work or work-to-home trip.

Commute Period

Morning and afternoon time periods when commute trips are the heaviest. Also referred to as peak periods.

Congestion

The condition of any transportation facility in which the use of the facility is so great that there are delays for the users of that facility. Usually this happens when traffic approaches or exceeds facility capacity.

Corridor

A predominant travel alignment and the area contributing to the major facility serving that travel movement.

County of Santa Clara

The County of Santa Clara is located at the southern end of the San Francisco Bay and encompasses 1,312 square miles. There are 15 cities ranging from Palo Alto in the north to Gilroy in the south. It is governed by a 5-member Board of Supervisors. Santa Clara County provides services such as law enforcement, correctional institutions, road construction and maintenance, parks and recreation, libraries, and environmental resources as well as operating as an agent of the state in providing other services.

County of Santa Clara Roads and Airports Department

A department within the County of Santa Clara government structure that is responsible for operating, maintaining, and improving County expressways, unincorporated roads, and County airports.

County Roads Commission

The Roads Commission was established on April 18, 1995. The Commission is composed of seven members, appointed by the Board of Supervisors, each representing the public at large and serving four-year terms. The purpose of the Commission is to give advice and make recommendations to the Board of Supervisors on matters generally relating to the planning, design, construction, and operation of the County's expressways, highways and roads and such other matters as directed by the Board.

D**Decibel**

A unit for expressing the relative intensity of sounds on a scale from zero for the average least perceptible sound to about 130 for the average pain level.

Delay

A measure of the amount of additional time travelers spend during a trip due to congestion. It is measured as the difference in travel time between congested and free-flow conditions.

Demand

The number of users desiring to use a transportation facility or system.

Developer Exaction

A contribution or payment required as an authorized precondition for receiving a development permit; can include dedication of roadway rights-of-way and improvement of roadway facilities.

Development Impact Fees

A fee, also called a development fee, levied on the developer of a project by a city, county, or other public agency as compensation for otherwise unmitigated impacts the project will produce.

Discretionary Funding

Unlike funding that flows only to highways or only to transit by a rigid formula, this is money that can be invested in a range of transportation projects and the project selection can be made regionally or locally.

Downtown East Valley Policy Advisory Board

One of VTA's transportation corridor policy advisory boards. This board, consisting of appointed elected officials from the County of Santa Clara and City of San Jose, provides oversight for the development and implementation of the Downtown East Valley Transit Improvement Plan.

E

EIS/EIR (Environmental Impact Study/Environmental Impact Report)

A study which analyzes various alternatives for environmental impacts, identifies possible mitigations to reduce impacts, and obtains legally mandated state and/or federal environmental clearance for a chosen preferred alternative. Federal funding requires an EIS while California state law requires an EIR.

Expressway

Expressway shall mean an arterial highway for through traffic with partial access control, which may or may not be divided or have grade separations at intersections. There are eight expressways in the Santa Clara County expressway system.

F

FHWA (Federal Highway Administration)

An agency of the U.S. Department of Transportation that funds highway planning and programs.

Finishing Program

Improvements to expressway medians and edges (i.e., back of curb to right-of-way line). These improvements include landscaping, sound walls, and sidewalks.

Fixed Guideway Funds

Federal funds available to transit agencies for operating transit services on fixed guideways, including HOV lanes.

Flyover Ramp

A ramp serving a high traffic volume movement, connecting two roadway facilities and providing a direct connection to avoid congestion, merging, and/or an intersection.

Freeway

A divided arterial highway designed for through traffic with full control of access and with grade separations at intersections. Freeways are operated and maintained by Caltrans.

Frontage Road

A local street or road located on the side of an expressway which provides access to abutting property and adjacent areas.

FTA (Federal Transit Administration)

A component of the U.S. Department of Transportation, delegated by the Secretary of Transportation to administer the Federal transit program under the Urban Mass Transportation Act of 1964, as amended, and various other statutes.

Future Width Line Study

A County planning study completed in 1971 that detailed the desired length and width of each roadway in the County system.

G**Gas Tax**

An excise tax assessed on gasoline and diesel fuel at the point of sale. The current rate assessed by the state is \$0.18 per gallon of gasoline and the federal rate is \$0.183 per gallon. A portion of these funds are returned to the cities and counties for streets and roads maintenance. These funds are allocated based on formulas set by legislation and are the sole sustainable source of operating and maintenance funds for County expressways and unincorporated roads.

Grade Separation

A crossing of two highways or a highway and a railroad at different levels.

H**HDM (Highway Design Manual)**

The HDM, prepared by Caltrans, establishes uniform policies and procedures to carry out the highway design functions of Caltrans. It is also used by the County of Santa Clara to assist with the design of County roadways.

HOV (High Occupancy Vehicle)

Any vehicle carrying two or more occupants.

HOV Lanes

Lanes on heavily congested roadways that are used exclusively at peak hours by carpools, vanpools, buses or any vehicle that transports multiple passengers.

HOV Queue Jump Lanes

Short HOV lane segments provided just before congested signalized intersections that allow HOVs (e.g., carpools, buses) to move to the front of queues waiting at red lights.

HOV Direct Connector Ramps

A structure providing direct, uninterrupted HOV movements from the HOV lane of one freeway to the HOV lane of the second freeway, eliminating the need to leave the HOV lane to exit one freeway only to merge back across the next freeway into its HOV lane. The *Expressway Implementation Plan* includes recommendations for similar direct connections from expressway HOV lanes to freeway HOV lanes.

I

I-680/I-880 Cross Connector Study

One of VTA's gateway studies. The study's purpose is to identify and evaluate alternatives for corridor connections between I-680 to I-880. The study's boundaries extend from Auto Mall Parkway in Fremont to Montague Expressway in Milpitas and involves officials from both Alameda and Santa Clara Counties.

Incidents

Events that cause increased congestion on our roads.

Infrastructure

Expressway infrastructure refers to all physical structures that are part of the expressways.

Interchange

The connection of two or more roadways using a grade-separated structure with ramps for moving from one road to the other. Ramp connections may or may not have traffic signals.

ITS (Intelligent Transportation Systems)

The application of technology to improve the efficiency and safety of transportation systems. When integrated into the transportation system infrastructure or in vehicles, these technologies help monitor and manage traffic flow, reduce congestion, and provide improved mobility, safety, air quality, and productivity.

L

Land Use

Activities and structures on the land, such as housing, shopping centers, farms, and office buildings.

Landscape Maintenance Agreement

Formal agreement between the County and a city or private landowner where the city/landowner provide for landscape maintenance along a section of expressway.

Livable Community and Pedestrian Program

One of VTA's funding programs in VTP 2020. The program aims to provide funding for safe walking access to jobs, schools, housing, transit, and other destinations.

Local Match

A requirement for local funding (e.g., from cities or the County) to supplement grant funds for transportation projects. Most federal and state grants require some amount of local match. VTA's current policy for calls for a minimum of 20% of a transportation project's cost being locally funded to receive federal, state, or regional sources that are allocated by VTA.

Long-Range Plan

A transportation plan covering a time span of 20 or more years.

LOS (Level of Service)

LOS measures the interrelationship between travel demand (volume) and supply (capacity) of the transportation system. LOS is a quantitative measure categorized into six levels, A through F, with A representing ideal conditions or no congestion and LOS F representing poor conditions or congested flow. Roadways at LOS F are considered deficient and not meeting CMP standards.

LRT (Light Rail Transit)

LRT operates on an electrical system powered from an overhead wire on dedicated tracks. The system is capable of operating at high speeds in dedicated rights-of-way and at lower speeds on arterial streets and downtown environments.

M

Measure B Sales Tax (1996)

A 1996 ballot measure in Santa Clara County that raised the local sales tax by one-half cent for a nine-year period, with the proceeds being deposited into the County's General Fund. Its companion measure (Measure A) identified a specific program of priority transportation improvement projects in Santa Clara County to be undertaken as funding became available. Measure B funds have been used to implement the Measure A program.

Median

The portion of a divided highway separating traffic traveling in opposite directions.

Mixed-flow Lane

A lane of traffic that is not restricted to HOV use and, therefore, can carry both single-occupant and HOV vehicles.

Mitigation

An action to reduce or eliminate the impacts of another action. In the case of transportation, the term can refer to an action or project to improve LOS conditions (a traffic mitigation), or to any number of roadway project mitigations such as installation of sound walls (an environmental mitigation).

Montague Study

A multi-agency study completed in 1999 identifying LOS improvements and priorities for Montague Expressway.

MTC (Metropolitan Transportation Commission)

The transportation planning body for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is responsible for preparing the RTP for the Bay Area.

Multimodal

Of or relating to more than one mode of transportation.

N

Nexus

Refers to the need for a rational and defensible link or connection between the imposition of traffic impact fees, the responsibility for such impacts, and the infrastructure that will be provided.

Noise Attenuation

The reduction of sound intensity by any means (e.g., air, humidity, materials, etc.).

PAB (Policy Advisory Board)

An appointed board of local officials that monitored and guided progress of the Expressway Study and development of the *Implementation Plan*. The Expressway Study PAB consisted of two county supervisors, one council member each from twelve cities, two VTA board members, and two members of the County Roads Commission.

Par-clo (Partial Cloverleaf) Interchange

A type of interchange providing two exit ramps (with signalized turns at the end) and four entrance ramps (all right turns).

Pavement Delineation

Striping and marking on roadways defining travel and non-travel lanes.

PCI (Pavement Condition Index)

Based on measurements of roughness, surface distress, skid resistance and deflection, pavements can be assigned a score that reflects their overall condition. This score quantifies a pavement's overall performance and can be used to help manage pavement maintenance. The pavement condition index is the scale, or series of numbers, used to describe a pavement condition.

PR (Project Report)

For Caltrans facilities, the PR is prepared at the same time as the Draft Environmental Document and after completion of environmental studies. It summarizes studies of need, alternatives, costs, and overall impacts of a proposed project. For simpler, well-defined projects, the PR is combined with the PSR process.

Peak Hour

The highest hour of traffic volumes in an area.

Peak Period

Morning and afternoon hours when commute trips are the heaviest. On the expressways, these hours are usually 6 a.m. to 9 a.m. and 3p.m. to 7 p.m. Also referred to as commute periods.

Peninsula Corridor Joint Powers Board

This Joint Powers Board (JPB) is made up of representatives from the Counties of San Francisco, San Mateo, and Santa Clara and oversees the Caltrain commuter rail service.

PMP (Pavement Management Program)

Pavement management refers to regular programs to monitor asphalt pavement conditions, evaluate serviceability, and schedule repairs. The cities and County must use a Pavement Management System certified by MTC to identify and prioritize pavement needs. In the past, PMP fund programs have distributed revenue using a population-based and lane-mile formula.

POC (Pedestrian Overcrossing)

A structure or bridge for pedestrians to cross a roadway while avoiding conflicts with vehicles. Expressway POCs are recommended to facilitate mid-block crossings where high demand exists and the nearest signalized intersection is too far away for convenient pedestrian use.

Pork Chop

The triangular island used to provide a divided right-turn-only lane at an intersection.

Proposition 42

A state constitutional amendment passed by California voters in March 2002 that permanently dedicates 100% of the state sales tax on gasoline for transportation investments, although the Legislature is able to suspend these provisions in times of fiscal crisis.

PSR (Project Study Report)

Chapter 878 of the (California) Statutes of 1987 requires that any capacity increasing project on the state highway system, prior to programming in the STIP, have a completed PSR. The PSR must include a detailed description of the project scope and estimated costs. The intent of this legislation was to improve the accuracy of the schedule and costs shown in the STIP, and thus improve the overall accuracy of the estimates of STIP delivery and costs.

PUC (Public Utilities Commission)

The California PUC regulates privately owned electric, telecommunications, natural gas, water and transportation companies, in addition to household goods movers and rail safety. Its rail safety responsibilities include LRT and Caltrain crossings and structures.

R**RAC (Rubberized Asphalt Concrete)**

A road pavement surface that uses rubber from scrap tires blended with asphalt.

Right-of-Way

A strip of land occupied or intended to be occupied by certain transportation and public use facilities, such as roadways, railroads, and utility lines.

Roadway Project Tiers

Grouping of expressway capacity/operational improvement projects into tiers to reflect priority. For the Expressway *Implementation Plan*, Tier 1A reflects the highest priority of projects and Tier 3 is the lowest priority.

RTP (Regional Transportation Plan)

A master plan prepared by MTC to guide the Bay Area's transportation investments for a 25-year period. Updated every three years, it is based on projections of growth in population and jobs and the ensuing travel demand. Required by state and federal law, it includes programs to better maintain, operate and expand transportation. The 2005 RTP, now under way, is known as Transportation 2030.

Rural Commute Routes

County unincorporated roads in rural areas identified by the County Roads Commission as being used for commuting. These roads typically have high traffic counts and demand is expected to increase due to local land development plans.

S

SAFETEA (Safe and Flexible Transportation Efficiency Act of 2003)

The current federal reauthorization program for transportation funding. It calls for authorizing a relatively flat federal surface transportation program for the next six years.

SB 541 (Senate Bill 541)

A bill introduced by Senator Torlakson that would tie the state gas tax rate to the consumer price index so as inflation goes up, the gas tax would automatically adjust upward to compensate.

Signal Coordination

Traffic signal coordination is a method of establishing timed relationships between adjacent traffic control signals to move large volumes or "platoons" of traffic in one movement along a corridor. In order to accomplish this, communication between and common equipment at each intersection that works together is required.

Signal Pre-emption

Interruption to the regular signal cycle to provide a green light for an emergency vehicle or to turn lights red to stop cross traffic at train at-grade crossings. Once the pre-emption event has passed, the lights return to normal functions.

Signal Synchronization

Once signal coordination is established, traffic signals can be synchronized to provide improved mobility. This does not mean that the signals will provide a green light at the same time for the entire length of a corridor; rather, that each signal will be timed in relationship with the entire system, allowing for more efficient mobility.

Smart Corridor

A Smart Corridor is one where various public agencies' traffic management activities are coordinated to more effectively manage traffic in that corridor. These are typically achieved using advanced technologies or ITS, while partnerships between jurisdictions are necessary to develop procedures and measures for coordination.

South County

The portion of Santa Clara County consisting of the area from the SR 85/US 101 interchange in San Jose to the San Benito County line. It includes a portion of the City of San Jose, all of the Cities of Morgan Hill and Gilroy, and County unincorporated land between and surrounding these cities.

South County Circulation Study

A study recommended in the *Expressway Implementation Plan* to identify travel needs and potential transportation improvements for the South County area of Santa Clara County.

SOV (Single-Occupant Vehicle)

A vehicle with one occupant.

STIP (State Transportation Improvement Program)

The STIP is a multi-year planning and expenditure plan adopted by the California Transportation Commission for the State Transportation System. VTA recommends the allocation of STIP funds for Santa Clara County in its Valley Transportation Plan (VTP) plans.

STP (Surface Transportation Program)

A flexible federal funding program. Funds may be used for a wide variety of purposes, including: roadway construction, reconstruction, resurfacing, restoration and rehabilitation; roadway operational improvements; capital costs for transit projects; highway and transit safety improvements; bicycle and pedestrian facilities; scenic and historical transportation facilities; and, preservation of abandoned transportation corridors.

SV-ITS (Silicon Valley ITS Program)

Expanded partnership originally formed to implement the Silicon Valley Smart Corridor (I-880/SR 17) project. Its purpose is to work towards implementing three additional ITS projects in Santa Clara and southern Alameda County.

T

T2000 Plan

A long-range countywide transportation plan adopted by the County of Santa Clara Board of Supervisors in 1986. The T2000 Plan included a comprehensive study of and improvement recommendations for the County Expressway System.

TDA (Transportation Development Act)

The state TDA created the Transportation Development Account in 1972. This account receives 1/2-cent of the 6-cent statewide sales tax. The 1/2-cent is apportioned to the county of origin according to the amount of sales tax generated by that county, and it is allocated by MTC to the county's eligible applicants. TDA funds are divided different pots, each with specific designated uses. TDA Article 3 funds (4% of the total TDA fund) are allocated annually for bicycle/pedestrian projects, which are nominated by the VTA.

TFCA (Transportation Fund for Clean Air)

TFCA funds are generated by a \$4.00 surcharge on motor vehicle registrations. The funds generated by the fee are used to implement projects and programs to reduce air pollution from motor vehicles. The Bay Area Air Quality Management District (BAAQMD) manages 60% of the funds via a regional discretionary program. The remaining 40% are returned to each county based on annual vehicle registrations. VTA allocates the 40% funds for Santa Clara County.

TMC (Traffic Management Center)

TMCs help in the real-time management of traffic, including monitoring and controlling roadway access, responding to and managing incidents, rerouting traffic, and communicating and coordinating with the public and the media. It performs these functions with advanced ITS technology.

TOC (Traffic Operations Center)

Centralized location where traffic operations are monitored and controlled. The County Roads and Airports Department TOC is located at the East Yard facility on Schallenger Road in San Jose.

TOS (Traffic Operations System)

A system made up of various ITS components which monitor and respond to traffic operations for an area. Components typically include surveillance (loop detectors, CCTV, etc.), monitoring equipment, highway advisory radio, changeable message signs (CMS), and ramp metering.

TOS Master Plan

A plan developed by the County of Santa Clara that identifies \$42 million in TOS improvements for the expressway system.

Traffic Adaptive System

Traffic-adaptive signal control systems are designed to develop coordination patterns in real-time based on traffic flow data gathered, processed, and communicated to a central computer. The traffic flow data is gathered using a detector located in each lane at the signalized intersection.

Transit

Passenger service provided to the public along established routes via bus or rail. VTA operates most of the transit services in Santa Clara County.

Transit Center

A location where a concentration of transit services is provided, such as multiple bus routes and/or rail stations. It is a major transfer facility for transit patrons.

TSOM (Transportation Systems Operations/Management)

One of VTA's VTP 2020 funding programs intended for ITS type improvements.

TWG (Technical Working Group)

An Expressway Study advisory committee consisting of staff from twelve cities, Caltrans, MTC, and VTA. The TWG provided review and input to both project staff and the PAB.

U

Unincorporated Roads

Roads outside city limits. Counties are responsible for the operation and maintenance of unincorporated roads. In Santa Clara County, there are 635 centerline miles of unincorporated roads, including 248 miles of mountain roads.

US 101 Central Corridor Study

One of VTA's corridor studies identifying transportation needs and improvements for US 101 between Alum Rock Avenue to north of Hellyer Avenue. The study's boundaries extend to the first intersection on each side of US 101.

V

VTA (Santa Clara Valley Transportation Authority)

The Santa Clara Valley Transportation Authority (VTA) is an independent special district responsible for bus and light rail operations, congestion management, specific highway improvement projects, and countywide transportation planning. As such, VTA is both a transit provider, and a multimodal transportation planning organization involved with transit, highways and roadways, bikeways, pedestrian facilities, and land use. The VTA Board of Directors is comprised of 12 elected officials appointed by the member cities and County of Santa Clara.

VTP (Santa Clara Valley Transportation Plan)

A long-range plan developed by the VTA which provides policies and programs for transportation in the Santa Clara Valley including roadways, transit, ITS, bicycle, pedestrian facilities, and land use. The VTP is updated every three years. VTP 2020 was the first plan and was adopted in 2000. VTP 2030 is currently under development.