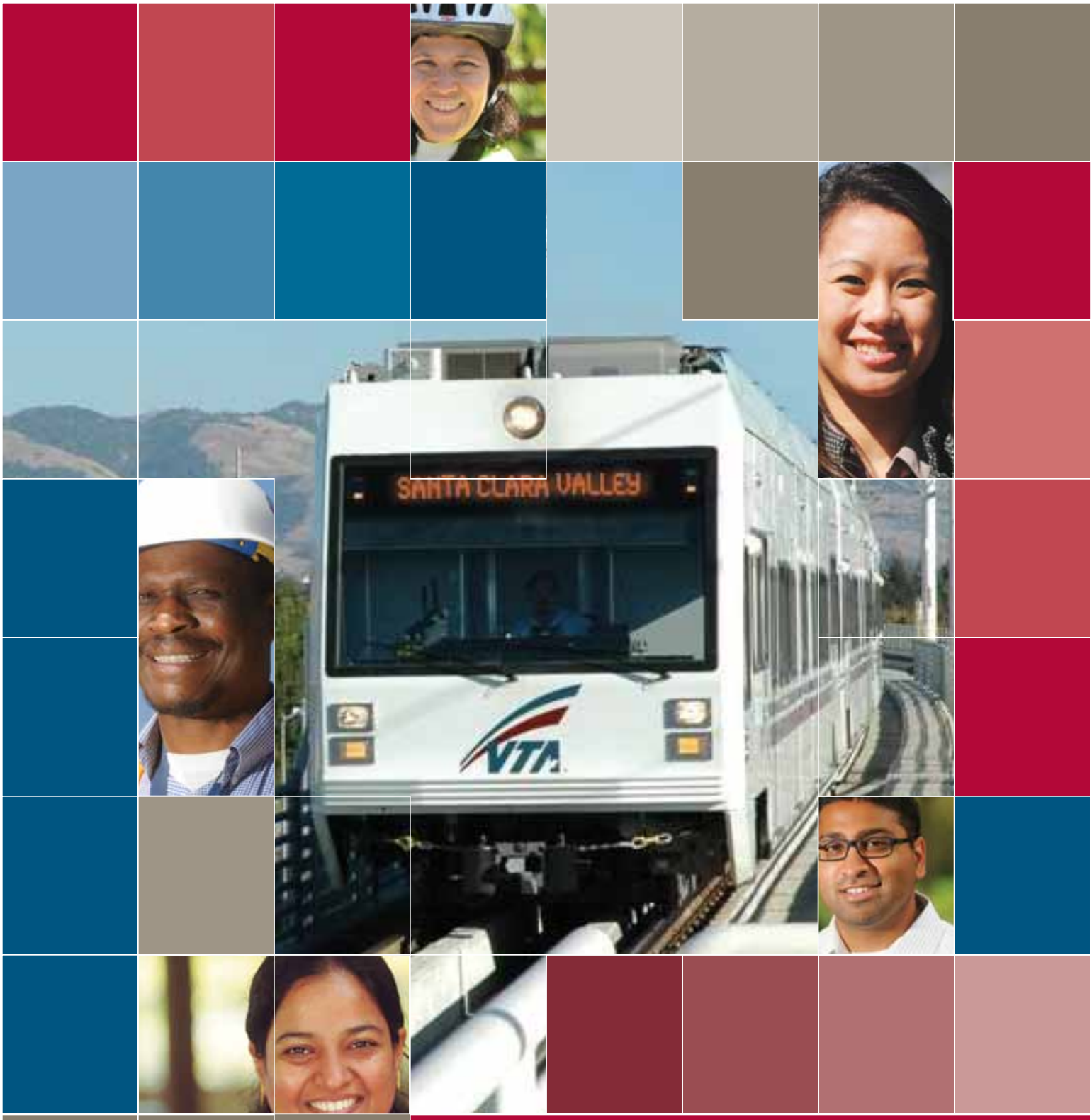

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY

Valley Transportation Plan 2035

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The *Valley Transportation Plan 2035* was adopted by the VTA Board of Directors in January 2009.

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY

Valley Transportation Plan 2035

SANTA CLARA
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Part of every trip you take®

Contents

Foreword

THE VALLEY TRANSPORTATION PLAN 2035 (VTP 2035) IS THE LONG-RANGE VISION for transportation in Santa Clara County. The Valley Transportation Authority (VTA), in its role as the Congestion Management Agency (CMA) for Santa Clara County, is responsible for preparing and updating the VTP on a cycle coinciding with the update of the Bay Area's Regional Transportation Plan (RTP).

VTP 2035 identifies the programs, projects and policies VTA's Board of Directors would like to pursue over the lifetime of the plan. It connects projects with anticipated funds and lays out a framework for the development and maintenance of our transportation system over the next 25 years. It considers all travel modes and addresses the links between transportation and land use planning, air quality, energy use and community livability. VTP 2035 is not a programming document and does not include precise schedules for project implementation or assumptions regarding financing costs that may be needed to implement specific projects in specific years.

VTP 2035 was developed during a challenging time. VTA must find ways to maximize effectiveness and its benefit to the community while addressing climate protection, energy use, growth pressures, and the growing gap between the availability of funds and our growing transportation needs. The plan incorporates a Strategic Planning Element which addresses these challenges and connects the agency's goals and ideals with the programs, projects and policies proposed in this document. The plan expresses a dedication to creating pragmatic and creative transportation solutions, recognizing that achieving success in the issues addressed in the plan will require cooperation and long-term commitments from VTA, its Member Agencies, partners and the public.

Executive Summary

AS THE CONGESTION MANAGEMENT AGENCY FOR SANTA CLARA COUNTY, VTA is responsible for preparing the long-range Countywide Transportation Plan for Santa Clara County, called the Valley Transportation Plan, or VTP. The VTP identifies existing and future transportation related needs, considers all modes of travel and identifies what can be completed within the anticipated available funding for projects and programs. It provides a roadmap for the planning, policy development and programming of transportation funds in Santa Clara County for the next 25 years according to State and Federal requirements. This update, VTP 2035, also includes a new Strategic Plan Element.

The development of VTP 2035 was initiated in late 2007 and pursued a strategy to develop a coordinated approach to identifying transportation issues in the county. Preparation of the VTP 2035 was accomplished in a five-step planning process which consisted of developing the following:

- A **Vision Statement** and goals to accomplish the vision
- A **Needs Based Plan** to meet the needs of the county to the year 2035
- A **Fiscally Constrained Plan** based on a forecast of future revenues
- An **Implementation Strategy**
- A **Strategic Framework** that describes VTA's strategic vision for growth

VTP 2035 recognizes that it is not possible to fully meet the needs of the county by expansion of the roadway system alone. At the same time, it also recognizes that the roadway system is the framework for other modes of transportation, including transit, paratransit, and bicycle and pedestrian systems. Thus, the plan includes both a strong roadway and a strong multi-modal element.

VTP's directive stems from the following mission statement for transportation system development in Santa Clara County:

VTA provides sustainable, accessible, community-focused transportation options that are innovative, environmentally responsible, and promote the vitality of our region.

VTP 2035 THEMES

The VTP is grounded on themes that describe a new direction for the future of Santa Clara County. These themes, contained within the plan horizon, include:

Connectivity The plan will address how we connect existing land uses to the transportation system. The implementation section of the plan addresses studies that will provide systems interconnection, mode interconnection, and elements such as first/last-mile connection.

Pricing Another important theme in the plan is developing congestion pricing methods. A major component of this is the development of an Express Lane network. Express lanes are expected to improve freeway operations, as well as generate revenue for a variety of multimodal improvements within the corridor.

Efficiency The plan embraces different modes of transport as well as examines technology to help us move more efficiently. The plan points us in the direction of developing new carpool lanes, use of technology, enhanced transit, and bike and pedestrian facilities.

Land Use VTP 2035 focuses on intensifying land uses within major transportation corridors. VTA has developed the Community Design for Transportation (CDT) in an effort to promote smart growth at major transit centers. The plan also looks at strategies for pursuing the best opportunities to develop within transit corridors.

Air Quality VTA has initiated a Transportation Energy and Air Quality (TEAQ) program that is designed to address the issues related to air quality and energy use by developing guidelines and incentives for agencies to reduce emissions.

CURRENT FUNDING PROJECTIONS

The financial element of the plan outlines a 25-year projection of transportation project costs, anticipated revenues and shortfalls in the funding of Santa Clara County's transportation needs. The plan projects that $15.2 billion will be available over the next 25 years from a range of State and Federal sources.

Revenue projections for the years 2009–2035 have been developed in consultation with the California Department of Transportation (Caltrans), Caltrans District 4, the Metropolitan Transportation Commission (MTC) and Member Agencies.

PLAN CONTENTS AND ORGANIZATION

VTP 2035 is organized into five chapters plus appendices:

Chapter 1: A Vision for Tomorrow This chapter provides an overview of the setting within which the plan was developed. It introduces three pivotal issues: 1) improving efficiency; 2) developing new sources of revenue, and 3) growing smarter. It provides a summary of VTA's vision, mission and responsibilities.

Chapter 2: Capital Investment Program This chapter provides the fiscal setting underlying the development of VTP 2035, the steps being taken to ensure VTA's long term financial stability, the sources of funding and the funds projected to become available during the 25-year timeframe of the plan. It discusses the ten programs areas included in the plan and provides project lists for the Highway, Transit, Expressways, Local Streets and County Roads, Bicycles, and Intelligent Transportation Systems (ITS) program areas.

Chapter 3: Planning Initiatives This chapter discusses the breadth of VTA planning initiatives for each of the Capital Investment Program Areas discussed in Chapter 2 as well other planning activities that VTA directly sponsors or participates in to improve the transportation system and built environment.

Chapter 4: Implementation This chapter summarizes the projects and programs that will be pursued in the near-term—before the plan is updated in 2012.

Chapter 5: The Strategic Planning Element This chapter reviews the purpose of the VTA Strategic Planning Element, how VTA is organized and structured to deliver the VTP programs and projects, and the goals and strategies that guide the agency's activities. It examines these elements in context with a discussion of VTA's Strengths, Opportunities, Weaknesses and Threats (SWOT) and near-term goals.

Appendices This includes the entire VTP project listing with descriptions, a summary of the policies that guide the plan, detailed descriptions of the CDT and TEAQ Programs and the model analysis results for the projects included in the plan.

RELATIONSHIP TO THE REGIONAL PLAN

The 2009 Regional Transportation Plan (RTP), prepared by the Metropolitan Transportation Commission (MTC), guides transportation planning and funding throughout the nine-county Bay Area to the year 2035. Countywide plans, like VTP 2035, provide input to the RTP.

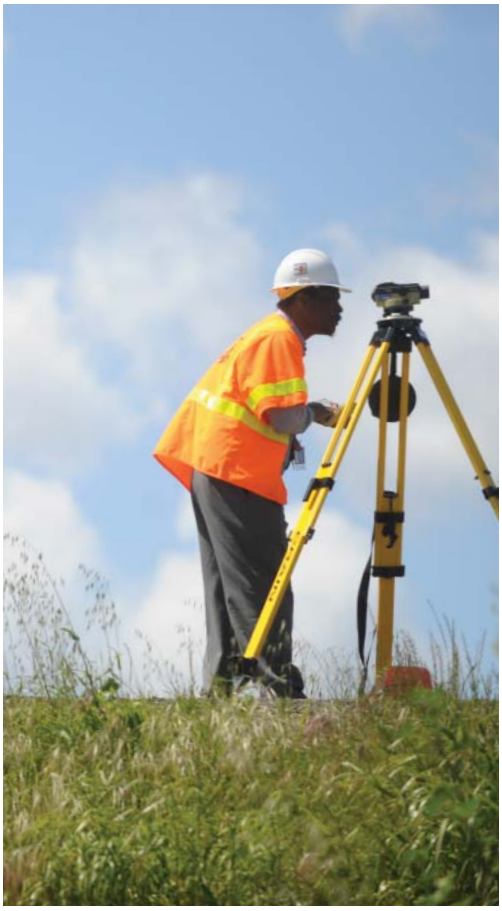
VTP 2035 and the 2009 RTP share common themes, including the reduction of CO_2 emissions, an Express Lane network, focused growth, and the use of technology to improve congestion.

The RTP contains a fiscally constrained list of projects and programs that have a reasonable expectation of being funded during the life of the plan. County-level projects seeking State or Federal funding, completing environmental clearances, or desiring to enter into construction must be in this section of the RTP. In turn, the RTP helps to inform the development of the State Transportation Improvement Program (STIP), which prioritizes the use of State transportation funds.

PLAN WITH VISION

Plans are intended to be visionary. They help us to understand where we are, envision where we want to go and lay out the steps necessary to get there. Successful plans are founded on an understanding of not only the vision and goals that the plan is designed to achieve, but also on the issues that frame them and the resources available to achieve them. VTP 2035 is both visionary and pragmatic—it affirms what we can do and raises the bar for what we should do.

CHAPTER ONE *a vision for tomorrow*



Transportation is the backbone of our economy and the connector of our communities. It binds together our daily activities and is a key input to our quality of life. Our transportation system is a shared resource and we only get out of it what we put into it. Accordingly, the decisions we make about how we travel and how we grow our cities have a profound effect on the future health and utility of our transportation system—and ourselves.

DEFINING THE ISSUES

Decades of sprawling, single-use developments have separated homes from jobs and transit, created a built environment that is unfriendly to transit and pedestrians and made us generally dependant on cars to get around. As a result, many of our communities lack coherent structure, our roadways are congested and we have limited choices about how we move about. This situation shows little sign of improving if we continue to grow as we have. Fortunately, we can learn from our past and start moving toward a more sustainable future. As an agency, and as citizens, we will need to adapt our policies and practices to meet the challenges and opportunities we face.

We need to become more efficient travelers. Over the next 25 years, Santa Clara County will grow by over 500,000 residents and 400,000 jobs—increases of 27.5 and 45.6 percent, respectively. Over the same period, we will only be able to increase the capacity of our roadway system by 5 to 6 percent. We will need to embrace carpooling, transit, biking, walking and making shorter and/or fewer trips. We will also need to embrace new "green" technologies that will allow us to travel by more energy efficient and environmentally friendly means.

We need to develop new sources of revenue. State and Federal funding sources are shrinking and our funding needs for all transportation modes are growing. We must generate additional revenue through existing and new sources.

We need to grow smarter. We must shorten travel distances and make non-auto modes viable by creating walkable/bikeable communities and locating new growth in urban cores and near transit. We must embrace new technologies that can help us move and grow more efficiently. And we must interconnect our systems so that pedestrian, bike, transit and roadway travel are linked as seamlessly as possible.

VTA MISSION AND VISION

In 2008, VTA adopted new Mission and Vision Statements, Core Values and Strategic Goals. Together, these elements represent a philosophical and structural transformation at VTA. They are designed to meet the evolving mobility needs of Santa Clara County and reflect current economic and environmental realities. The Mission and Vision Statements are presented below. A detailed discussion of all these elements occurs in Chapter 5.

VTA MISSION STATEMENT

VTA provides sustainable, accessible, community-focused transportation options that are innovative, environmentally responsible and promote the vitality of our region.

VTA VISION STATEMENT

VTA builds partnerships to deliver transportation solutions that meet the evolving mobility needs of Santa Clara County.

Overview of VTA

VTA is comprised of multiple agency functions, and has wide-ranging authority to plan, fund and deliver the programs and projects identified in VTP 2035. As a Congestion Management Agency, transit operator, funding conduit, and designer and constructor of transit and highway projects, VTA is at the forefront of transportation in Santa Clara County. In this capacity, VTA partners with the cities, towns and the County of Santa Clara—VTA's Member Agencies—as well as intra-county agencies to develop a practical, multimodal transportation infrastructure and services.

As a special district, VTA occupies a unique position between city government and State government. It is led by a Board of Directors comprised of appointees who are directly elected to local governments within Santa Clara County. VTA has been granted tax authority status and can generate its own revenue by placing tax measures on the ballot.

TABLE 1-1 *VTA's Responsibilities*

RESPONSIBILITY	ROLE
Countywide Transportation Planning	VTA prepares the Valley Transportation Plan (VTP). The VTP is the multimodal, countywide long-range transportation plan for Santa Clara County. This plan is the foundation for the wide array of transportation investments, services and programs that VTA and its partner agencies intend to implement over the next 25 years. It is also the county's input into the Regional Transportation Plan (RTP), which is prepared by the Metropolitan Transportation Commission (MTC).
Congestion Management Agency	As the Congestion Management Agency (CMA) for Santa Clara County, VTA is responsible for establishing, implementing and monitoring the Congestion Management Program (CMP).
Transportation Programming	VTA establishes the transportation capital improvement project priorities for local, State and Federal program funding. This includes transit, highway, roadway, bicycle, pedestrian and other capital projects.
Local Transportation Ballot Measure Programs	VTA is responsible for overseeing the ½ cent sales tax established by Santa Clara County voters in 2000 to implement the Measure A Transit Program. VTA also has authority to develop new measures if necessary.
Countywide Transit Planning, Development and Operations	VTA plans, designs and builds new bus and rail projects, and facilities. It also operates, maintains and improves bus, rail and paratransit service within the county.
Highway Planning and Development	VTA plans, designs and builds highway projects and partners with local, regional and State agencies to operate and maintain the local highway system.
Commuter Rail Service and Regional Partnerships	Through a Joint Powers Board (JPB), VTA partners with the San Mateo Transit District and the San Francisco Transportation Agency (SFTA) to jointly plan and fund the Caltrain Commuter Rail service which operates between Gilroy and San Francisco. VTA also establishes regional partnerships to provide the commuter rail service in the Capitol Corridor between Sacramento and San Jose, the Altamont Pass/Sunol Grade Corridor between Stockton and San Jose, and regional bus service between Santa Clara County and the Counties of Santa Cruz and Alameda.

RESPONSIBILITY	ROLE
Land Use and Transportation Integration	As the CMA, VTA is responsible for linking transportation and land use planning. VTA established the Community Design and Transportation (CDT) Program as a partnership with its Member Agencies to implement its goals for land use and transportation integration.
Joint Development	VTA can enter into partnerships with other agencies or private developers to develop its land. VTA may also directly develop and manage its land holdings, and use the surplus revenues for the continued operation and development of the agency.

Table 1-1 explains VTA's responsibilities and the specific roles VTA plays.

VTP 2035 SETTING: GROWTH, LAND USE AND EFFICIENCY

In 2008, Santa Clara County finds itself in a changing transportation environment. Fluctuating gas prices, climate change issues, dwindling supplies of traditional energy sources, frustration with traffic and a desire to limit urban sprawl are yielding new models for development. Affordable housing, transit access and a renewal in the desire for an urban lifestyle have spurred growth in existing city centers and near transit stations. Transit use has increased over the past three years and new data shows statewide declines in vehicle miles driven.

However, this transition toward a new urban and suburban form is in its infancy. The legacy of the high-tech boom—corporate campuses in the north and swaths of neighborhoods in the south—still dominate travel patterns. The geographic imbalance of residences and job sites creates heavy morning and evening commutes that are often disproportionate in direction. However, these issues also showcase the county's strengths and opportunities. Demand to live and work in Santa Clara County remains high and underused industrial sites are seeing new life as redeveloped residential and mixed-use areas.

GROWTH

The Association of Bay Area Governments (ABAG) projects an increase of 512,900 residents and 427,480 jobs in Santa Clara County between 2010 and 2035—increases of 27 and 46 percent, respectively. These percent increases outpace the entire nine-county Bay Area, which is projected to gain 1,619,000 new residents and 1,553,860 new jobs—increases of 22 and 42 percent, respectively.

FIGURE 1-1 *Bay Area Growth in Jobs*

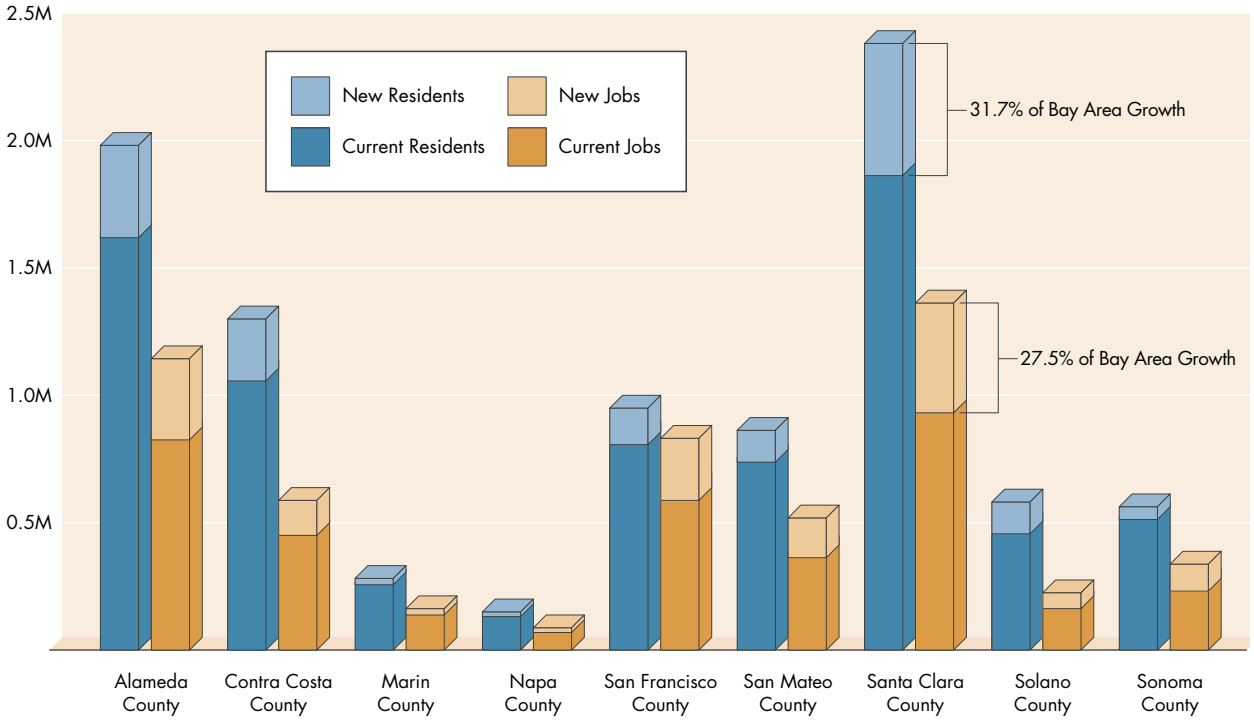
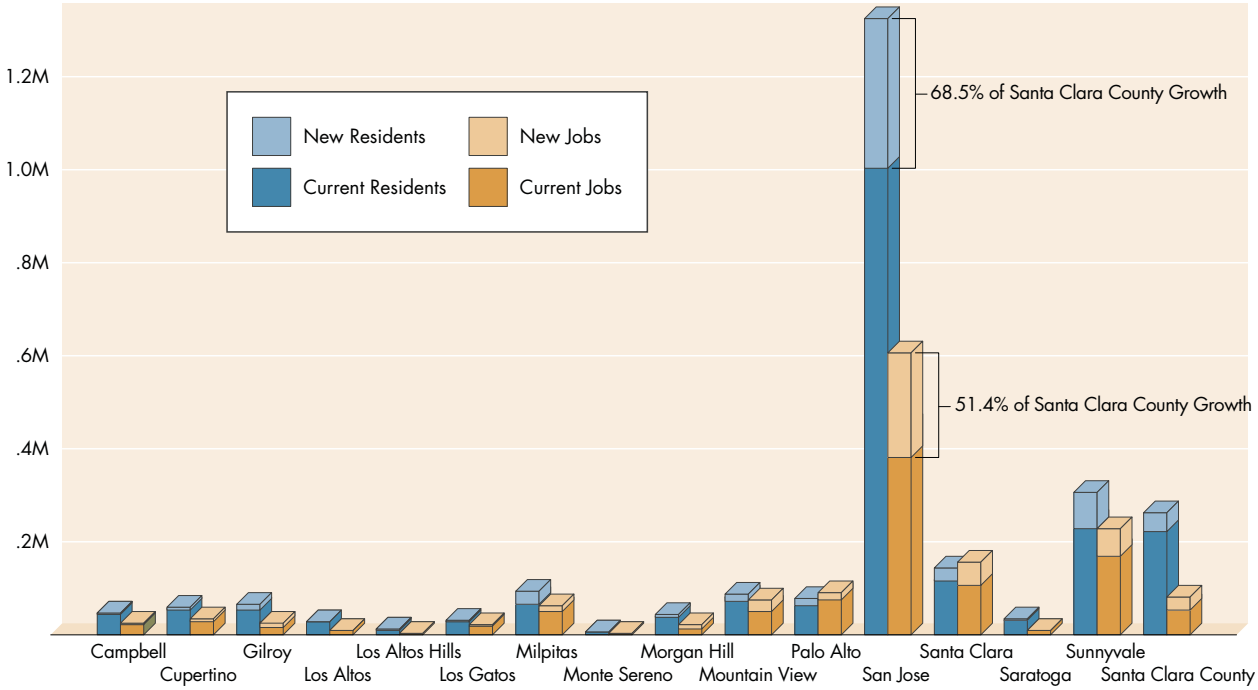


FIGURE 1-2 *Santa Clara County Growth in Jobs*



This growth will increase roadway demand at a rate greater than our ability to add capacity to the transportation system. It will not be possible to build our way out of traffic congestion. Rather, solutions must be found in a smarter built environment and more efficient traveling.

LAND USE

At a very basic level, we need to make our trips shorter and easier. Residences need to be closer to jobs and services and be accessible by multiple modes. This will require partnering with Member Agencies to develop a built environment that supports these objectives. Many cities in Santa Clara County have taken great strides toward these objectives in recent years by building residences near job sites and transit, establishing mixed use districts and by intensifying land uses in urban cores and transit corridors. These trends present great hope for the future and must continue. However, more needs to be done if we are to sustain and improve our quality of life and mobility over the next 25 years.

EFFICIENCY

In addition to smarter, more convenient land uses, improvements in mobility will largely be driven by improved roadway and transit efficiency and the development of a truly interconnected multimodal system. Increases in carpooling, transit and non-auto modes like bicycling and walking will take cars off our roadways and control congestion. VTP 2035 supports these developments through projects like new carpool lanes, new metering lights, signal synchronization, new and enhanced transit services, new bicycle trails and dynamic congestion pricing.

MOVING FORWARD

Maintaining and improving the quality of our mobility over the next 25 years will be challenging. The arrival of new residents and jobs will bring opportunity and vibrancy to our communities, but will increase the demand on the transportation system that connects them. Over the next 25 years, we will be able to craft new and exciting strategies and projects, but continual State and Federal funding shortfalls means that we cannot build everything we need if we rely only on those traditional sources. VTP 2035 acknowledges these challenges and creates a framework for developing the best, most cost-effective programs and projects for Santa Clara County. It lays out sensible policies and the framework for a comprehensive plan. It is, in short, a roadmap to a promising future.


VTA
Valley Transportation Authority

VTA

VTA

CHAPTER TWO *capital investment program*

This chapter of the plan examines the fiscal setting underlying the development of VTP 2035, the steps being taken to ensure VTA's long-term financial stability, the sources of funding, and the funds projected to become available during the 25-year timeframe of the plan. These elements provide the foundation for the VTP Capital Investment Program.

Chapter 2 is complemented by Chapter 3, which discusses the planning initiatives that create and guide these projects, and Chapter 4, which discusses near-term implementation of these projects and initiatives.

VTP 2035 FISCAL SETTING

Santa Clara County is the heart of Silicon Valley, with an economy rooted in technology development. This "tech" economy is characterized by significant volatility and boom-bust cycles that, while influenced by trends in the larger national economy, are not necessarily concurrent. VTA has been through two of these cycles since its formation in 1995.

In 1995, the Valley was recovering from a down-cycle. By 1997 the recovery had become a high technology boom with unprecedented job growth, peaking in mid-2000. By 2002 the Valley was in a deep recession from which it did not begin to recover until late 2004. The next two years were characterized by modest growth. The national economy began faltering in early 2007. While local sales tax receipts were essentially flat in fiscal 2008, Santa Clara's economy was performing well relative to most of the rest of the nation, including other Bay Area counties.

However, the short-term financial future is very unclear. The nation's financial system is grappling with the worst crisis since 1929. In the weeks immediately preceding the production of this chapter (late 2008), housing values in many areas of the country were in decline, major financial institutions have failed, credit markets are essentially frozen and the Federal government has stepped in with a multi-billion dollar bailout package in an attempt to stabilize the economy.

In the midst of this environment, the Federal Transportation Act is due for reauthorization at the end of 2009. The Federal Highway Trust Fund will be bankrupt at that time, and the Mass Transit Account is projected to follow suit shortly thereafter in 2010.

At the State level, California is already in its third year of dealing with multi-billion dollar

structural deficits with a fourth year predicted. While new legislation enacted in 2005 has so far deterred the State from raiding transportation funds as deeply as reported in VTP 2030 (2005), all "unprotected" sources are being diverted to the State General Fund, without the promise of repayment.

Needless to say, these are extremely challenging times for funding and this will be a major focus of VTA staff over the next several years. The economic setting and financial foundation that influence the overall development of VTP 2035 is discussed next.

VTP 2035 FINANCIAL PLAN

Developing the plan requires an understanding of the resources that are expected to become available during the life of the plan with which to implement the programs and projects presented. The VTP 2035 Financial Plan examines the various sources of funding for transportation programs in Santa Clara County, describes the planning and funding process, the funds projected to become available during the timeframe of the plan and the Board-adopted fund allocations for each program area.

As noted previously, the projects, programs and services identified in this section will be funded from a number of local, State and Federal fund sources. The process for dividing up and allocating Federal and State funds to the local level—and then to the various program areas—is complex and varies by fund source. For the purposes of this plan, a brief summary of how this money flows to VTA is helpful in understanding the overall financial planning process for VTP 2035 and the policy environment that shapes VTA Board decisions.

THE FLOW OF MONEY

Locally generated funds are normally governed by local initiatives or policies—such as a sales tax or parcel tax measure—that

earmark revenues for specific purposes. Federal funds flow into the State and are divided up based on both Federal and State statutes and guidelines. State funds are essentially moved to the regional and local level through the State Transportation Improvement Planning (STIP) process, and allocated for specific purposes in accordance with the statutes and guidelines governing the STIP process.

Various organizations are involved along the way, such as the California Transportation Commission and Caltrans, but ultimately the funds essentially arrive at the regional level where either a Regional Transportation Planning Agency (RPTA) or a Metropolitan Planning Organization (MPO)—or both—divide them up for various dedicated and discretionary purposes. These regional entities may, and most often do, have their own statutes and guidelines for directing funds to various uses. In our case, the Metropolitan Transportation Commission (MTC) functions as the MPO for the nine-county San Francisco Bay Area region. The policies for MTC to assign transportation funds to counties occur through the development of the long-range Regional Transportation Plan (RTP), which is prepared approximately every four years.

FUND SOURCES

Funding for the projects, programs and services identified in VTP 2035 comes from a number of local, State and Federal sources. Generally, the plan focuses on the larger sources that provide flexibility in programming and that are expected to provide significant revenues for transportation projects in Santa Clara County over the life of the plan.

Other, less flexible funding sources or funds that are dedicated for specific purposes such as transit operations are not presented here. While these other funds are critically important to operate and maintain the transit system, their limitations mean that the plan is not needed to establish policy for their use. Details regarding use of these funds can be found in VTA's Short Range Transit Plan, and in other city and county planning documents.

In addition to the more traditional fund sources, VTP 2035 discusses strategies for seeking additional funding that VTA will explore during the timeframe of the plan, and that may become valuable and reliable sources of revenue. A description of all of these fund sources follows and are summarized below.

TRANSPORTATION FUNDING SOURCES FOR VTP 2035 PROJECTS AND PROGRAMS

The fund sources described below provide significant revenue for transportation projects in Santa Clara County, and are available for VTP

TABLE 2-1 *VTP 2035 Program Area Allocations (in millions)*

PROGRAM AREAS	FEDERAL NEW STARTS	2000 MEASURE A[1]	TCRP[2]	ITIP	RTIP	STP/CMAQ	TE/TFCA	PROP 1B FUNDS	LOCAL TRANSPORTATION FEES COMMITTED	NEW LOCAL TRANSPORTATION FEES	JOINT DEVELOPMENT REVENUE	SANTA CLARA COUNTY EXPRESS LANE REVENUES	LOCAL ANTICIPATED UNSPECIFIED	2008 MEASURE B SALES TAX[3]	VTP 2035 PROGRAM REVENUES
Transit (2000 Meas. A)	$750	$4,704	$636	$0	$0	$0	$0	$170	$35	$0	$554	$1,400	$0	$1,033	**$9,281**
Highways	$0	$0	$0	$245	$292	$0	$0	$195	$235	$414	$0	$1,720	$0	$0	**$3,101**
Expressways	$0	$0	$0	$0	$161	$0	$0	$0	$102	$0	$0	$0	$0	$0	**$263**
Local Streets and County Roads	$0	$0	$0	$0	$260	$0	$0	$24	$299	$45	$0	$0	$0	$0	**$628**
Pavement	$0	$0	$0	$0	$0	$230	$0	$0	$0	$0	$0	$0	$910	$0	**$1,140**
Local Transportation Projects and Enhancements	$0	$0	$0	$0	$0	$0	$85	$0	$60	$0	$0	$0	$0	$0	**$145**
Soundwalls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10	$0	$0	$0	$0	**$10**
Landscape/ Graffiti	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1	$0	$0	$0	$0	**$1**
TSM and Ops (ITS)	$0	$0	$0	$0	$0	$100	$0	$0	$0	$0	$0	$0	$0	$0	**$100**
Bicycle	$0	$0	$0	$0	$0	$100	$25	$0	$35	$0	$0	$0	$0	$0	**$160**
CDT Program	$0	$0	$0	$0	$0	$101	$100	$0	$0	$0	$0	$0	$159	$0	**$360**
Total	**$750**	**$4,704**	**$636**	**$245**	**$713**	**$531**	**$210**	**$389**	**$766**	**$470**	**$554**	**$3,120**	**$1,069**	**$1,033**	**$15,189**

[1] Includes 18.5% Operating Revenue set-aside

[2] Total TCRP programmed to BART Extension, Warm Springs to SC/SJ—including prior expenditures

[3] Assumes new revenue would not begin before 2013.

2035 projects and programs at the VTA Board of Directors' direction. A 25-year projection (in 2008 dollars) and a general description of the programming processes and fund-specific limitations are included with each source.

2000 Measure A Sales Tax

On November 2, 2000, the voters of Santa Clara County voted to extend the 1996 Measure B Sales Tax for 30 years to fund a specified package of transit projects and programs. The new

2000 Measure A began on April 1, 2006 and ends on March 31, 2036. The tax is currently projected to generate $5.1 billion in 2008 dollars between 2008 and 2035. Eighteen and a half percent of Measure A funds are set aside for operating purposes.

2008 Measure B

In November 2008, the voters of Santa Clara County renewed the funding for the BART project. This 1/8-cent sales tax is solely for the purpose of funding the operations and maintenance of the 16.1-mile BART extension into Santa Clara County. The tax is limited to 30 years and will not be collected until sufficient State and Federal funds are secured.

Federal New Starts Program (Section 5309—New Starts)

The Federal New Starts program is one of the Federal transit funding programs created in 1991 as part of the Intermodal Surface Transportation Efficiency Act (ISTEA). These programs were continued in the Transportation Efficiency Act for the Twenty-First Century (TEA-21) and are expected to be renewed in the next reauthorization. The New Starts program is part of Title 49 United States Code (USC), Section 5309. The funds are for significant rail and rapid bus expansion projects.

Congress distributes these funds to projects at its discretion, based on project evaluations by the Federal Transit Administration (FTA). VTP 2035 projects $750 million from this source to extend BART from Fremont to San Jose and Santa Clara. This plan assumes a flat amount with no escalation.

Traffic Congestion Relief Program and Proposition 42

In 2000, the Traffic Congestion Relief Program (TCRP) was enacted, directing revenues generated by the State sales tax on gas and diesel fuel from the State general fund to transportation. The transfer was to occur for fiscal years 2003–04 through 2007–08, then end. However, in 2002, California voters passed State Proposition 42, which made the sales tax on gasoline a permanent funding source for transportation. These revenues are dedicated to the following purposes: (a) the State Transportation Improvement Program; (b) local streets and roads; (c) the Public Transportation Account; and (d) the Traffic Congestion Relief Program, which consists of 149 projects that were earmarked in legislation that was enacted in 2000. These programs are discussed in more detail in the following paragraphs.

While State transportation funding was expected to increase as a result of the passage of Proposition 42, the Governor and Legislature took advantage of a “loophole” in the ballot measure to divert a significant amount of these revenues to the General Fund. To curb this practice, California voters approved Proposition

1A in November 2006, a constitutional amendment that puts restrictions on when and how often Proposition 42 revenues can be loaned to the General Fund. It also requires any outstanding prior-year Proposition 42 loans to be repaid within a 10-year period and specifies an annual minimum amount that must be paid back in a given fiscal year.

Traffic Congestion Relief Projects Establishes a list of 149 specific congestion relieving transit and highway projects designated to receive funds. Approximately $965 million was designated for projects in Santa Clara County. Of that amount, the California Transportation Commission (CTC) has already allocated all but $239 million to VTA. The CTC adopted a statewide TCRP allocation plan on September 24, 2008 that specifies a six-year payment schedule for the remaining $239 million, starting in fiscal year 2009.

Proposition 42 Local Streets and Road Rehabilitation Augments the gas tax receipts that the State distributes directly to cities and counties. The current estimate is $890 million in 2008 dollars. The VTA Board of Directors does not control or direct these funds.

Proposition 42 State Transportation Improvement Program Increment Increases the amount of State funding flowing into the State Highway account for the STIP, subject to the distribution formulas that apply to the existing funds. The current estimate is $899 million in 2008 dollars. More discussion is included under the State Transportation Improvement Program (STIP) section.

Proposition 42 State Transit Assistance Increment Increases the amount of State Transit Assistance (STA) to transit operations. The current estimate is $420 million for VTA in 2008 dollars. STA funds are directed to specific transit operators and funds are generally used for operations. More discussion of the STA program is included under "Other Major Transportation Fund Sources" on page 20.

Proposition 1B

The Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006 was approved by California voters as Proposition 1B on November 7, 2006. Proposition 1B provides almost $20 billion in bond funding statewide for twelve different transportation infrastructure programs. Of these programs, six provide significant funding for projects in Santa Clara County.

Corridor Mobility Improvement Account This program provides $4.5 billion statewide for performance enhancing highway projects of statewide significance. Three highway projects in Santa Clara County will receive $170 million from this program.

STIP Augmentation Proposition 1B provided an additional $2 billion statewide to augment the 2008 STIP. Santa Clara County's share is $63 million. More information on the program is provided in the STIP section. These funds, allocated to VTP 2035, are included in the RTIP totals shown in Table 2-1.

State Local Partnership Program Proposition 1B recreated a State matching program for entities that enact local transportation taxes and uniform developer fees. Santa Clara County's estimated share is approximately $46 million.

Public Transportation Modernization, Improvement and Service Enhancement Account This program makes funds available on a formula basis for rehabilitation, safety or modernization improvements, capital service enhancements or expansions, new capital projects, bus rapid transit improvements, or for rolling stock procurement, rehabilitation or replacement. VTA's estimated share is $210 million. The majority of these funds ($120 million) will be used to replace and maintain VTA's current fleet and facilities. The balance ($90 million) is included in Table 2-1.

Highway Railroad Crossing Safety Account $250 million is available statewide on a competitive basis for railroad grade-separation projects. The CTC programmed approximately $20 million to two grade separation projects on the Silicon Valley Rapid Transit Extension right-of-way in August 2008. These funds are shown under Proposition 1B in Table 2-1.

Local Street and Road Congestion Relief and Traffic Safety Account Proposition 1B provides funds to the cities and counties for improvements to transportation facilities that will assist in reducing local traffic congestion and further deterioration, improving traffic flows, or increasing traffic safety that may include, but not be limited to, street and highway pavement maintenance, rehabilitation, installation, construction and reconstruction of necessary associated facilities such as drainage and traffic control devices, or the maintenance, rehabilitation, installation, construction and reconstruction of facilities that expand ridership on transit systems, safety projects to reduce fatalities, or as a local match to obtain State or Federal transportation funds for similar purposes. These funds flow directly to the cities and the county, with no prioritization by VTA. They are therefore excluded from Table 2-1. Approximately $190 million is projected to be made available to the fifteen cities and the County of Santa Clara in the next ten years.

Federal Surface Transportation Program/Congestion Mitigation Air Quality Program

The Surface Transportation Program (STP) and Congestion Mitigation Air Quality Program (CMAQ) funding programs were created in ISTEA and continued in TEA-21 and SAFETEA-LU. Since they are not restricted to particular modes, STP and CMAQ are also called "flexible funds." STP funds can be used for virtually all transportation capital projects. CMAQ funds are limited to implementing the transportation provisions of the 1990 Federal Clean Air Act in Air Quality Non-Attainment areas. The Bay Area is currently a non-attainment area.

Federal funds are authorized in six-year programs. The current act is the SAFETEA-LU, which expires at the end of Fiscal Year 2009. TEA-21 expired on October 1, 2003; however, Congress has been adopting continuing resolutions to allow transportation agencies to continue doing business until a successor bill is adopted. MTC has final programming authority for STP and CMAQ funds in the nine-county Bay Area, and directs the use of these funds through the RTP. The current estimate for Santa Clara County is $651 million in 2008 dollars over the life of the plan.

State Transportation Improvement Program

Senate Bill 45 (SB45), enacted in 1997, consolidated several State transportation funding programs and directed State and Federal transportation funds from the State Highway Account (SHA) into the Regional Improvement Program (RIP) and the Interregional Improvement Program (IIP). Together, these programs are called the State Transportation Improvement Funds (STIP). STIP funds may be used for road rehabilitation and capacity expanding capital transportation projects.

RIP funding constitutes 75 percent of the STIP, and funds are distributed among the counties via a formula established by State legislation. In the Bay Area, Congestion Management Agencies (CMAs) program RIP funds with review by MTC and approval by the CTC. The IIP is the remaining 25 percent of the STIP. IIP funds are programmed by Caltrans through the Interregional Transportation Improvement Plan (ITIP) process, with final approval by the CTC. The STIP programming process occurs every two years—in "even" years. The current total STIP projection in 2008 dollars for Santa Clara County is $957.9 million (virtually all derived from Proposition 42), consisting of $713 million in RIP funds and $245 million in IIP funds for projects nominated by Caltrans.

Transportation Fund for Clean Air

Health and Safety Code Section 44223 authorizes the Bay Area Air Quality Management District (BAAQMD) to levy a fee on motor vehicles. Funds generated by this fee are placed in the Transportation Fund for Clean Air (TFCA) account to be used for implementing projects and programs that reduce air pollution from motor vehicles. Health and Safety Code Section 44241 limits expenditure of these funds to specified eligible transportation control measures (TCMs) that are included in BAAQMD's 1991 Clean Air Plan, developed and adopted pursuant to the requirements of the California Clean Air Act of 1988.

BAAQMD directly administers 60 percent of the TFCA, with annual revenues ranging from $9 million to $15 million. The remaining 40 percent goes directly to TFCA Program Managers in each Bay Area county. VTA, as Santa Clara's TFCA Program Manager, works

with Member Agencies to develop criteria that are then used to select projects consistent with the eligible project categories specified in statute. The current TFCA 40 percent estimate for Santa Clara County is $80 million in 2008 dollars over the life of the plan. Since TFCA fund generation is tied to the number of vehicles being registered, it does not increase with inflation.

Transportation Enhancement Activities

ISTEA provided a 10 percent set-aside of each state's STP allocation for Transportation Enhancement (TE) activities above and beyond normal capital improvements. This set-aside has been continued in the two subsequent acts.

TE funds must be used for elements of a project that are over and above what would be termed the "normal project." They must have a direct relationship to the intermodal transportation system and fit one or more of 12 activity categories described in TEA-21. These activities include bicycle and pedestrian improvements, scenic preservation and wildlife mortality mitigation.

The mechanisms and responsibility for programming TE funds have changed several times since the program's inception. As of 2004, TE funds are programmed through the

STIP process. Each of the counties receives a TE share estimate with its RIP share estimate. The TE estimate for Santa Clara County is $41 million in 2008 dollars.

OTHER MAJOR TRANSPORTATION FUND SOURCES

Although the fund sources discussed in this section provides significant funding for transportation projects in Santa Clara County they have not been included in VTP 2035 for the following reasons:

- Funds are given directly to cities and counties for local road repairs.
- The VTA Board does not control them, and/or they are committed to operations and rehabilitation purposes.

The priorities for using these funds are determined by the cities, the county, VTA and Caltrain through local the Capital Improvement Program (CIPs) and the Short-Range Transit Plan (SRTP).

Gas Tax Subventions

A portion of the State sales tax on gasoline and diesel fuel goes directly back to the cities and the counties for streets and roads maintenance. These funds are allocated based on formulas established by the State Legislature. The State Controller's office transfers funds directly to local agencies. These funds were augmented by Proposition 42. The current estimate, including Proposition 42 transfers, is $1.88 billion in 2008 dollars sent directly to the cities and County of Santa Clara.

VTA Dedicated Sales Tax

In 1976, the voters of Santa Clara County enacted a permanent 1/2-cent sales tax for local transit operations and capital projects. These funds flow to VTA and are allocated by VTA for operations and capital projects through VTA's annual budget and SRTP. The current 25-year estimate is $4.78 billion in 2008 dollars.

Transportation Development Act Article 3

Transportation Development Act (TDA) Article 3 funds are a portion of the sales tax on gasoline and diesel fuel, which is returned by the State of California to the county in which it was collected. TDA Article 3 funds are for use on bicycle and pedestrian projects.

MTC programs these funds in the nine Bay Area counties. Each year, VTA coordinates and submits countywide project priorities for this fund source. The VTA Board has set aside 30 percent of the annual allocation for the countywide Bicycle Expenditure Program between 2000-01 and 2010-11. The remainder is distributed among the cities, towns and county by a VTA Board-adopted formula. The current 25-year estimate for TDA Article 3 funds is $45 million in 2008 dollars.

Transportation Development Act Articles 4, 4.5 and 8

TDA Article 4 and TDA Article 8, also generated from the statewide sales tax on diesel and gasoline fuels noted above, provide transit operating, maintenance and capital funds. TDA Article 4.5 is available only for paratransit operating assistance and capital projects. TDA funds are administered by MTC and allocated annually based on sales tax receipts in each county.

These funds flow to VTA and are allocated for operations and capital projects via VTA's annual budget and SRTP. The combined 25-year TDA estimate (for Articles 4, 4.5 and 8) for Santa Clara County is $2.91 billion in 2008 dollars.

Federal Transit Act Section Funds (Section 5307, 5309)

The FTA funding programs were parts of ISTEA, and were continued in TEA-21. These funds flow to transit operators via MTC's regional programming process, with earmarks for specific urbanized areas (UAs). Based on 2000 census data, Santa Clara County contains two UAs—the San Jose UA and the Gilroy/Morgan Hill UA. VTA and Caltrain are the only fund recipients within these two UAs. The three most significant Federal funding programs are:

Section 5307, Transit Formula Funds These funds are available to VTA and Caltrain for rolling stock purchases and paratransit operations. Programming is determined in VTA and Caltrain SRTPs, through the MTC region's Transit Capital Priority process, subject to the provisions of the Caltrain Joint Powers Agreement (JPA). The current 25-year estimate is $1.16 billion in 2008 dollars.

Section 5309, Fixed Guideway These funds are available to VTA and Caltrain for rail or ferry capital projects. Planning for projects occurs in VTA's and Caltrain's SRTPs. Programming is through MTC's Transit Capital Priority process, and subject to the provisions of the JPA. The current 25-year estimate is $500 million in 2008 dollars.

Section 5309, New Rail Starts This is a discretionary program for rail, ferry and rapid bus transit expansions, and is discussed in the previous section under VTP 2035 Fund Sources. The current estimate for New Rail Starts funds during the 25-year plan period are $750 million in 2008 dollars.

Measure B Sales Tax Funds

In 1996, Santa Clara County voters approved Measure B, a 1/2-cent, nine-year countywide general sales tax to be collected by the county between April 1, 1998 and March 31, 2006. When Measure B was approved, voters also approved 1996 Measure A, a nine-year program of transit, highway, expressway, and bicycle projects and a pavement management program

to be funded with any new sales tax revenue and carried out by VTA and the county.

The 1996 Measure B program is complete, and the improvements are in use. It is therefore not included in this plan.

State Transit Assistance

These funds may be used for transit capital projects and transit operations, including regional transit coordination. STA funds are subdivided into STA revenue-based and STA population-based categories. Revenue-based funds are allocated to transit operators based on operator revenues. Population-based funds are allocated to regional transportation planning agencies based on service area population.

The current 25-year STA projection is $490 million in 2008 dollars. This includes base funding and $270 million in Proposition 42 STA increments to VTA and Caltrain. It does not include the population-based funds allocated to VTA by MTC for regional paratransit coordination and/or the Lifeline Transportation Program.

ADDITIONAL FUNDING STRATEGIES

The VTA is also looking at new and innovative ways to fund transportation projects. Current funding projections are inadequate to meet all the transportation needs in California. In order to meet the demand of the transportation system and the lack of adequate capital, the plan is looking toward generating revenue locally to help fund our transportation projects. Examples of this are discussed below.

Local Sales Tax

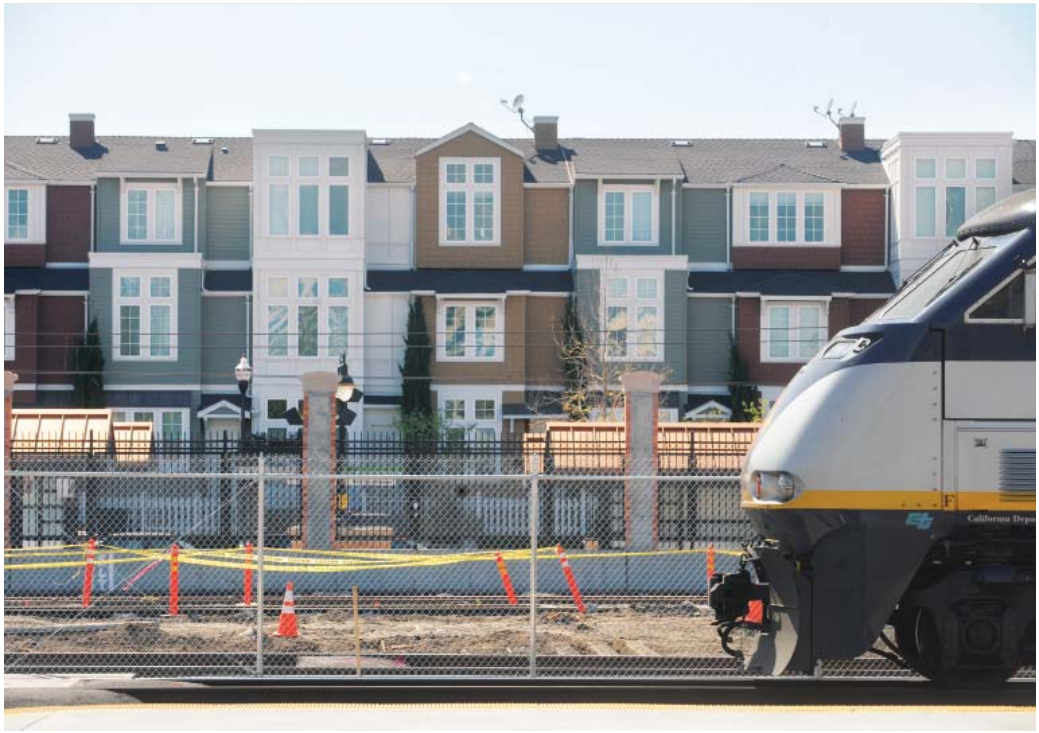
Since the voters in Santa Clara County approved a sales tax for specified transportation projects in 1984 and 1996, the county has successfully constructed significant improvements to the transportation system. The projects built under the 1984 and 1996 measures dwarf the projects programmed with State and Federal flexible funds.

In November 2000, the Santa Clara County voters approved a 30-year 1/2-cent sales tax to fund transit projects and services in the county. Measure A revenues are administered by VTA, and VTA is responsible for providing the funds necessary to sustain operations and maintenance of the Measure A projects in perpetuity.

Other Local Revenue Sources

Local revenues can offer greater reliability and flexibility than State or Federal sources, and may be used strategically to leverage other funds. Forecasting the amount of revenue that many of these sources might generate is a difficult and inexact process over the long term. These local sources include, but are not limited to:

- Citywide or countywide development impact fees (discussed below)
- Transit Special District (discussed further below)
- City or county general funds
- Business tax and/or license fees
- Transient Occupancy taxes
- Gas taxes
- Local assessment districts
- Developer exactions
- Right-of-way dedication
- California Environmental Quality Act (CEQA) mitigation
- Redevelopment tax increment financing
- Parking charges and taxes
- Sales tax
- Vehicle Miles Traveled (VMT) tax
- Payroll tax
- Parcel tax
- Joint development and other forms of value capture
- Vehicle registration fees
- Roadway pricing
- Other user fees



Development Impact Fee

Development Impact Fees may be assessed to projects through local agency policies, or through the Congestion Management Program (CMP) Deficiency Planning Process. The CMP statute requires Member Agencies to prepare deficiency plans for CMP system facilities located within their jurisdictions that exceed the CMP Traffic Level-of-Service (LOS) standard.

In 1997, VTA investigated a countywide transportation impact fee as part of a Countywide Deficiency Plan (CDP) dedicated to specific improvements on the CMP network. Such a fee program could have the following aspects:

- Fees charged directly to developers seeking permits to build within the county.
- Fees charged proportional to the impact (i.e., vehicle trip generation) of the specific land use type. Thus, the fee could be scaled according to the burden new development places on congested transportation infrastructure. The traditional approach to instituting CDP fees is for all local jurisdictions to adopt the plan by a majority vote of their city council or board. Although no legal precedent has been established, an alternative strategy may be for VTA to institute a 50 percent matching requirement and give each jurisdiction the option of adopting the countywide fee as a means of generating its local match.

VTA Member Agencies may develop their own CDPs for the same purposes. Several cities in the county have or are developing deficiency plans or impact fees for new development projects. VTA staff is available to assist local jurisdictions with developing deficiency plans and impact fees.

Currently fees are in place in the North San Jose Redevelopment Area and in Sunnyvale. Together they are projected to generate $731 million in 2008 dollars. These funds are dedicated to specific transit, highway, expressway, local road, bicycle and Transportation Demand Management (TDM) projects.

VTA projects that the cities and the county will adopt additional fee programs over the life of the plan, generating an estimated $470 million for roadway improvements.

Transit Special District

Jurisdictions around the nation and in other counties are exploring and implementing Transit Special Districts (TSD) to generate funds to support new or expanded transit service and/or transit-related capital improvements in specific areas or corridors. The concept is that assessments would be levied to businesses, property owners, other special districts such as schools, or jurisdictions in general that request new transit service and that would benefit from those service improvements. The fees would help expand transit operations that support new development or community specific services such as a community bus. This may also be a mechanism that would allow VTA to implement transit service improvements in advance of the land use in areas where VTA's Transit Sustainability Policy and Service Design Guidelines are not met. Several cities are in the process of preparing comprehensive General Plan updates and VTA will be working over the next few years with these jurisdictions to further explore this option in conjunction with these processes.

Express or High Occupancy Toll Lanes and Other Roadway Pricing

Although the concept of having drivers pay for using the roadways has existed for decades, it is now drawing more attention from local, State and Federal agencies. This increased attention is attributable to worsening traffic congestion, the desire to gain greater efficiency from existing facilities, the scarcity of transportation funding and the improved ability to electronically collect tolls and vary toll amounts by time of day and location.

Tolling is a user fee best able to directly charge for the use of a facility at the place and time of use. Such user fees address the market side of the equation by considering the interaction between demand for transportation services and the available supply.

This results in a direct cost for the good—or service—being consumed. Cost in this context may be considered as the time spent driving. Economic theory tells us that as the price of a good decreases (i.e., drive time) demand for it increases—so drive alone trips are induced as long as the cost of driving remains relatively low and new facilities that improve travel time are constructed.

VTP 2035 includes a countywide express lane network. Forms of roadway pricing for serious consideration are:

Toll Roads Charge drivers in all travel lanes to use the roadway. Toll roads have the admirable quality of being able to pay for themselves through the revenue generated from toll collection. Given the scarcity of—and the high demand for—State and Federal highway funds, toll roads are considered in some cases the best—or only—hope for timely implementation of needed highway expansion or improvement projects. Toll roads are commonplace in other parts of the U.S. and in other countries, and have often been constructed to accommodate long distance or commute trips.

Toll roads can also be an effective congestion management tool. Flexible pricing plans can be used to encourage ridesharing while charging for use of the roadway. Pricing plans can also be used to discourage trips during

the peak-hour periods and encourage drivers to shift their commute to times when fewer vehicles are using the facility. The revenue generated in excess of the amount needed to pay for construction and operation of the facility can be used to provide transit services in the corridor; these efforts can further enhance the level of ridesharing and transit use, thereby effectively increasing the overall carrying capacity of the corridor.

Express Lanes An innovative operational and financial approach to implementing roadway pricing that can be viewed as a subset of toll roads that allow single occupant vehicles (SOVs) to use—for a fee—what would otherwise be a preferential lane for carpools and transit vehicles. Express lanes essentially apply to new or existing carpool lanes, where surplus HOV lane capacity is "sold" to SOVs at escalating rates to keep the lane(s) operating a peak efficiency. Express lane operations have existed on State Route (SR) 91 in southern California since 1991. This four-lane express lane facility constructed in the median of SR 91 allows free passage to vehicles carrying three or more people, while charging a fee to SOVs and two-person carpools. In the Bay Area, VTA has been a leader in the development of an express lane network. VTA is partnering with the Alameda Congestion Management Agency and Caltrans to deliver a southbound express lane on the I-680 Sunol Grade in Alameda and Santa Clara counties. This facility will charge SOVs for use, but would allow free passage to vehicles carrying two or more people. It is currently under construction with a projected in-service date of 2011.

The fee charged for using the lane goes to manage operations and prevent congestion in the express lane. Revenues from express lanes can be used to pay for all or a portion of the cost of the additional lane(s) or the lane conversions, and to pay for transit services serving the corridor or other roadway improvements in the corridor.

In 2004, State legislation (AB 2032, Dutra) was passed giving VTA the authority to implement express lane operations in up to two corridors in Santa Clara County. VTA has completed an Express Lane Study that identified candidate corridors. These corridors are included as part of the Highway Program of projects in this plan.

VTA projections estimate that express lane projects will generate $3.13 billion in 2008 dollars during the plan time period. Approximately $1.72 billion will be needed to finance, construct, operate and maintain the express lane system over the plan period. The express lanes will generate an additional $1.4 billion that will be used for transit services and other transportation improvements in the express lane corridors.

Joint Development Revenue

VTA has implemented a Joint Development/ Land Development Program. This program responds to the Board's 2003 Ad Hoc Financial Committee Recommendations to pursue opportunities to provide VTA with a diverse revenue stream. VTA has a large portfolio of land assets that if developed, leased or sold and the revenues properly invested can generate a significant ongoing revenue stream for VTA. Potential from the Joint Development Program is currently estimated at $500 million over the life of the plan.

New Local Anticipated/ Unspecified Funds

Over the last decade, significant, unanticipated new transportation revenue sources have become available. TCRP, Proposition 42, Regional Measure 2 (RM2), and Proposition 1B are examples of significant new fund sources that were not anticipated in either the countywide plans or the regional transportation plans that were in effect at the time.

Moreover, with the development of the 2009 RTP, MTC acknowledged that it has in the past tended to underestimate the amount of reasonably expected transportation revenues that come into the Bay Area during the 25-year timeframe of the RTP. Accordingly, MTC has included an additional $13 billion for Regional Anticipated/Unspecified Funds in the Commission-adopted Financially Constrained Investment Plan in the 2009 RTP. This is roughly equivalent to 20 years

worth of the annualized amount of unanticipated funding that has come into the Bay Area since 1998.

Following this same logic, VTP 2035 includes $2 billion in new Local Anticipated/Unspecified Funds coming to Santa Clara County. To compare this to the MTC assumptions, if Santa Clara County received its population share of the $13 billion Regional Anticipated/Unspecified Funds, or approximately 30 percent, about $3.9 billion could be expected for Santa Clara County of the life on the plan.

CAPITAL INVESTMENT PROGRAM

This section of the plan is the core of VTP 2035. It presents a capital investment plan for a comprehensive set of transportation projects and programs that express a vision of Santa Clara County's transportation future.

The VTP 2035 Capital Investment Program is built on a vision in which the existing roadway network is better managed with ITS improvements: an expanded high-occupancy vehicle (HOV) system, improved interchanges, some freeway upgrades and a priced express lane network. Transit lines are improved, and existing transit services are refined—increasing efficiency and productivity, and requiring fewer resources. Bicycle and pedestrian improvements augment other modes and firmly establish walking and biking as viable forms of travel. Overall, land use decisions are better integrated and coordinated so as to complement and support transportation projects.

The Capital Investment Program addresses transportation-related projects and actions in Santa Clara County that involve participation by VTA and its partnering agencies, impact inter-jurisdictional travel, or are regional in nature. These capital investments are location-specific improvements for four modes of travel: roadway (including express lanes and ITS), transit, bicycle and pedestrian. The projects and programs for these modes are covered in ten Program Areas:

1. Highway Program
2. Expressway Program
3. Local Streets and County Roads Program
4. Pavement Management Program
5. Sound Mitigation Program
6. Landscape Restoration/Litter and Graffiti Removal Program
7. Transit Program
8. Systems Operations and Management Program
9. Bicycle Program
10. CDT Program

Developing the Constrained and Unconstrained Project Lists

Under guidelines established by the Federal government in the 1998 TEA-21, and its earlier sibling, the 1991 ISTEA, long-range transportation plans must be financially constrained. The financially constrained portion of the RTP includes projects funded with projected revenues from sources that exist today—such as approved sales tax measures, Federal flexible formula funds, or gas tax subventions—and from sources that can be reasonably expected to be available during the life of the plan. The unconstrained portion of RTP includes projects that fall outside of these funding assumptions.

Like the RTP, not all of the programs and projects identified in VTP 2035 can be funded with the fund sources identified, which means that VTP 2035 also has an unconstrained portion. Both constrained and unconstrained projects lists are presented in the Capital Investment Program that follows.

The Programming Process

VTP 2035 is a long-range transportation planning document, and neither it nor the RTP set priorities or schedules for when projects are to be implemented. Programming documents, such as the Transportation Improvement Program (TIP), are where priorities and schedules for delivery of specific projects are

developed. These are shorter-range documents with a three-to six-year timeframe. The VTA Board of Directors and its partners determine the expenditures that will guide project priorities and schedules that are affirmed in these shorter-range programming documents.

VTP 2035 Fund Projections and Allocations

As shown in Table 2-2, the total amount assumed to be available over the life of the plan for VTP 2035 programs and projects is $15.2 billion. Details regarding each of these program areas and their respective lists of projects are presented on the following pages. The VTA Board of Directors adopted the allocations amounts for the projects shown in this table at its June 2008 meeting. These allocations were based on revenue projections developed by MTC, the Bay Area CMAs and VTA.

The VTP 2035 program areas represent a wide range of programs and projects covering the four modes of travel: roadways, transit, bicycle and pedestrian. Since the adoption of VTP 2030 in February 2005, VTA and its

TABLE 2-2 *VTP 2035 Fund Allocations*

PROGRAM AREAS	FUND ALLOCATION ('08 $MILLIONS)
Highway Program	**$3,101**
Expressway Program	**263**
Local Streets and County Roads Program	**628**
Transit Program	**9,281**
Transportation Systems Operations and Management (ITS) Program	**100**
Pavement Management Program	**1,140**
Bicycle Program	**160**
CDT/Pedestrian Program	**360**
Landscape Restoration/Litter and Graffiti Removal Program	**1**
Sound Mitigation Program	**10**
Local Transportation Projects and Enhancements	**145**
Total	**$15,189**

partners have conducted numerous planning studies to identify transportation needs and define projects throughout the county. Results from these studies have helped to develop the project lists and define the program areas presented here. Some of the program areas presented here are handled programmatically and do not have associated project lists. The VTP 2035 allocations for each of the program areas discussed in this section are shown in Table 2-2.

Appendix A provides additional information about the project lists presented in this section. The additional information may include a more detailed description, the project sponsor, the jurisdictions the project affects and the VTP 2035 project allocation.

HIGHWAY PROGRAM

The first generation of the Highway Program—Generation 1.0—began in the 1950s with the construction of the National Interstate Highway System. Generation 2.0, completion of the highway system, came during the 1980s and 1990s with many local jurisdictions implementing self-help measures to fund projects to complete the network, as was the case in Santa Clara County. Generation 3.0, which concentrates on pricing and improving efficiency, begins in Santa Clara County with VTP 2035.

Planning for generation 3.0 of State highway system improvements in Santa Clara County is an evolving and challenging process. VTP 2035 continues this process by building upon the highway planning work conducted for VTP 2030.

Key recommendations from the 2005 VTP 2030 include the need to study county gateways, vital highway corridors, obtain greater utility from existing highway infrastructure and develop an express lane network. As a result, part of the work in developing VTP 2035 Highway Projects involved an evaluation of the county gateways and key corridors within the county to increase efficiency, identify, define and prioritize improvements that relieve congestion, alleviate bottlenecks and enhance safety.

The VTP 2035 Highway Program fund allocation is just over $3.1 billion for 75 improvements in all areas of the county, including the creation of a comprehensive countywide express lane program.

Developing the Fiscally Constrained and Unconstrained Highway Project List

VTA and its Member and Partnering Agencies are the primary source for identifying projects. A total of 105 projects representing about $4.2 billion in requests were evaluated using the Board-adopted highway project prioritization criteria. The criteria are designed to give fair consideration to the full range of low-cost improvements with high utility as well as higher cost mainline capacity and systems enhancements.

The constrained list of projects includes 75 projects totaling $3.1 billion in requests, including $1.7 billion for building and maintaining an express lane network in Santa Clara County. The unconstrained project list includes another 30 projects totaling $1.1 billion. The constrained list of projects is provided in Table 2-3. The maps of projects on pages 34 through 38 show only the 75 constrained projects.

Express Lane Projects

VTP 2035 includes an array of express lane projects that have resulted from planning studies conducted by VTA between 2000 and 2008. VTA currently has the statutory authority to build and operate two express lane corridors within the county. The top two corridors are SR 85 and Highway 101 corridors. Other express corridors include SR 237, I-280, I-680, I-880, and SR 87. In addition, VTA is partnering with Alameda County agencies and Caltrans to develop the I-580/680 corridor including a portion of I-680 in Santa Clara County.

VTP 2035 allocates $1.7 billion to the express lane network over the life of the plan. This amount includes the cost to finance, build and operate the system.

FIGURE 2-1 *Express Lane Projects in Santa Clara County*

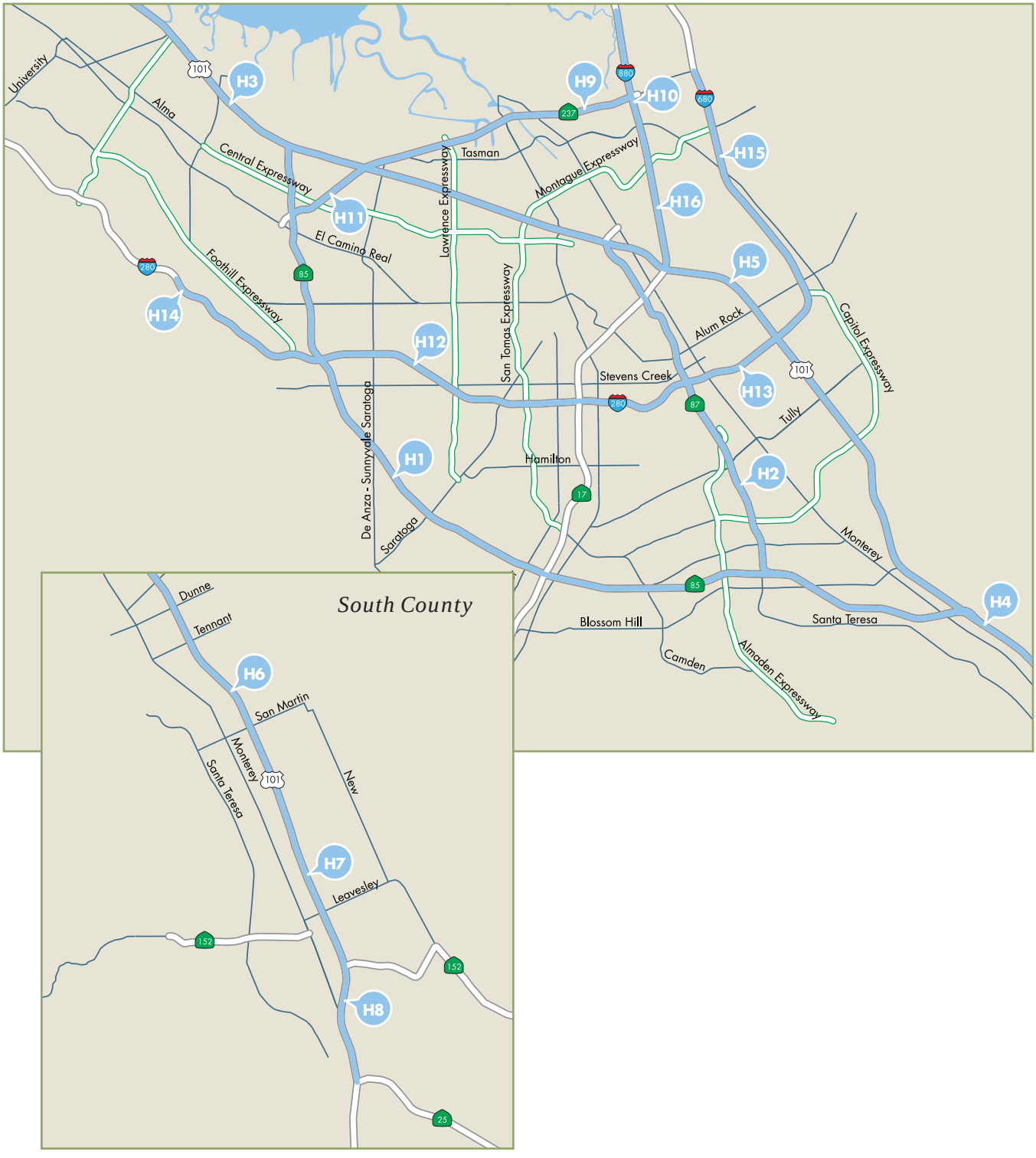


TABLE 2-3 *Constrained Highway and Express Lane Projects in Santa Clara County*

VTP ID	ROUTE	HIGHWAY PROJECT TITLE	COST ('08 $MILLIONS)
H1	SR 85	SR 85 Express Lanes: US 101 (South San Jose to Mountain View)	**$72**
H2	SR 87	SR 87 Express Lanes: SR 85 to US 101 (Conversion)	**30**
H3	US 101	US 101 Express Lanes: San Mateo county line to SR 85 in Mountain View (Conversion)	**12**
H4	US 101	US 101 Express Lanes: SR 85 (San Jose) to Cochrane Rd. (Conversion)	**23**
H5	US 101	US 101 Express Lanes: SR 85 in Mountain View to SR 85 in San Jose (Conversion)	**90**
H6	US 101	US 101 HOV/Express Lanes: Cochrane Rd. to Masten Ave.	**93**
H7	US 101	US 101 HOV/Express Lanes: Masten Ave. to 10th St.	**59**
H8	US 101	US 101 HOV/Express Lanes: 10th St. to SR 25	**43**
H9	SR 237	SR 237 Express Lanes: I-880 to Mathilda Ave. (Conversion)	**20**
H10	SR 237	SR 237 Express Lane Connectors: Milpitas to I-880	**5**
H11	SR 237	SR 237 HOV/Express Lanes: Mathilda Ave. to SR 85	**70**
H12	I-280	I-280 Express Lanes: Leland Ave. to Magdalena Ave. (Conversion)	**50**
H13	I-280	I-280 Express Lanes: US 101 to Leland Ave.	**21**
H14	I-280	I-280 HOV/Express Lanes: Southbound El Monte Rd. to Magdalena Ave.	**12**
H15	I-680	I-680 HOV/Express Lanes: Calaveras Blvd. to US 101	**30**
H16	I-880	I-880 Express Lanes: Alameda county line to US 101 (Conversion)	**20**
H17	SR 17	SR 17 Southbound/Hamilton Ave. Off-ramp widening	**1**
H18	SR 25	SR 25/Santa Teresa Blvd./US 101 Interchange (includes US 101 widening between Monterey Rd. and SR 25 and connection to Santa Teresa Blvd.)	**233**
H19	SR 85	SR 85 Northbound to Eastbound SR 237 Connector Ramp and Northbound SR 85 Auxiliary Lane	**26**
H20	SR 85	Fremont Ave. improvements at SR 85; Ramp improvements at Fremont Ave. interchange and reconfiguration at Bernardo Ave.	**3**
H21	SR 85	SR 85/Cottle Rd. Interchange improvements	**5**
H22	SR 87	SR 87/Capitol Expwy./Narvaez Ave. Interchange improvements	**10**
H23	US 101	US 101/Montague Expwy./San Tomas Expwy./Mission College Blvd. Interchange improvements	**12**
H24	US 101	US 101/Trimble Rd./De La Cruz Blvd./Central Expwy. Interchange improvements	**34**
H25	US 101	US 101/Blossom Hill Rd. Interchange improvements	**20**

FIGURE 2-2 *Constrained Highway Projects in Santa Clara County*

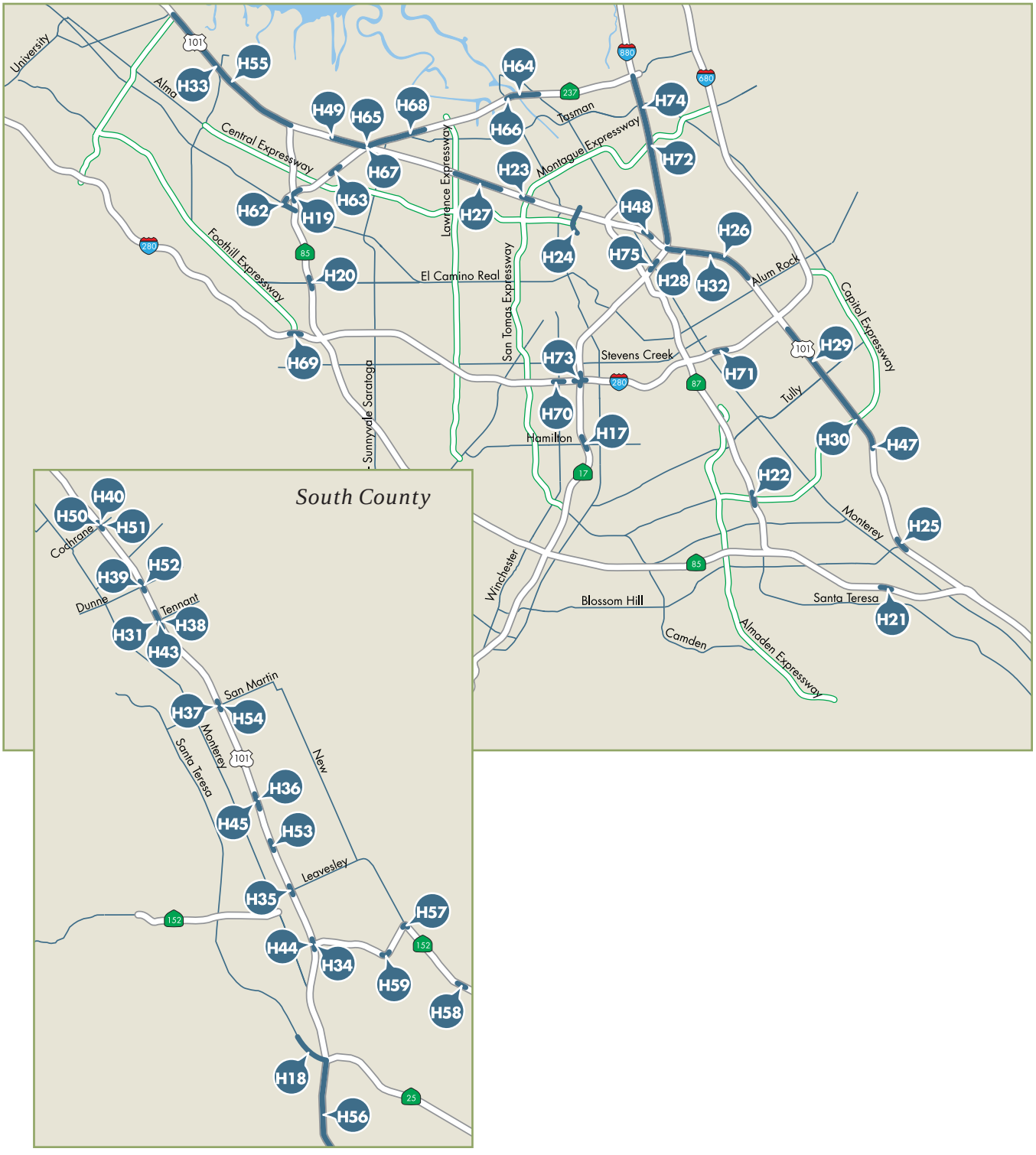


TABLE 2-3 (CONT'D) *Constrained Highway and Express Lane Projects in Santa Clara County*

VTP ID	ROUTE	HIGHWAY PROJECT TITLE	COST ('08 $MILLIONS)
H26	US 101	US 101/Mabury Rd./Taylor St. Interchange improvements	**$49**
H27	US 101	US 101 Southbound Auxiliary Lane: Great America Parkway to Lawrence Expwy.	**3**
H28	US 101	US 101/Old Oakland Rd. Interchange improvements	**20**
H29	US 101	US 101 Southbound widening: Story Rd. to Yerba Buena Rd.	**63**
H30	US 101	US 101/Capitol Expwy. Interchange improvements (includes New Northbound on-ramp from Yerba Buena Rd.)	**40**
H31	US 101	US 101/Tennant Ave. Interchange improvements	**17**
H32	US 101	US 101 Southbound Auxiliary lane widening: I-880 to McKee	**9**
H33	US 101	US 101 Auxiliary Lanes: SR 85 to Embarcadero Rd.	**103**
H34	US 101	US 101 Ramp metering facilities: 10th St.	**7**
H35	US 101	US 101 Ramp metering facilities: Leavesley Rd.	**10**
H36	US 101	US 101 Ramp metering facilities: Masten Ave.	**5**
H37	US 101	US 101 Ramp metering facilities: San Martin Ave.	**5**
H38	US 101	US 101 Ramp metering facilities: Tennant Ave.	**6**
H39	US 101	US 101 Ramp metering facilities: E. Dunne Ave.	**5**
H40	US 101	US 101 Ramp metering facilities: Cochrane Ave.	**6**
H41	US 101	US 101 Ramp metering facilities: Coyote Creek Golf Dr.	**5**
H42	US 101	US 101 Ramp metering facilities: Bailey Ave.	**4**
H43	US 101	US 101 Ramp and intersection improvements: Southbound off-ramp at Tennant Ave.	**1**
H44	US 101	US 101 Ramp and intersection improvements: Southbound ramp at 10th St.	**3**
H45	US 101	US 101 Ramp and intersection improvements: US 101 Southbound and Northbound ramps at Masten Ave.	**1**
H46	US 101	US 101 TOS improvements	**35**
H47	US 101	US 101/Hellyer Ave. Interchange improvements	**14**
H48	US 101	US 101/Zanker Rd./Skyport Dr./Fourth St. Interchange improvements	**90**
H49	US 101	US 101 Southbound Auxiliary Lane improvement: Ellis St. to SR 237	**4**
H50	US 101	US 101 Ramp and Intersection improvements: Southbound off-ramp at Cochrane Rd.	**1**

TABLE 2-3 (CONT'D) *Constrained Highway and Express Lane Projects in Santa Clara County*

VTP ID	ROUTE	HIGHWAY PROJECT TITLE	COST ('08 $MILLIONS)
H51	US 101	US 101 Ramp and Intersection improvements: Northbound off-ramp at Cochrane Rd.	**$1**
H52	US 101	US 101 Ramp/Intersection Improvements at Dunne Ave.	**2**
H53	US 101	US 101/Buena Vista Ave. Interchange Improvements	**27**
H54	US 101	US 101 Ramp/Intersection Improvements: US 101 Southbound Ramps at San Martin Ave.	**1**
H55	US 101	US 101 Southbound Improvements: San Antonio Rd. to Charleston Rd./Rengstorff Ave.	**19**
H56	US 101	US 101 Widening to Six-Lane Freeway: SR 25 to SR 129	**170**
H57	SR 152	SR 152 Improvements, Intersection Improvement at Ferguson Rd.	**2**
H58	SR 152	SR 152 Ramp/Intersection Improvements: SR 152 at Bloomfield Ave.	**2**
H59	SR 152	SR 152 Ramp/Intersection Improvements: SR 152 at Frazier Lake Rd.	**2**
H60	SR 152	SR 152 Ramp/Intersection Improvements: SR 152 at Watsonville Rd.	**3**
H61	SR 152	New SR 152 Alignment: SR 156 to US 101	**350**
H62	SR 237	SR 237/El Camino Real/Grant Rd. Intersection Improvements	**4**
H63	SR 237	SR 237 Westbound On-ramp at Middlefield Road	**11**
H64	SR 237	SR 237 Eastbound Auxiliary Lane: Zanker Rd. to North First St.	**7**
H65	SR 237	SR 237/Mathilda Ave. and US 101/Mathilda Ave. Interchange Improvements	**15**
H66	SR 237	SR 237/North First St. Interchange Improvements	**2**
H67	SR 237	SR 237 Westbound to Northbound US 101 Ramp Improvements	**9**
H68	SR 237	SR 237 Eastbound Auxiliary Lanes: Mathilda Ave. to Fair Oaks Ave.	**6**
H69	I-280	I-280 Northbound: Second Exit Lane to Foothill Expwy.	**2**
H70	I-280	I-280 Northbound Winchester Blvd. Interchange Improvements[1]	**–**
H71	I-280	I-280 Downtown Access Improvements between 3rd St. and 7th St.	**25**
H72	I-880	I-880/Montague Expwy. Interchange Improvement	**12**
H73	I-880	I-880/I-280/Stevens Creek Blvd. Interchange Improvements	**64**
H74	I-880	I-880 Widening for HOV Lanes: SR 237 to Old Bayshore	**95**
H75	I-880	I-880 Northbound Auxiliary Lane: Coleman Ave. to First St.	**13**
		Total	**$1,794**

[1] Project included in H73

System Efficiency Projects

The VTP 2035 Highways project list includes 16 projects designed to improve the efficiency of the existing highway system, including auxiliary lane and ramp metering projects. Ramp metering is one of the most cost-effective and beneficial improvements that can be made to a congested highway corridor and VTA has been a leader in the Bay Area in implementing these projects. Santa Clara County is home to approximately fifty percent of all ramp meters in the nine-county Bay Area region. Moreover, MTC has recently taken more interest in these types of projects and has included its Freeway Performance Initiative (FPI) in the 2009 RTP to assist with project implementation. It is expected VTA will receive funding through MTC for these types of projects included in the VTP. The additional revenue could offset expenses and allow for additional projects to be added to the list.

EXPRESSWAY PROGRAM

Santa Clara County is the only county in California operating a comprehensive expressway system within urban areas. In 2003, the County of Santa Clara adopted its Comprehensive County Expressway Planning Study which provided a long-term plan for the improvement and maintenance of the expressway system. In 2008, the county initiated a comprehensive update to this plan to reflect new conditions and opportunities, address issues identified in the 2003 Study and provide input into the VTP 2035 planning process. This process concluded in early 2009 with the adoption of an updated plan.

VTP 2035 Expressway Program Fund Allocation

The county placed expressway projects into five tiers—the top two tiers, Tier 1A and Tier 1B, were submitted for inclusion in VTP 2035. The projects were assigned to these tiers based on criteria developed by a Technical Working Group of city and county staff, approved by the Expressway Study Policy Advisory Board with county and city representation and adopted by the county Board of Supervisors. The complete list of 28 Tier 1A and 1B projects totals about $423 million. As shown in Table 2-4, all 25 Tier 1A projects were placed on the financially constrained list with a proposed VTP 2035 allocation of approximately $263 million, comprised of approximately $161 million in State and Federal sources and $102 million from local development fees. Tier 1B projects were placed in the unconstrained list. A complete list of Tier 1A projects is provided in Figure 2-3.

VTP 2035 allocates $263 million to fund the entire Tier 1A list of projects identified in the Countywide Expressway Study.

FIGURE 2-3 *Constrained Expressway Projects in Santa Clara County*

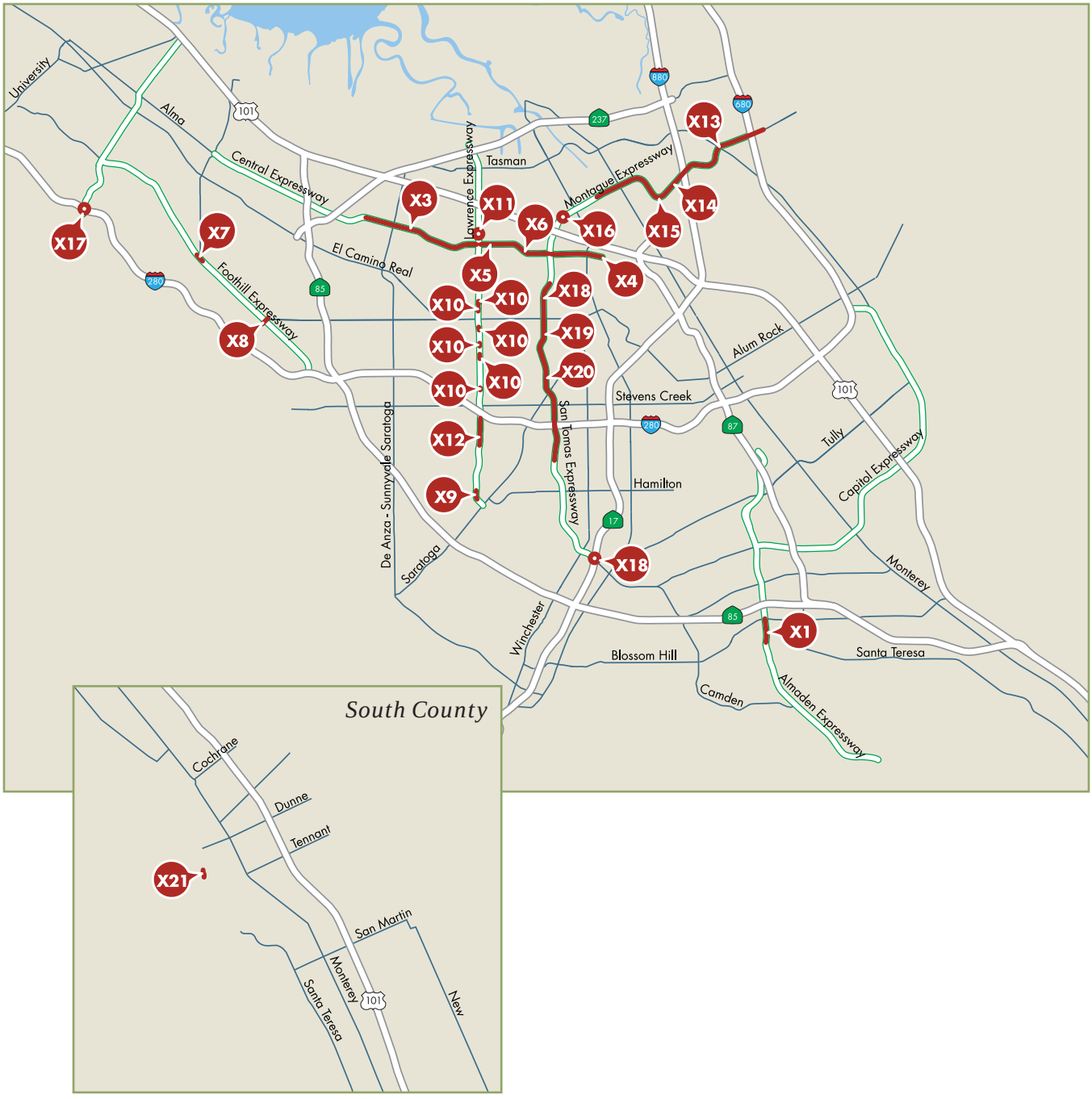


TABLE 2-4 *Constrained Expressway Projects in Santa Clara County*

VTP ID	EXPRESSWAY	EXPRESSWAY PROJECT TITLE	COST ('08 $MILLIONS)
X1	Almaden Expressway	8 Lanes from Coleman to Blossom Hill	**$10.5**
X2	Capitol Expressway	TOS Infrastructure (not mapped)	**3.5**
X3	Central Expressway	Auxiliary Lanes between Mary and Lawrence	**17.0**
X4	Central Expressway	Convert Measure B HOV Lane (De La Cruz to San Tomas Expwy.)	**0.1**
X5	Central Expressway	Convert HOV Queue Jump Lane at Bowers	**0.1**
X6	Central Expressway	6 Lanes from Lawrence Expwy to San Tomas Expwy.	**13.6**
X7	Foothill Expressway	Extend Deceleration Ln. at San Antonio	**0.7**
X8	Foothill Expressway	Loyola Bridge	**7.0**
X9	Lawrence Expressway	Additional Left Turn Lane at Prospect	**2.6**
X10	Lawrence Expressway	Close Median, Right In/Out	**1.5**
X11	Lawrence Expressway	Arques Square Loop Grade Separation	**45.0**
X12	Lawrence Expressway	8 Lanes From Moorpark to South of Calvert	**5.2**
X13	Montague Expressway	8 Lanes from Trade Zone to Park Victoria	**20.0**
X14	Montague Expressway	8 Lanes from Lick Mill to Trade Zone	**12.0**
X15	Montague Expressway	Trimble Road Flyover	**32.0**
X16	Montague Expressway	Mission College At-Grade Improvements	**4.0**
X17	Oregon Expressway/Page Mill	I-280 Page Mill Modification for Bicycle Travel	**6.6**
X18	San Tomas Expressway	SR 17/San Tomas Expressway Improvements	**2.6**
X19	San Tomas Expressway	Box Culvert	**13.2**
X20	San Tomas Expressway	8 Lanes from Williams to El Camino	**40.7**
X21	Santa Teresa/Hale Corridor	Realign DeWitt S-Curve	**2.5**
X22	Santa Teresa/Hale Corridor	TOS Infrastructure Improvements (not mapped)	**5.0**
X23	Santa Clara County	SCC Motorist Traffic Information and Advisory Systems (not mapped)	**5.0**
X24	Santa Clara County	Signal Coordination/Interconnect with Cross Streets (not mapped)	**5.0**
X25	Santa Clara County	TOS Infrastructure Improvements (not mapped)	**10.0**
N/A	Almaden Expressway	Project Study Report for SR 85/Almaden Interchange	**0.4**
N/A	Central Expressway	Install Median Curbs Between SR 85 and SR 237	**0.8**
N/A	Lawrence Expressway	Project Study Report at Lawrence/Calvert/I-280	**1.0**
N/A	Oregon Expressway	Alma Bridge Replacement Feasibility Study	**0.3**
		Total	**$267.9**

N/A Not funded through VTP. Not mapped.

Expressway Projects/ Improvements

Almaden Expressway Improvements to Almaden Expressway largely involve additional lanes both north and south of the Highway 85 interchange to reduce congestion and increase throughput.

Capitol Expressway Improvements include modifications to the Traffic Operations Systems (TOS) infrastructure.

Central Expressway Widening from four to six lanes between Lawrence and San Tomas Expressways will increase capacity and safety on this heavily used stretch of Central Expressway. Other improvements include auxiliary lanes from Mary to Lawrence and median curb between SR 85 to SR 237.

Foothill Expressway Extension of a deceleration lane at San Antonio Road is a safety project, while a host of bicycle, pedestrian and signal timing improvements are added with the replacement of Loyola Bridge.

Lawrence Expressway Optimizing signal timing in the Lawrence/Saratoga area and the Highway 280 intersection will reduce delays. Limiting the number of neighborhood access points between Highways 101 and 280 will reduce delays from merging vehicles. Additional mixed flow lanes will be added between Calvert and Moorpark/Bollinger. Additionally, a project study report will look at the Lawrence Expressway/I-280/Calvert interchange area.

Montague Expressway Convert HOV lanes between I-680 and I-880 to mixed flow lanes. Montague Expressway also has an at-grade improvement at the Mission College Boulevard Intersection.

Oregon/Page Mill Expressway Replace and optimize signals, installing pedestrian ramps, improving pedestrian and bicycle safety and reducing the effects of traffic on adjacent streets.

San Tomas Expressway Widen to eight lanes between El Camino Real and Williams Road as well as at-grade improvements in the SR 17 intersection area. There is also a box culvert project for maintenance purposes.

Santa Teresa–Hale Corridor The previous Comprehensive Countywide Expressway Planning Study in 2003 did not contain expressway projects located in southern Santa Clara County. The Policy Advisory Board (PAB) for the Expressway Planning Study concluded that a South County "local corridor" is needed to facilitate travel between Gilroy and Morgan Hill. They further concluded that while this facility did not necessarily need to be called an expressway or fall under single-jurisdiction ownership, it did need consistent standards and an identifiable alignment. In 2008, the Expressway Planning Study PAB

approved the addition of the Santa Teresa Corridor in Morgan Hill and Gilroy to the Countywide Expressway Plan. The two VTP 2035 projects for this corridor involve operational signal timing.

Signal Operations for All Expressways

Improvements include coordination of expressway signals with signals on perpendicular streets, electronic information signs, advisory radio, cable TV feeds, automatic traffic counts and a web page. These improvements are intended to work together to reduce delay on and around the expressways. Additionally, traffic signal monitoring on the expressways will be interconnected with other programs in Sunnyvale, Palo Alto, Mountain View and Los Altos.

Refer to the Comprehensive Countywide Expressway Planning Study, Implementation Plan for more information on the Tier 1A projects.

LOCAL STREETS AND COUNTY ROADS PROGRAM

The VTA Board of Directors created the Local Streets and County Roads (LSCR) Program to address the difficulties Member Agencies have with raising revenues for local streets and county roads projects not connected to new development projects.

The VTP 2035 Program Area allocation identifies up to $628 million for local streets and county roads on the committed project list. VTA Staff, working through the CIP Working Group of the Technical Advisory Committee (TAC), developed this list of projects using program eligibility and scoring criteria adopted by the VTA Board. The criteria are based on street connectivity, congestion relief, safety, and the interface between transportation and land use. Another $58 million in grant fund requests appear on the uncommitted project list.

The following project types are eligible for LSCR funds:

- New street connections and extensions, local road crossings of freeways and expressways
- Multimodal reconstruction of streets
- Roadway operational improvements including new lanes, intersection turn lanes, and modern roundabouts
- New or major upgrades of sidewalk and Class II and III bicycle facilities
- Traffic calming measures
- New grade separations at railroads and roadways
- ITS projects and project elements

The complete list of LSCR projects is shown in Table 2-5 on pages 45 through 47.

ROADWAY MAINTENANCE PROGRAMS

Three VTP 2035 roadway program areas are presented under this heading: 1) Pavement

FIGURE 2-4 *Constrained Local Streets Projects in Santa Clara County*

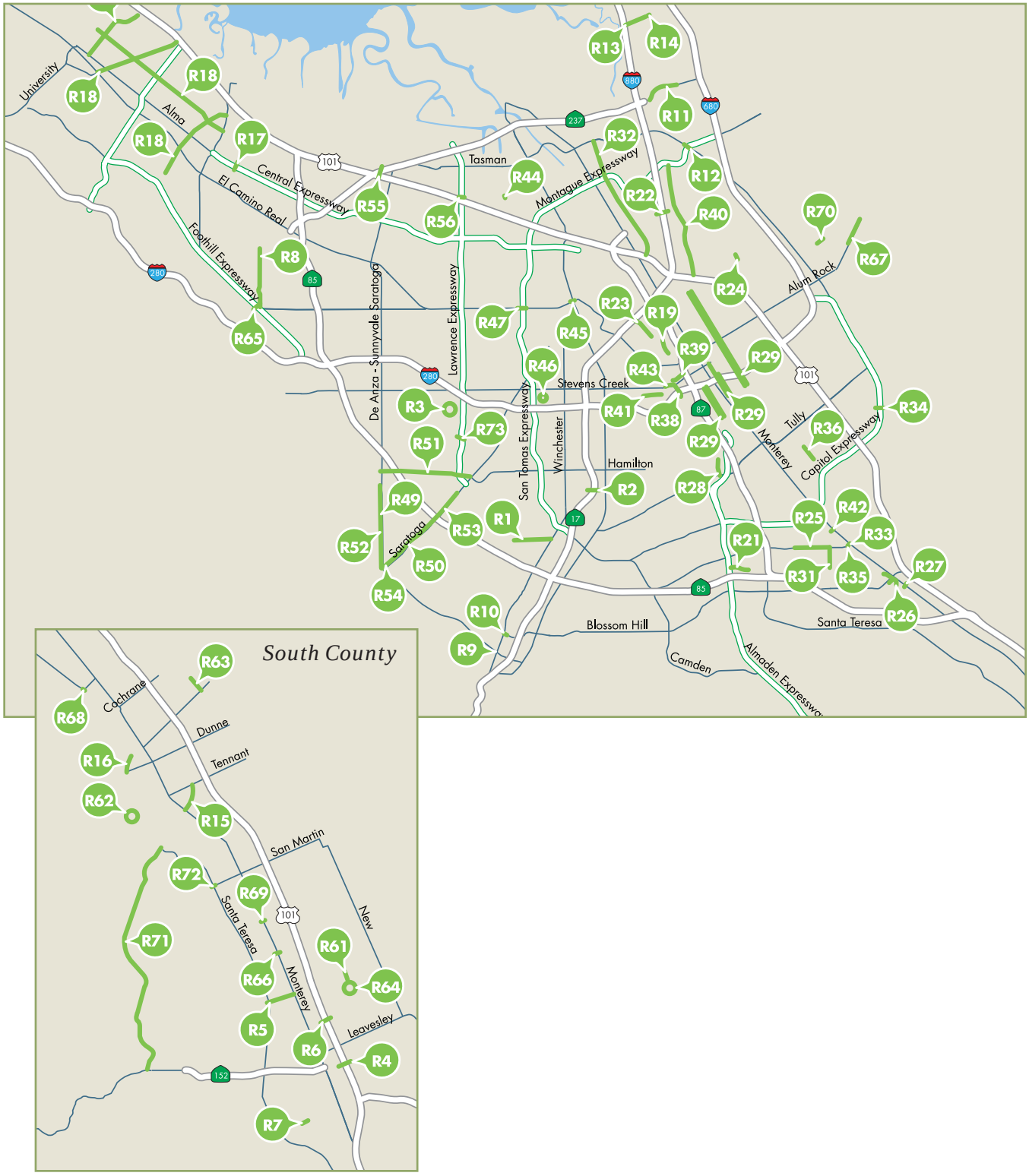


TABLE 2-5 *Constrained Local Streets Projects in Santa Clara County*

VTP ID	JURISDICTION	LOCAL STREETS PROJECT TITLE	COST ('08 $MILLIONS)
R1	Campbell	Hacienda Ave. Improvements	**$3.5**
R2	Campbell	Campbell Ave. Bicycle and Pedestrian Improvements under SR 17	**3.0**
R3	Cupertino	Rancho Rinconada Traffic Calming Project	**0.1**
R4	Gilroy	IOOF Ave. Overcrossing	**14.5**
R5	Gilroy	Gilroy Orbital Concept (NW Quadrant): Buena Vista Ave. to Monterey Rd.	**8.5**
R6	Gilroy	Las Animas Ave. Overcrossing	**9.2**
R7	Gilroy	Tenth St. Bridge Project	**14.0**
R8	Los Altos	Miramonte Ave. Bikeway Improvements	**1.4**
R9	Los Gatos	SR 9 Gateway Enhancements at University Ave. and North Santa Cruz Ave.	**3.0**
R10	Los Gatos	Blossom Hill Rd. at University Ave. Intersection Improvements	**1.0**
R11	Milpitas	Calaveras Blvd. Overpass Widening with Operational Improvements	**70.0**
R12	Milpitas	Montague Expwy. and Great Mall Pkwy./Capitol Ave. Grade Separation	**60.0**
R13	Milpitas	Dixon Landing Rd. Widening	**60.0**
R14	Milpitas	Dixon Landing Rd. and North Milpitas Blvd. Intersection Improvements	**3.0**
R15	Morgan Hill	Butterfield Blvd. South Extension	**18.8**
R16	Morgan Hill	Santa Teresa Blvd. Improvements	**10.2**
R17	Mountain View	Rengstorff Ave. Grade Separation	**65.0**
R18	Palo Alto	Palo Alto Smart Residential Arterials	**10.0**
R19	San Jose	Autumn Pkwy. Improvement from Union Pacific Railroad to Park Ave.	**33.0**
R20	San Jose	North First St. Core Area Grid Streets	**61.0**
R21	San Jose	Chynoweth Ave. Extension: Almaden Expwy. to Winfield Blvd.	**15.0**
R22	San Jose	Charcot Ave. Extension over I-880	**34.0**
R23	San Jose	Coleman Ave. Widening from I-880 to Taylor St.	**13.0**
R24	San Jose	King Rd. Bridge Replacement and Widening at Penitencia Creek	**5.0**
R25	San Jose	Branham Ln. Widening: Vista Park Dr. to Snell Ave.	**10.3**
R26	San Jose	Blossom Hill Rd. Bike/Ped Improvements	**10.0**
R27	San Jose	Caltrain Pedestrian Crossing Bridge at Blossom Hill Station	**2.5**
R28	San Jose	Almaden Rd. Improvement: Malone Rd. to Curtner Ave.	**5.4**
R29	San Jose	Downtown Couplet Conversion Projects	**22.0**

TABLE 2-5 (CONT'D) *Constrained Local Streets Projects in Santa Clara County*

VTP ID	JURISDICTION	LOCAL STREETS PROJECT TITLE	COST ('08 $MILLIONS)
R30	San Jose	North San Jose Bicycle and Pedestrian Improvements	$33.0
R31	San Jose	Snell Ave. Widening: Branham Ln. to Chynoweth Ave.	4.0
R32	San Jose	Zanker Rd. Widening: US 101 to Tasman Dr.	54.0
R33	San Jose	Branham Ln./Monterey Hwy Grade Crossing Project	30.0
R34	San Jose	Neiman Blvd. Pedestrian Overcrossing at Capitol Expwy.	8.0
R35	San Jose	Caltrain Grade Separation at Branham Ln.[1]	–
R36	San Jose	Senter Rd. Widening: Umbarger Rd. to Lewis Rd.	5.4
R37	San Jose	North San Jose Miscellaneous Intersection Improvements	29.0
R38	San Jose	Bird Ave. Pedestrian Corridor	3.0
R39	San Jose	Park Ave. Improvements: Bird Ave. to SR87	4.1
R40	San Jose	Oakland Rd. Improvements from 101 to Montague (Phase 2)	10.0
R41	San Jose	Auzerais Ave. Bicycle and Pedestrian Improvements from Sunol St. to Race St.	1.9
R42	San Jose	Caltrain Grade Separation at Skyway Dr.	25.0
R43	San Jose	San Carlos St. Bridge Replacement and Widening at Caltrain/Vasona LRT	10.0
R44	Santa Clara	Great America Pkwy./Mission College Blvd. Intersection Improvements	6.5
R45	Santa Clara	El Camino Real and Lafayette St. Intersection Improvements	1.0
R46	Santa Clara	Reconstruction/Rehabilitation of Various Streets	15.0
R47	Santa Clara	El Camino Real/San Tomas Expwy. Intersection Improvements	0.8
R48	Santa Clara County	Center Ave. and Marcella Ave. two-lane Connection	3.0
R49	Santa Clara County	DeWitt Ave./Sunnyside Ave. Realignment at Edmunsen Ave.	6.6
R50	Santa Clara County	Hill Rd. Extension: East Main Ave. to Peet Rd.	8.0
R51	Santa Clara County	Marcella Ave. Two-Lane Realignment	6.0
R52	Santa Clara County	Foothill-Loyola Bridge	1.0
R53	Santa Clara County	Fitzgerald Ave./Masten Ave. Realignment at Monterey Rd.	0.6
R54	Santa Clara County	Alum Rock Ave. Pedestrian Connection to Miguelita Bridge	0.4
R55	Santa Clara County	Santa Teresa Blvd. and Tilton Ave. Traffic Signal Improvements	0.6
R56	Santa Clara County	Railroad Crossing Improvements at Church Ave. and Monterey Hwy.	0.7
R57	Santa Clara County	McKee Rd. Pedestrian Improvements	0.4
R58	Santa Clara County	Watsonville Rd. Center Turn Lane	7.0
R59	Santa Clara County	Santa Teresa Blvd. and San Martin Ave. Traffic Signal Improvements	0.6

[1] Project is included in R33

TABLE 2-5 (CONT'D) *Constrained Local Streets Projects in Santa Clara County*

VTP ID	JURISDICTION	LOCAL STREETS PROJECT TITLE	COST ('08 $MILLIONS)
R60	Santa Clara County	Doyle Rd. Bicycle and Pedestrian Trail Connection	**$0.4**
R61	Saratoga	SR 9 Pedestrian Safety Improvement	**2.0**
R62	Saratoga	Citywide Signal Upgrade Project Phase II	**0.5**
R63	Saratoga	Herriman Ave./Saratoga Ave. Traffic Signal	**0.3**
R64	Saratoga	Prospect Rd. Median Project	**2.0**
R65	Saratoga	Verde Vista Ln. Traffic Signal	**0.3**
R66	Saratoga	Saratoga Ave. Rehabilitation and Overlay Project	**0.8**
R67	Saratoga	Saratoga Ave. Sidewalk Pedestrian Improvement	**0.3**
R68	Sunnyvale	Mary Ave. Extension	**58.0**
R69	Sunnyvale	Lawrence Expwy. and Wildwood Ave. Realignment and Signalization	**5.0**
R70	Sunnyvale	Comprehensive Sidewalk Network for Employment Areas	**8.1**
R71	Sunnyvale	Sunnyvale Local Street Improvements	**14.7**
R72	Sunnyvale	Sunnyvale Downtown Specific Plan Transportation Improvements	**13.0**
R73	Sunnyvale	Installation of Pedestrian Countdown Signals	**0.2**
		Total	**$947.6**

Management, 2) Sound Mitigation and 3) Landscape Restoration/Litter and Graffiti Removal.

Project lists have not been developed for these programs. However, VTA will work in partnership with its Member Agencies to identify projects that would be eligible to fund through these programs. Each of these program areas is described below.

Pavement Management Program

Pavement management projects are intended to repair or replace existing roadway pavement from outside edge of curb and gutter to opposite outside edge of curb and gutter. VTP 2035 identifies up to $1.1 billion for the Pavement Management Program (PMP). This is based on the amount of Surface Transportation Program revenues that are expected in the next 25 years. The total unmet pavement need for Santa Clara County is estimated at approximately $8 billion.

The following types of project expenditures are eligible for PMP funding:

- Roadway reconstruction projects
- Overlay projects

- Pavement maintenance treatments including seal coats and microsurfacing
- Spot repairs
- Curb and gutter repair
- Replacing pavement markings and striping
- Incidental non-pavement repairs (e.g., emergency storm drain repair)
- Fiber-optic cable installation and other ITS elements should be installed in conjunction with these projects

Bike facilities may be included in the final striping wherever feasible and consistent with local plans, and projects should include VTA standard concrete pads and ADA accessible curbside facilities at bus stop locations.

Each city and the county must use a Pavement Management System certified by MTC to identify and prioritize projects and must be a minor collector or greater roadway.

Sound Mitigation Program

VTA is responsible for programming freeway sound mitigation projects such as soundwalls in Santa Clara County. With the enactment of SB 45, all new highway projects must include soundwalls in their project scopes. In addition, sound mitigation, including retrofit projects where no new changes to the freeway or expressway are planned, are the responsibility of the local jurisdiction.

VTA staff, working with the CIP Working Group of the TAC, has developed a process for identifying projects that would be eligible to fund through the Sound Mitigation Program. VTA is compiling a list of soundwall locations that will meet VTA's basic sound mitigation standard, must be eligible for STIP funds and a Noise Barrier Summary Scope Report (NBSSR) or equivalent must be complete. VTP 2035 identifies up to $10 million for a Sound Mitigation Program.

Landscape Restoration, Litter and Graffiti Removal

The VTA, along with local partners and Caltrans, conducted a study to determine the level of effort required to maintain the freeway appearance in Santa Clara County. The study also resulted in a pilot program that estimated the amount it would cost to maintain the freeway to a clean level. Caltrans, working with their maintenance staff, performed a pilot clean-up program along US 101 between I-880 and Blossom Hill Road in San Jose in early 2008. The pilot program determined that it would cost almost $18 million to maintain the freeway appearance at a clean level.

The VTP 2035 Expenditure Plan identifies up to $1 million to augment Caltrans efforts to restore freeway landscaping and remove graffiti within the freeway rights of way. These funds will provide "seed" money to develop public/private partnerships to identify funds and develop programs for ongoing landscaping and maintenance efforts.

TRANSIT PROGRAM

The CIP identifies specific transit projects to be implemented during the timeframe of the plan. As shown in Table 2-6 on page 51, these projects include new light rail extensions, bus rapid transit corridors, regional rail services, community-oriented bus service operated with small vehicles and enhanced commuter rail service. This section discusses VTA's current services and plans to enhance and expand them, more defined descriptions of the specific capital projects in the VTP 2035 Transit Program and the need to secure a new source of funds to fully implement the 2000 Measure A Transit Program of projects.

Existing VTA Transit Services

VTA is responsible for providing bus, light rail, light rail shuttles and paratransit services to Santa Clara residents, workers and visitors. VTA also partners with other transit operators to provide commuter rail service, inter-community and inter-county express bus service and rail shuttles. Future partnerships include BART to jointly operate the segments in Santa Clara County. These services provide important connections to and from Santa Clara County

FIGURE 2-5 *Measure A Transit Projects in Santa Clara County*

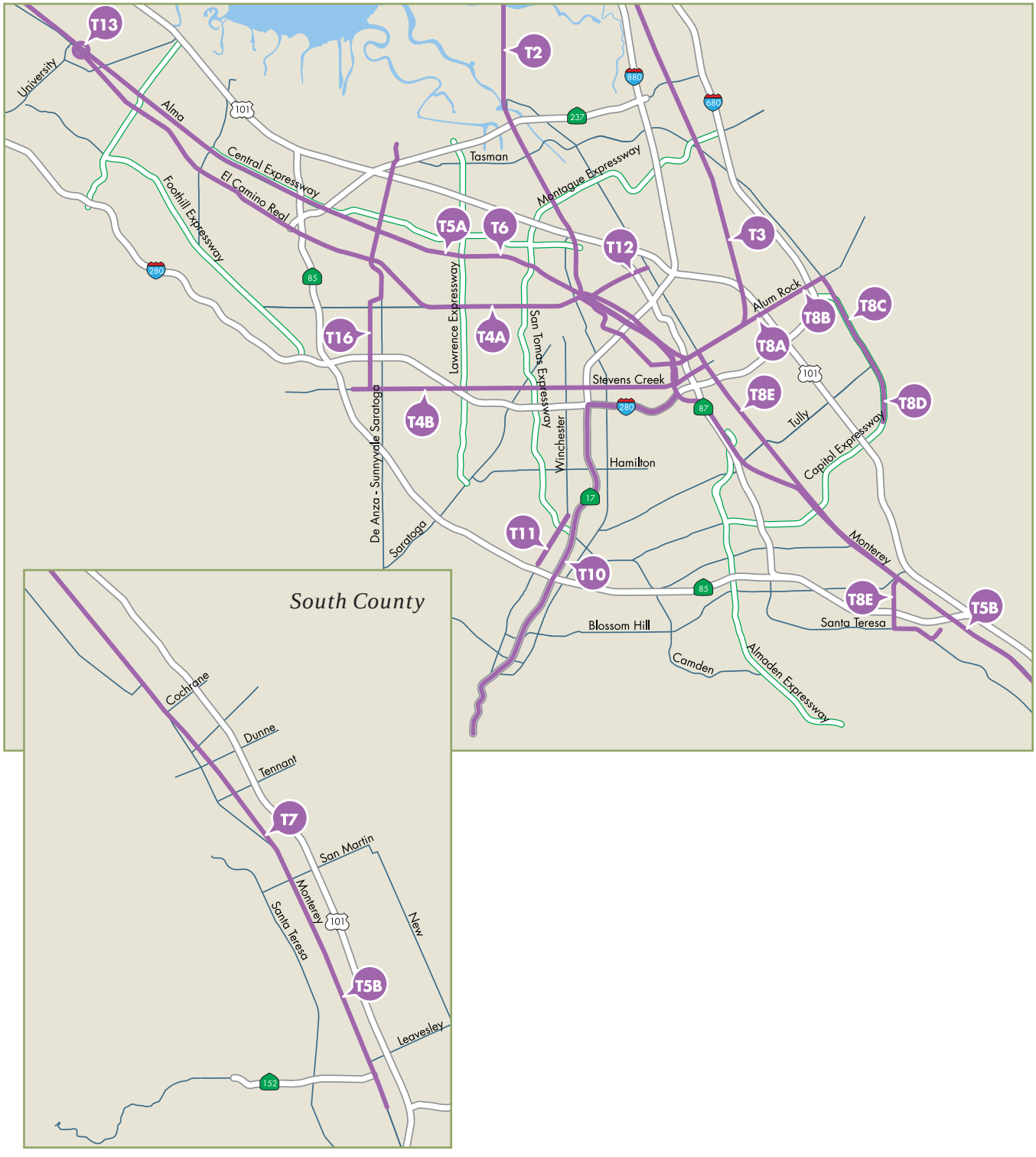


TABLE 2-6 *Transit Projects in Santa Clara County*

VTP ID	JURISDICTION	TRANSIT PROJECT TITLE	COST ('08 $MILLIONS)
T1	All Cities	Additional Measure A Capital and Operating Needs [1]	**$1,954**
T2	Santa Clara, San Jose	ACE Upgrade	**24**
T3	Milpitas, San Jose, Santa Clara	BART to Milpitas, San Jose and Santa Clara [2]	**6,172**
T4	Mountain View, Palo Alto, Los Altos, Sunnyvale, Santa Clara, San Jose, Cupertino	*Bus Rapid Transit–The Alameda/El Camino—San Carlos/Stevens Creek*	
		(T4A) El Camino BRT [3]	207
		(T4B) Stevens Creek BRT [4]	127
		Subtotal	**334**
T5	Palo Alto, Mountain View, Los Altos, Sunnyvale, Santa Clara, San Jose, Morgan Hill, Gilroy	*Caltrain Electrification from San Francisco to Gilroy*	
		(T5A) Caltrain Electrification from San Francisco to Tamien [5]	222
		(T5B) Caltrain Electrification from Tamien to Gilroy [6]	123
		Subtotal	**345**
T6	Palo Alto, Mountain View, Sunnyvale, Santa Clara, San Jose, Morgan Hill, Gilroy	Caltrain Service Upgrades	**203**
T7	San Jose, Morgan Hill, Gilroy	Caltrain–South County	**86**
T8	San Jose	*Downtown East Valley*	
		(T8A) Santa Clara/Alum Rock Phase 1: BRT [7]	128
		(T8B) Santa Clara/Alum Rock Phase II: LRT [8]	265
		(T8C) Capitol Expressway LRT [9]	334
		(T8D) Neiman LRT Extension [10]	137
		(T8E) Monterey Highway BRT [11]	87
		Subtotal	**954**
T9	Palo Alto	Dumbarton Rail Corridor	**44**
T10	Los Gatos, Campbell, San Jose	Highway 17 Bus Service Improvements	**2**
T11	Los Gatos, Campbell	Vasona Junction [12]	**99**
T12	San Jose	Mineta San Jose International Airport APM Connector	**264**
T13	Palo Alto	Palo Alto Intermodal Center	**59**
T14	All Cities	ZEB Demonstration Program (not mapped)	**20**
T15	All Cities	ZEB Facilities (not mapped)	**78**
T16	Sunnyvale, Cupertino	Sunnyvale-Cupertino BRT	**68**
T17	San Jose	North San Jose Transit Enhancements (not mapped) [13]	**35**
		Total	**$10,741**

[1] Funds assumed to be available over the 25-year plan timeframe to fund the Measure A Program and additional transit capital and operating expansion projects

[2] BART cost includes total TCRP programmed to BART extension Warm Springs to Santa Clara/San Jose, including prior expenditures.

[3] Project from Diridon Station to Palo Alto

[4] Project from downtown San Jose to De Anza College

[5] Project is electrification only. Does not include capital funds needed for additional vehicles or service expansions. VTA share of cost only.

[6] Project is electrification only. Does not include capital funds needed for additional vehicles or service expansions.

[7] Project from Eastridge via Capitol Expressway/Alum Rock/Santa Clara to Downtown San Jose

[8] Project from Santa Clara/Alum Rock to Diridon Station

[9] Project from Eastridge to existing Alum Rock LRT Station

[10] Project from Eastridge south to Nieman Ave.

[11] Project from Downtown San Jose to Santa Teresa LRT Station

[12] Project from Campbell to Netflix/SR 85 via Winchester Blvd.

[13] Project is included in the North San Jose Development Area Deficiency Plan

for residents and workers. VTA also funds privately operated shuttles and ADA para-transit services for persons with disabilities. A summary of the directly operated, inter-agency and contracted transit services is presented in the following tables.

VTA directly has an active fleet of 450 buses and 99 light rail vehicles—plus four historic trolleys. About 21 million miles of bus and light rail service is operated annually. During FY 2007-08, VTA carried about 43.5 million riders: approximately 33.1 million on bus and 10.4 million on light rail. The agency serves roughly 3,800 bus stops, 15 transit centers and 62 light rail stations. In July 2008, VTA restructured its bus transit service, targeting greater service for a core system of routes that generate strong ridership. Since then, ridership has increased and VTA will continue to refine its service along the core system market-based model.

Transit Capital Program

The VTP 2035 transit program is based on the currently adopted Measure A Expenditure Plan and planning work conducted since 2005. Table 2-6 (page 51) provides the financially constrained list of VTP 2035 transit capital projects. There are a total of 23 projects representing a $9.28 billion dollar investment, which includes the Measure A projects discussed in more detail in the following sections.

As shown in Table 2-1, a wide range of fund sources are being pursued to fully implement the Measure A program. These funds include local transportation fees, VTA joint development revenue, Santa Clara County Express Lane Program net revenues and new local anticipated unspecified fund sources.

Information on the VTP 2035 Transit Planning Program is provided in Chapter 3.

TRANSPORTATION SYSTEMS OPERATIONS AND MANAGEMENT PROGRAM

The Transportation Systems Operations and Management (TSO&M) Program includes projects that use technology to improve the operation and management of the overall transportation system. These new technologies are collectively referred to as Intelligent Transportation Systems (ITS), and include electronics, computer and communications infrastructure.

Development of the TSO&M Program for VTP 2035 built on work conducted for the development of an ITS Plan for Santa Clara County as part of VTP 2030. The VTP 2035 TSO&M Program development included a review and update of the list of ITS projects from VTP 2030 and the development of a fund allocation strategy for the TSO&M Program. This work was conducted by an ITS task force consisting of staff from both VTA's Member Agencies and regional agencies, including MTC and Caltrans.

ITS Project List

The VTP 2035 ITS Plan includes 50 listings of "projects" totaling over $247 million, as shown in Table 2-7. "Projects" is in quotes here because some may be included in whole or in part in projects found in other program areas, and as such do not represent individual projects in the usual sense.

Maps and a project listing are provided on pages 54 through 57. Please refer to the Local Streets and County Roads Program map on page 44 for the four projects that are included under that program. The cost shown in the listing is the full cost. The VTP 2035 allocation amount for the TSO&M Program is $100 million.

During the development of VTP 2035, staff compiled a list of ITS projects/initiatives and

FIGURE 2-6 *Constrained ITS Projects in Santa Clara County*

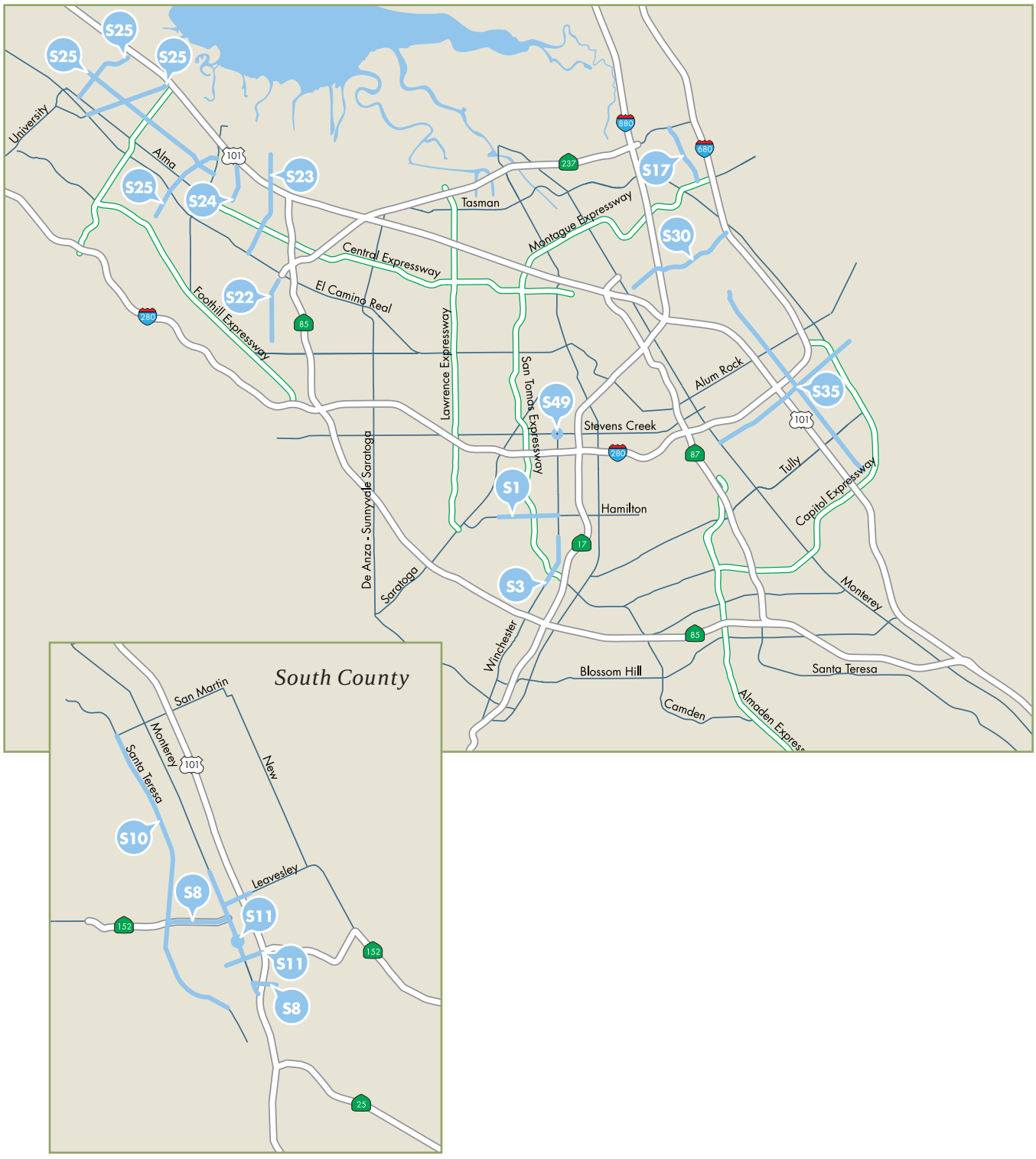


TABLE 2-7 *Constrained ITS Projects in Santa Clara County*

VTP ID	JURISDICTION	ITS PROJECT TITLE	COST ('08 $MILLIONS)
S1	Campbell	Hamilton Ave. ITS	**$0.40**
S2	Campbell	Citywide Traffic Signal Upgrade (not mapped)	**0.15**
S3	Campbell	Winchester Blvd. ITS	**0.40**
S4	Campbell	Reactivation of Traffic Count Stations (not mapped)	**0.10**
S5	Campbell	Installation of Pedestrian Countdown Timers (not mapped)	**0.20**
S6	Gilroy	City of Gilroy Adaptive Traffic Control System (not mapped)	**0.90**
S7	Gilroy	Gilroy Event Management System Dynamic Message Signs (not mapped)	**0.90**
S8	Gilroy	City of Gilroy Traffic Signal System Upgrade	**3.90**
S9	Gilroy	Gilroy Flood Watch Cameras (not mapped)	**0.51**
S10	Gilroy	ITS Enhancements on Santa Teresa Blvd.	**2.00**
S11	Gilroy	10th Street and Downtown Signals Upgrade	**1.50**
S12	Gilroy	SR 152 Signal System Upgrade (not mapped)	**2.30**
S13	Gilroy	Gilroy Community Bus Signal Priority (not mapped)	**0.40**
S14	Gilroy	Gilroy Other Signals Upgrade (not mapped)	**1.00**
S15	Gilroy	Gilroy Downtown Parking Management System (not mapped)	**0.30**
S16	Los Gatos	Town of Los Gatos Traffic Signal System Upgrade (not mapped)	**0.30**
S17	Milpitas	South Milpitas Blvd. SMART Corridor	**0.48**
S18	Milpitas	City of Milpitas Traffic Signal Upgrade (not mapped)	**0.75**
S19	Morgan Hill	Citywide Traffic Signal Operational Center (not mapped)	**1.25**
S20	Morgan Hill	Citywide Wireless Vehicle Detection System Installation (not mapped)	**0.90**
S21	Mountain View	Citywide Traffic Signal Upgrade and IP Traffic Signal Access (not mapped)	**2.50**
S22	Mountain View	Grant Road Adaptive Traffic Signals	**1.35**
S23	Mountain View	Shoreline Blvd. Adaptive Traffic Signals	**1.65**
S24	Mountain View	Rengstorff Ave. Traffic Signal Improvements	**0.40**
S25	Palo Alto	Palo Alto Smart Residential Arterials	**6.22**
S26	Palo Alto	Citywide Traffic Signal System Upgrades (not mapped)	**1.80**
S27	Palo Alto	Citywide Traffic Signal CCTV/Emergency Vehicle Preemption Project (not mapped)	**1.40**

TABLE 2-7 (CONT'D) *Constrained ITS Projects in Santa Clara County*

VTP ID	JURISDICTION	ITS PROJECT TITLE	COST ('08 $MILLIONS)
S28	San Jose	Silicon Valley Transportation and Incident Management Center (not mapped)	**$7.50**
S29	San Jose	San Jose Proactive Signal Retiming Program (not mapped)	**25.00**
S30	San Jose	San Jose Transportation Communications Network Enhancements	**24.00**
S31	San Jose	San Jose Traffic Signal System Upgrades (not mapped)	**8.00**
S32	San Jose	Downtown San Jose Area Freeway Management System (not mapped)	**2.00**
S33	San Jose	Downtown San Jose Local Street Advanced Traffic Management System (not mapped)	**3.00**
S34	San Jose	Downtown San Jose CMS Upgrades (not mapped)	**1.40**
S35	San Jose	King/Story Area Advanced Traffic Management System (not mapped)	**3.00**
S36	San Jose	Silicon Valley ITS Program Upgrades (not mapped)	**27.00**
S37	San Jose	Countywide Freeway Traffic Operation System (TOS) and Ramp Metering Improvements (not mapped)	**25.00**
S38	San Jose	Silicon Valley TIMC—SJPD Integration (not mapped)	**2.00**
S39	San Jose	City of San Jose Red Light Running Enforcement Program (not mapped)	**0.50**
S40	San Jose	San Jose Traffic Signal Interconnect (not mapped)	**4.00**
S41	San Jose	SVITS Hybrid Analogy/Digital Video System (not mapped)	**0.20**
S42	San Jose	Silicon Valley TIMC—Ramp Metering Integration (not mapped)	**8.00**
S43	San Jose	Coyote Valley ITS (not mapped)	**6.00**
S44	San Jose	Monterey Highway ITS (not mapped)	**4.80**
S45	San Jose	San Jose Mobile Video Surveillance for Emergency Response (not mapped)	**0.25**
S46	San Jose	San Jose Emergency Vehicle Preemption System (not mapped)	**6.60**
S47	San Jose	SVITS Connection to Sunnyvale (not mapped)	**3.50**
S48	San Jose	Construction Information Management System (not mapped)	**0.10**
S49	San Jose	Winchester/Stevens Creek Area Advanced Traffic Management System	**2.00**
S50	San Jose	Eastridge/Evergreen Area Advanced Traffic Management System (not mapped)	**4.00**
S51	San Jose	Almaden/Blossom Hill Area Advanced Traffic Management System (not mapped)	**2.00**
S52	Santa Clara	Santa Clara Communications Network Upgrade (not mapped)	**3.49**
S53	Santa Clara	Santa Clara Traffic Signals Upgrade (not mapped)	**3.19**
S54	Santa Clara	Santa Clara TMC Upgrade (not mapped)	**0.35**

TABLE 2-7 (CONT'D) *Constrained ITS Projects in Santa Clara County*

VTP ID	JURISDICTION	ITS PROJECT TITLE	COST ('08 $MILLIONS)
S55	Saratoga	City of Saratoga Citywide Signal Upgrade Project—Phase II (not mapped)	**$0.20**
S56	Saratoga	Citywide Accessible Pedestrian Signals (not mapped)	**0.26**
S57	Sunnyvale	Traffic Adaptive Signal System on Major Arterials (not mapped)	**3.32**
S58	Sunnyvale	Citywide CCTV Camera Deployment (not mapped)	**1.06**
S59	Sunnyvale	Citywide Traffic Signal Controller Update (not mapped)	**0.56**
S60	Sunnyvale	Citywide Count and Speed Monitoring Stations (not mapped)	**1.01**
S61	Sunnyvale	Citywide ITS Communications Infrastructure (not mapped)	**1.69**
S62	Sunnyvale	Traffic Management Center Integration (not mapped)	**0.25**
S63	Sunnyvale	Emergency Preemption Receiver Installation (not mapped)	**0.99**
S64	Santa Clara County	Capitol Expressway TOS (not mapped)	**3.50**
S65	Santa Clara County	County Expressway Countdown Pedestrian Signal Heads (not mapped)	**0.50**
S66	Santa Clara County	TOS Infrastructure Improvements (not mapped)	**10.00**
S67	Santa Clara County	Signal Coordination/Interconnect With Cross Streets (not mapped)	**5.00**
S68	Santa Clara County	SCC Motorist Traffic Information and Advisory Systems (not mapped)	**5.00**
S69	Santa Clara County	Adaptive Pedestrian Timing Demonstration Project (not mapped)	**1.00**
S70	Santa Clara County	Expressway Bike Detection (not mapped)	**2.08**
		Total	**$247.26**

proposes the following four major allocation strategies:

- The highest priority projects improve traffic flow through signal operations for local roadways/expressways, freeways (ramp meters), transit (priority treatment at traffic signals) and bicycle traffic (bicycle detection and signal timing).
- Reserve 20 percent of the proposed allocation to fund a countywide ITS operations, management and maintenance program managed by VTA.
- Use the remainder of the proposed allocation for other ITS projects that emphasize integration and connectivity of the transportation network systems.
- VTA staff will work with transportation staff from partner agencies to identify a project list that uses the above strategies.

As part of the strategic ITS planning effort, the list of projects/initiatives and the four allocation strategies were distributed to the cities, county and Caltrans for review. A series of meetings

were held with each city and the county to determine if updates were required. The outcome of these series of meetings revealed a shift in the original fund allocation recommendations, where operations, management and maintenance needs have become the greatest need in the region. The greatest needs, in order of greatest frequency, are as follows:

1. Operations, management and maintenance programs
2. Traffic flow improvement project for all users such as traffic signal timing; improve access for pedestrians and bicycles; improve transit operations; and safety
3. Traffic Signal Systems projects
4. Traffic Operations Center (TOC) projects
5. Traffic surveillance projects such as cameras and in pavement loops
6. Communications between traffic signals, TOC and other traffic operations systems (TOS)
7. Emergency Response System projects
8. Other projects that do not fall under any of the above listed project types

BICYCLE PROGRAM

VTA has developed a comprehensive bicycle program dedicated to improving the bicycle infrastructure in Santa Clara County. VTA believes that the bicycle network is an essential component of a fully integrated, multimodal, countywide transportation system. VTA is committed to improving bicycling conditions to enable and encourage people of all ages to bike to work, school, errands and for recreation.

VTA serves as the countywide planning agency for bicycle projects. In this capacity, VTA leads the development and implementation of the Countywide Bicycle Plan and develops the Bicycle Technical Guidelines (BTG). VTA also has a bicycle count program and assists and encourages Member Agencies with their data collection. Future data collection plans include a countywide bicycle and pedestrian collision monitoring program. VTA is involved in other regional and countywide bicycle improvement and coordination efforts including the development of a new Complete Streets Program, which is discussed in Chapter 3.

Bicycle Expenditure Plan

Regional bicycle projects are eligible to apply for inclusion in the Bicycle Expenditure Program (BEP) which was initiated in FY 2000–2001. To date over two dozen BEP projects have been completed. Over the 2010–2035 time period, the BEP will have $160 million to fund bicycle projects. The funding is a combination of:

- Transportation Funds for Clean Air (funded through the BAAQMD)
- Transportation Development Act Article 3 funds
- Regional Bicycle/Pedestrian Program Funds (Transportation Enhancements Program and Congestion Mitigation and Air Quality Improvement Program in FY 2006–2010)
- Local Fees

VTA administers and distributes funds from these sources to Member Agencies, matching appropriate project types and funding amounts with the requirements of each fund source. VTA assists Member Agencies as necessary to comply with the various regional, State and Federal procedural rules of each fund source. Project sponsors/Member Agencies are required to provide a minimum 20 percent match to receive BEP funding. The BEP projects list is updated approximately every four years for project changes and cost increases to align with the VTP schedule.

Recognizing that transportation is multimodal, several projects on the BEP list are also included in the Local Streets and County Roads Program, the Livable Communities and Pedestrian Program and the Expressway Program.

A complete description of the VTA Bicycle Program is addressed in the next chapter.

Bicycle Project Lists

The project lists shown on pages 60 through 63 represent the entire program of bicycle projects and total $332 million. In early 2009, VTA's Bicycle and Pedestrian Advisory Committee and Technical Advisory Committee prioritized the projects and alloted the $160 million allocation for this program provided by the VTP.

FIGURE 2-7 *Bicycle Projects in Santa Clara County*

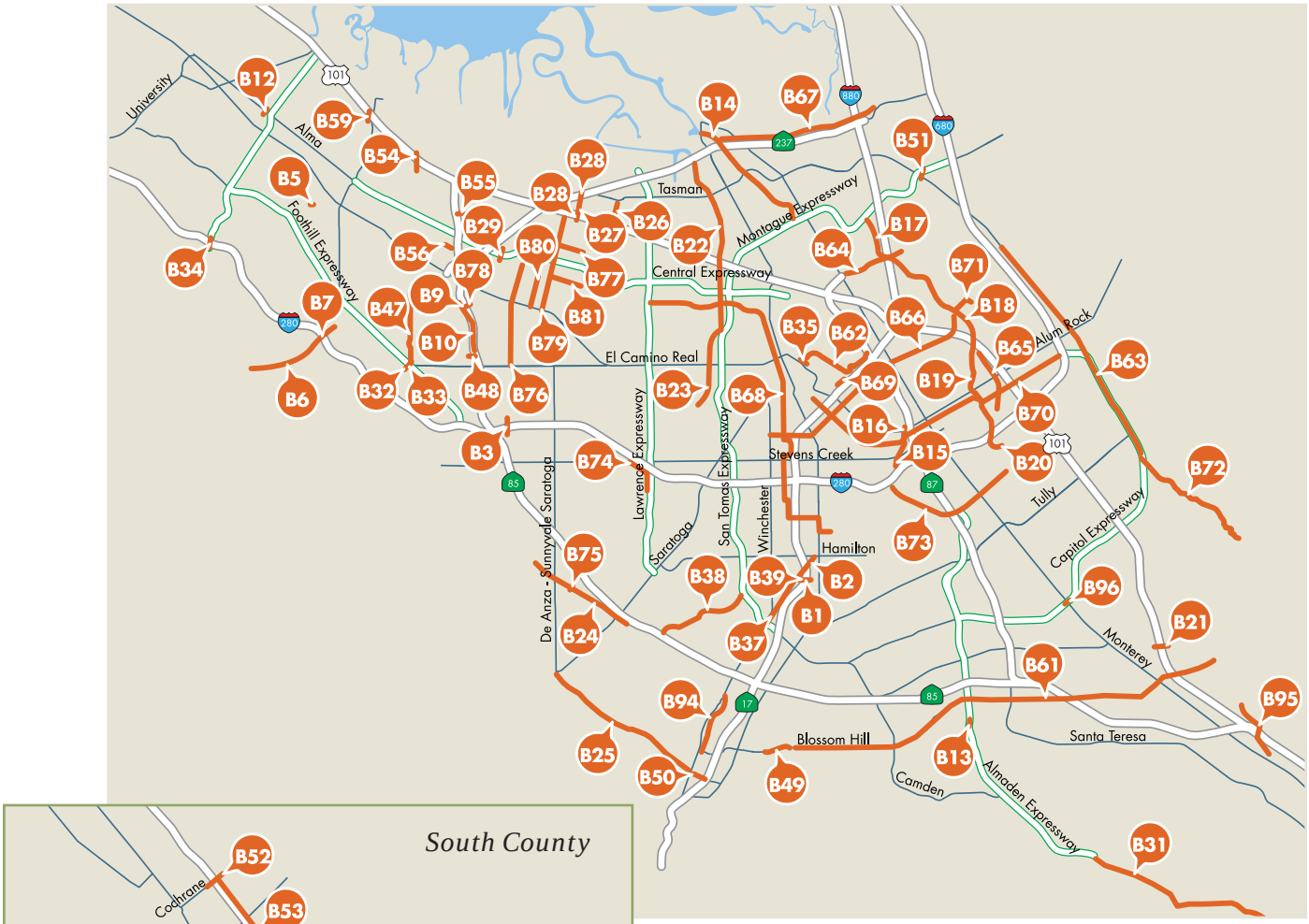


TABLE 2-8 *Bicycle Projects in Santa Clara County*

VTP ID	JURISDICTION	BICYCLE PROJECT TITLE	COST ('08 MILLIONS)
B1	Campbell	Campbell Ave. Improvements at SR 17 and Los Gatos Creek	**$1.50**
B2	Campbell	Los Gatos Creek Expansion on the west side	**2.50**
B3	Cupertino	Mary Ave. (I-280) Bicycle and Pedestrian Overcrossing	**15.00**
B4	Gilroy	Uvas Creek Trail Feasibility Study (not mapped)	**0.15**
B5	Los Altos	Adobe Creek Bike/Ped Bridge Replacement	**0.50**
B6	Los Altos Hills	Moody Rd./El Monte Rd. Bike Improvements Segments 1, 2, and 3	**3.50**
B7	Los Altos Hills	El Monte Rd.: Stonebrook Dr. to Voorhees	**0.20**
B8	Morgan Hill	West Llagas Creek Trail: Spring Rd. to Edes Ct.	**0.65**
B9	Mountain View	Stevens Creek Trail Reach 4 Segment 2	**10.00**
B10	Mountain View	Stevens Creek Trail Reach 4 Segment 2: Dale Ave./Heatherstone Wy. to Mt. View High School	**12.00**
B11	Palo Alto	Bicycle Boulevards Network Project (not mapped)	**5.00**
B12	Palo Alto	California Ave. Caltrain Undercrossing	**13.00**
B13	San Jose	Almaden Expwy. Bike/Ped Overcrossing	**5.70**
B14	San Jose	Guadelupe River Trail: Montague Expwy. to Alviso	**5.00**
B15	San Jose	Los Gatos Creek Trail: Auzerais Ave. to Park Ave.(San Carlos St. Segment)	**5.00**
B16	San Jose	Los Gatos Creek Trail: Park Ave. to Santa Clara	**7.33**
B17	San Jose	Coyote Creek Trail: Montague Expwy. to Oakland Rd.	**7.50**
B18	San Jose	Coyote Creek Trail: Oakland Rd. to Watson Park	**7.50**
B19	San Jose	Coyote Creek Trail: Watson Park to Williams St. Park	**5.00**
B20	San Jose	Coyote Creek Trail: Williams St. Park to Kelley Park)	**2.50**
B21	San Jose	Branham Ln./US 101 Bicycle and Pedestrian Overcrossing	**7.00**
B22	Santa Clara	San Tomas Aquino Creek Trail: North of Monroe Ave. to SR 237	**10.00**
B23	Santa Clara	San Tomas Aquino Creek Trail: Monroe Ave. to Cabrillo Ave. to southern city limit	**1.60**
B24	Saratoga	PG & E DeAnza Creek Trail (Reach 3)	**2.50**
B25	Saratoga/Los Gatos	SR 9 Bicycle and Pedestrian Safety Improvements	**2.70**
B26	Sunnyvale	Sunnyvale East Drainage Trail	**1.33**
B27	Sunnyvale	Borregas Bike Lanes between Weddell and Persian	**0.06**
B28	Sunnyvale	Borregas Bike Bridge over US 101 and SR 237	**8.70**
B29	Sunnyvale	Bernardo Ave. Caltrain Undercrossing	**8.50**
B31	SCC Roads	McKean Rd. Shoulder Improvements	**6.60**
B32	SCC Roads	Foothill–Loyola Bridge	**0.46**
B33	SCC Roads	Loyola Bridge over Foothill Expwy.	**7.00**
B34	SCC Roads	Page Mill/I-280 Interchange Improvements	**6.60**
B35	VTA	Santa Clara Caltrain Undercrossing	**8.00**

TABLE 2-8 (CONT'D) *Bicycle Projects in Santa Clara County*

VTP ID	JURISDICTION	BICYCLE PROJECT TITLE	COST ('08 MILLIONS)
B36	VTA	Pilot Bicycle Parking Program (not mapped)	**$0.25**
B37	Campbell	Widen Los Gatos Creek Trail on east side	**0.30**
B38	Campbell	San Tomas Aquno Creek Trail	**1.50**
B39	Campbell	Portals Project: Widening Campbell Ave. under SR 17	**3.00**
B40	Gilroy	Western Ronan Channel SCVWD service road: Leavesley to Llagas Creek	**2.70**
B41	Gilroy	Gilroy Sports Park	**4.80**
B42	Gilroy	Lions Creek SCVWD service road west of Kern Ave.	**1.90**
B43	Gilroy	Lions Creek SCVWD service road west of Santa Teresa Blvd./Day Rd.	**0.60**
B44	Gilroy	Northern Uvas Creek SCVWD service road	**1.90**
B45	Gilroy	Lions Creek SCVWD service road west	**0.90**
B47	Los Altos	Miramonte Ave. Bikeway Improvement Project	**1.40**
B48	Los Altos	Stevens Creek Link Trail	**3.00**
B49	Los Gatos	Blossom Hill Rd. Sidewalks & Bicycle Lanes	**0.80**
B50	Los Gatos	Los Gatos Creek Trail Connector to SR 9	**1.00**
B51	Milpitas	Montague Expwy. BART Pedestrian Overcrossing	**15.00**
B52	Morgan Hill	US 101 and Cochrane Road	**0.60**
B53	Morgan Hill	Madrone Recharge Channel Bike Path	**0.50**
B54	Mountain View	US 101/Permanente Creek Trail Bike/Ped Crossing	**9.50**
B55	Mountain View	Stevens Creek Trail/Middlefield Rd. North Side Access	**0.70**
B56	Mountain View	Stevens Creek Trail/Landels School Trailhead	**0.60**
B59	Palo Alto	US 101/Adobe Creek Ped./Bicycle Grade Separation	**13.00**
B61	San Jose	Blossom Hill: Calero Bikeways	**0.30**
B62	San Jose	Brokaw–Coleman: Airport Bikeway	**1.00**
B63	San Jose	Capitol Ave./Capitol Expwy. Bikeway	**0.30**
B64	San Jose	Charcot Bikeway	**0.40**
B65	San Jose	Five Wounds Trail: Watson Park to Williams St. Park	**5.00**
B66	San Jose	Hedding St. Bikeway	**0.20**
B67	San Jose	HWY 237 Bikeway	**0.40**
B68	San Jose	Monroe Bikeway	**0.10**
B69	San Jose	Newhall St. Bike/Ped Overcrossing over Caltrain	**7.00**
B70	San Jose	Park Ave./San Fernando St./San Antonio Bikeway	**0.10**
B71	San Jose	Penitencia Creek Trail: Coyote Creek to King Rd.	**3.75**
B72	San Jose	Thompson Creek Trail: Eastridge Transit Center to Evergreen College	**6.40**
B73	San Jose	Willow Glen Spur Trail	**2.50**

TABLE 2-8 (CONT'D) *Bicycle Projects in Santa Clara County*

VTP ID	JURISDICTION	BICYCLE PROJECT TITLE	COST ('08 MILLIONS)
B74	Santa Clara	San Tomas Aquino Creek Spur Trail	**1.00**
B75	Saratoga	Blue Hills School RR Crossing Safety Project	**$0.38**
B76	Sunnyvale	Mary Ave. Bike Lanes	**0.52**
B77	Sunnyvale	Maude Ave. Bike Lanes	**0.22**
B78	Sunnyvale	Stevens Creek Trail Connector	**1.40**
B79	Sunnyvale	Mathilda Avenue:Bike lanes from US 101 to El Camino Real	**3.90**
B80	Sunnyvale	Pastoria Avenue: Bike lanes from El Camino Real to Evelyn Ave.	**0.24**
B81	Sunnyvale	Hendy Avenue: Bike lanes from Sunnyvale Ave. to Fair Oaks Ave.	**0.67**
B92	SCC Roads	Santa Teresa Blvd./Hale Ave. Bicycle Delineation (not mapped)	**0.50**
B93	SCC Roads	Bicycle Detection: Expressways and Santa Teresa/Hale (not mapped)	**2.10**
B94	SCC Parks	Los Gatos Creek Trail: Lark Ave. to Blossom Hill Dr.	**1.50**
B95	SCC Parks	Coyote Creek Trail: Silicon Valley Blvd. to Metcalf Rd.	**1.10**
B96	VTA	Capitol Caltrain Station Crossing	**8.50**
N/A	Gilroy	SCVWD service road along western edge of Llagas Creek: Farrell Ave. to Day Rd.	**1.70**
N/A	Mountain View	Permanente Creek Trail undercrossing of Charleston Rd. and extension of the trail south from Old Middlefield Way to Middlefield Rd.	**4.20**
N/A	Mountain View	Hetch Hetchy Trail: Middlefield Rd. to Shoreline Blvd.	**0.80**
N/A	Palo Alto	South Palo Alto Caltrain Pedestrian/Bicycle Grade Separation	**13.00**
N/A	San Jose	River Oaks Bikeway	**0.30**
N/A	Sunnyvale	Northside Access at Sunnyvale Caltrain Station	**6.00**
N/A	Sunnyvale	Wildwood Avenue: Bike lanes from Bridgewood to city limits	**0.07**
N/A	Sunnyvale	Duane Avenue: Bike lanes from Fair Oaks to Lawrence	**1.91**
N/A	Sunnyvale	Hollenbeck Avenue: Bike lanes from Grand Coulee to Danforth	**0.20**
N/A	Sunnyvale	Bernardo Avenue: Bike lanes from El Camino Real to Evelyn Ave.	**0.16**
N/A	Sunnyvale	Tasman Drive: Bike lanes from Fair Oaks Ave. to city limits	**0.30**
N/A	Sunnyvale	Bernardo Avenue: Bike lanes from Homestead Rd. to Fremont Ave.	**0.13**
N/A	Sunnyvale	Belleville Way: Bike lanes from Fremont Ave. to Homestead Rd.	**0.12**
N/A	Sunnyvale	Remington Drive: Bike lanes from Mary Ave. to Tilton Ave.	**0.18**
N/A	Sunnyvale	California Avenue: Bike lanes from Mary Ave. to Fair Oaks Ave.	**0.23**
N/A	Sunnyvale	Moffett Park Area Bike/Ped Trails	**5.90**
N/A	SCC Parks	Coyote Creek Trail: Metcalf Rd. to Malaguerra. Ave.	**2.80**
		Total	**$332.01**

N/A Not funded through VTP. Not mapped.

COMMUNITY DESIGN AND TRANSPORTATION PROGRAM

The Community Design and Transportation (CDT) Program is VTA's Board-adopted program for integrating transportation and land use. The CDT Program and its *Manual of Best Practices for Integrating Transportation and Land Use* were adopted by the VTA Board of Directors in 2002. Subsequently, the CDT Program and manual were endorsed by each Member Agency in 2003 through formal resolutions. The CDT Program continues to evolve and function as an active partnership for pursuing transportation and land use goals. VTA has led the region with this innovative program, with the CDT Program serving as a model for other agencies including the FOCUS program recently developed by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) as part of the 2009 Regional Transportation Plan.

The CDT Program structure reflects VTA's role as a multimodal transportation provider. It considers all transportation modes and

stresses the importance of a healthy pedestrian environment, concentrated mixed-use development patterns integrated with transit service, innovative street design, and the interrelationships of buildings and sites with transportation facilities and services. The CDT Program is designed around a framework of community cores along the major transportation corridors and surrounding transit station areas.

CDT Grant Fund Programs

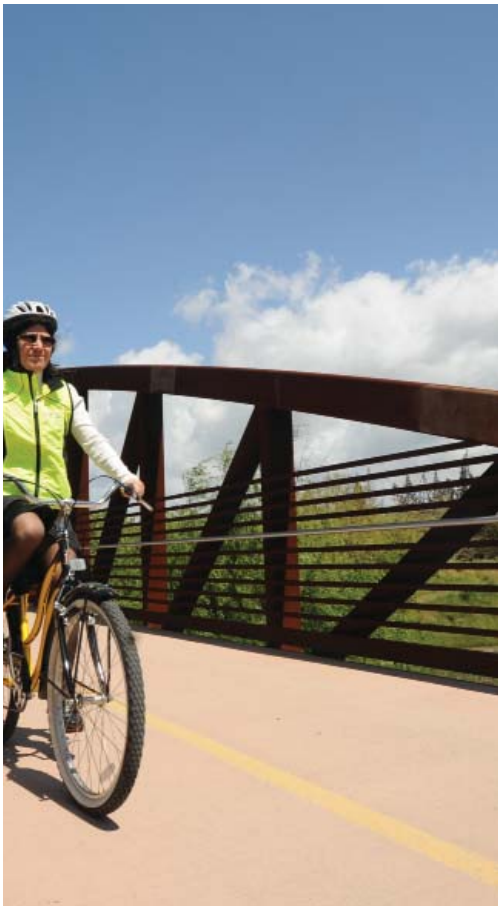
The CDT Program provides planning and capital grant funds for transportation-related projects that develop land use policies supportive of the CDT Principles, improve community access to transit, provide multimodal transportation facilities, and enhance the pedestrian environment along transportation corridors, in core areas and around transit stations.

VTA receives funding for these grant programs from MTC's Transportation for Livable Communities (TLC) Program. The policies for funding the TLC Program come through the development of the RTP. The current allocation methodology is based on Santa Clara County's population share of the regional total and on the amount MTC requires for dedication to the county share (currently split on a 25 percent share for counties and a 75 percent share for MTC). Policies for the 2009 RTP are currently under development; VTA will actively pursue a change in policy to pass through 75 percent to counties with adopted CDT-like programs, and to pursue additional funds for the CDT Program. In addition, VTA will pursue other fund sources that could be administered through the CDT Program.

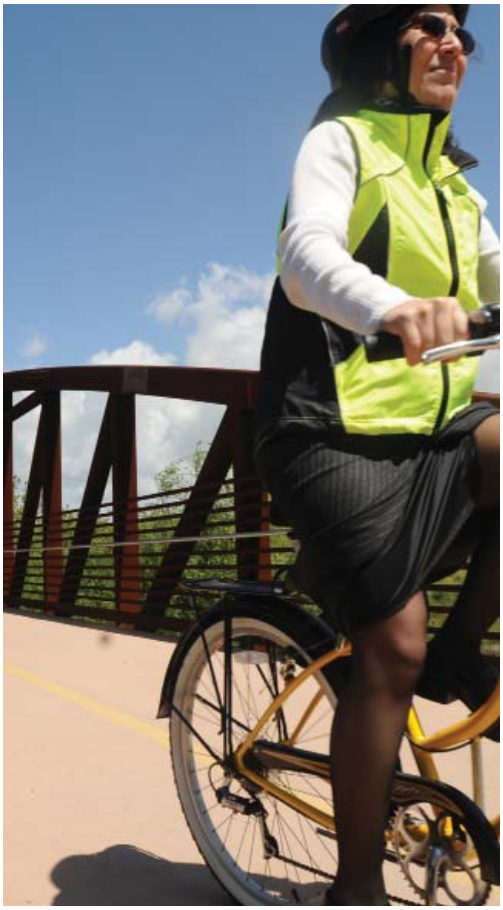
Developing a Project List

Project lists for the CDT Program are regularly developed through a competitive call-for-projects. The timing and frequency of the calls depend on funding availability. VTA currently expects to allocate about $360 million to this program over the 25-year life of the plan.

Additional information on the Community Design and Transportation Program and other VTA urban design/land use-related programs is provided in Appendix B.



CHAPTER THREE *planning initiatives*



VTA's Capital Investment Program is supported and complemented by a comprehensive array of ongoing and future planning initiatives. These initiatives take the forms of policies, plans and studies that range in application from specific projects to how VTA functions as an agency. They address key goals such as improving the efficiency of the transportation system, developing new sources of revenue and improving our model of growth to embrace shorter trips and multiple travel modes. Taken as a whole, these initiatives support the mission and vision of VTA and form a roadmap for meeting the challenges Santa Clara County faces over the next 25 years.

This chapter discusses the breadth of planning initiatives as they apply to each of the Capital Investment Program areas, as well as to VTA and Santa Clara County's built environment and transportation system.

HIGHWAYS

Over the past few decades, Santa Clara County has typically addressed highway congestion by adding capacity to—and expanding—the highway system. While this strategy has been successful in accommodating more vehicles, it has reached its limits as a practical solution. The lack of cheap land and available funding has made adding lanes prohibitively expensive. As such, VTA's next generation of highway improvements emphasizes efficiency and pricing to generate revenue to pay for future corridor improvements.

When a highway is at or nearing capacity, each successive vehicle entering the highway exercises a greater negative effect on traffic conditions than the vehicle that precedes it. As such, it takes only a small percentage of additional vehicles to have a significantly adverse impact on overall operations. Ramp metering and congestion pricing stand out as cost-effective strategies to avoid overcrowding and maximize existing lane capacity.

RAMP METERING

Ramp metering helps reduce traffic congestion by limiting the rate at which vehicles can enter a highway. This strategy avoids overloading the highway system with additional vehicles at known bottlenecks and keeps the density of vehicles at a level that allows for better operations. VTP 2035 includes nine metering projects along the US 101 corridor in its highway program.

CONGESTION PRICING

Congestion pricing seeks to maintain a constant acceptable level of operation by charging users a fee. As applied to Santa Clara County, congestion pricing would first take the form of express lanes on highways. Express lanes are modified HOV lanes that allow non-carpool drivers to use the lane for a fee that varies depending on traffic conditions. The cost of entry would vary to maintain a minimum speed of 55 miles per hour and HOV users will remain able to use the facility at no cost.

This strategy takes advantage of excess capacity in HOV lanes and has the added benefit of raising revenue for future corridor improvements, including express or freeway-based BRT services operating in those lanes. By allowing non-carpool drivers to use express lanes, the burden on mixed-flow lanes is reduced. VTP 2035 identifies potential express lane projects on all major highways in Santa Clara County excluding SR 17 and portions of I-280 and US 101. At the time of this writing, legislation is in place that allows the development of two express lane corridors. US 101/SR 85 and the SR 237/I-880 connector are the top corridors for near-term implementation. VTA will seek authority to complete the entire network.

HIGHWAY PLANNING STUDIES

Over the last several years, VTA had conducted highway planning studies to identify projects to be included as part of the VTP planning process. These studies have led to implementation projects such as the SR 152/SR 156 Interchange, the US 101/SR 85 Interchange and the I-880 widening between US 101 and SR 237.

VTA is currently engaged in highway planning studies, discussed below, to inform the next generation of highway projects.

SR 85 and US 101 Express Lanes

This study follows and updates the Santa Clara County HOT Lane Feasibility Study that was completed in 2005. The study involves the preliminary engineering, conceptual alternatives and public outreach work to develop express lanes on SR 85 and the US 101 corridor. The study analysis will recommend an implementation plan for the Silicon Valley Express Lanes program with a recommendation to convert existing carpool lanes to express lanes on SR 85 and US 101 by 2012 and 2015 respectively.

Investigation of Innovative Pricing Practices for Silicon Valley

This study, funded by the Federal Highway Administration (FHWA) 2006 Value Pricing Pilot Program, would evaluate three different elements of pricing practices consisting of:

- Conversion of a general purpose lane to an express lane
- Development of Express/Rapid Bus network on price-managed lanes
- Transit credit-based congestion pricing

The three elements combined would address innovative ways to create a multimodal value pricing program in the region. These efforts would help shift trips away from driving alone to carpooling and using transit, provide enhancements for managing traffic flow, and create a potential revenue source to fund transportation improvements and transit operations.

El Camino Real/SR 85/SR 237/ Middlefield Road

This project will include operational improvements to the El Camino Real/ SR 85 Interchange, auxiliary lanes on SR 85 from El Camino Real to the SR 85/SR 237 Interchange and operational improvements at the Middlefield Road/SR 237 Interchange. Currently the project is in the conceptual study phase with a Project Study Report/ Project Development Support expected to be completed in 2009.

US 101 Implementation—Trimble Road to Mabury Road/Taylor Street

This project will prepare an implementation plan for the US 101 corridor from the Trimble/ De La Cruz Road Interchange to the proposed Mabury Road/Taylor Street Interchange. The scope of this project requires traffic studies and mapping of the corridor area and preparation of geometric concepts and phasing implementation plan for the 4th Street/Zanker Road, Mabury Road/Taylor Street and Old Oakland Road Interchanges. The implementation plan will determine which projects will be advanced to the project study report phase, and the timing of the projects. The study is anticipated to be completed in 2009.

US 101/Trimble Road/ De La Cruz Boulevard Interchange

The project will study improvements to the US 101—Trimble Road/De La Cruz Boulevard Interchange, including:

- Replacing the existing US 101 overcrossing
- Widening De La Cruz Boulevard/Trimble Road to six travel lanes through the interchange limits
- Reconstructing the southbound exit loop to a new partial cloverleaf design and incorporating a new intersection on De La Cruz Boulevard
- Adding a southbound auxiliary lane from De La Cruz Boulevard to the SR 87 exit ramp, depending on results of operational studies

- Configure ramp termini to be pedestrian- and bicycle-friendly

Currently, VTA is working on the project study report, which is expected to be complete in mid-2009.

Calaveras Boulevard Widening

This work is anticipated to include widening the existing four-lane facility to six lanes, from Town Center Drive in the east to Abel Street on the west. In addition, the work assumes auxiliary lanes will be added on the current six-lane facility between Abel Street and Abbott Avenue. The proposed widening will require widening/replacement of the bridges over Main Street and the Union Pacific Railroad tracks to accommodate the proposed BART extension. Currently, VTA is working on the PSR, which is expected to be completed in mid-2009.

MTC Regional Express Lane Study

The development and implementation of a Bay Area Express Lane Network has five primary objectives:

- More effectively manage the region's freeways in order to provide higher vehicle and passenger throughput and reduce delays for those traveling within each travel corridor
- Provide an efficient, effective, consistent and seamless system for users of the network
- Provide benefits to travelers within each corridor commensurate with the revenues collected in that corridor, including expanded travel options and funding to support non-highway options that enhance effectiveness and throughput
- Implement the Express Lane Network in the Bay Area, taking advantage of existing highway right-of-way
- Toll revenue collected from the Express Lane Network will be used to operate the Express Lane Network; to maintain Express Lane system equipment and software; to provide transit services and improvements in the corridors; to finance and construct the Express Lane Network; and to provide other corridor improvements

MTC Freeway Performance Initiative

The Freeway Performance Initiative (FPI) is a relatively new MTC effort to improve the operations, safety and management of the Bay Area's freeway system. The purpose of the FPI is to develop a comprehensive strategic plan to guide the next generation of freeway investment.

Studies of the major corridors in the Bay Area are currently being conducted by MTC. These studies focus on freeway operations, incorporating parallel arterials and transit, and include documentation of existing problems, development of viable short-term and long-term solutions, preparation of rough cost estimates, and an assessment of impacts and benefits of the proposed solutions. The effect of a small number of regional multi-corridor strategies is also being assessed.

The projects within Santa Clara County in the FPI are included in VTP 2035. These projects consist of ramp metering and roadway improvements along three highways: US 101, I-680 and I-880.

EXPRESSWAYS

Santa Clara County's expressway system is owned and operated by the County Roads and Airport Department. Expressway planning is guided by the Comprehensive County Expressway Planning Study (CCEPS) which was approved in January 2009. The study identifies system needs and projects to improve efficiency and responsibly accommodate bicycle and pedestrian traffic. The results of CCEPS will inform future VTP planning.

LOCAL STREETS AND COUNTY ROADS

VTA's Member Agencies serve as the lead agencies for projects in this program area. Though projects frequently are closely coordinated with and receive input from VTA, Member Agencies act on their autonomy regarding project design and implementation.

VTA will actively work with local jurisdictions to ensure projects achieve the highest stan-

dards of value and to implement CDT Program recommendations, routine accommodation and Caltrans DD64 elements (best practice concepts for integrating bicycling and walking) in local streets projects.

TRANSIT

VTA is committed to providing the high-quality transit service its customers expect and deserve. Since the adoption of VTP 2030 in 2005 VTA has completed several transit-related planning efforts designed to guide future transit investments such as:

- The adoption of Service Design Guidelines and a Transit Sustainability Policy
- The completion of a Market-based Comprehensive Operations Analysis (COA)
- The service implementation of the COA recommendations.

These collective efforts have resulted in the development and implementation of a new model for delivering transit service in the county.

COORDINATION WITH MEMBER AGENCIES FOR GENERAL PLAN UPDATES

As of the writing of this document, several cities in Santa Clara County are undergoing comprehensive General Plan (GP) updates. San Jose, Santa Clara, Los Gatos, Milpitas and Palo Alto are all engaged in GP updates with various horizon years. VTA is working closely with these cities to integrate the land use patterns envisioned in those plans with the plans, projects and services provided by VTA.

STRATEGIES FOR EXISTING SERVICE IMPROVEMENTS

Planning for Market Needs Using information from market-segmentation studies, surveys and other plans and studies VTA will design and re-design its existing transit system to better serve existing and capture new high-ridership markets. A market-based approach is designed to match basic elements such as travel, attitudes, desired amenities, environment and services in a way that VTA can prioritize the deployment of its resources and maximize its market share. Another dimension to this study will be identifying the origins and destinations of these markets.

Headway Improvements When financial conditions allow, future service expansion will focus on improving service frequencies on the core bus and LRT network.

Expanded Service Hours When financial conditions allow, expanded hours of service will be explored for lines with high evening ridership demand. These improvements also support welfare-to-work initiatives and Community-Based Transportation Plans.

Operating Optimization and Effectiveness Ongoing efforts, informed by studies such as the Light Rail Systems

Needs Study, will allow VTA to explore options for improving operational efficiency and flexibility to offer premium services such as faster transit speeds and express (skip stop) trains on the LRT system.

ANNUAL TRANSIT SERVICE PLAN PROCESS

VTA continually monitors use of its transit network to determine where and when service improvements and expansions may be needed, and this process is now guided by the TSP/SDG mentioned above. This information is considered as VTA develops its biennial ten-year Short Range Transit Plan (SRTP), and its Annual Transit Service Plans. These plans are used to implement detailed transit service improvements, route changes and refinements, and improve productivity. Until new sources of additional funding can be secured for operations, VTA will work within the existing resources it has for operations, and will continue to improve services to its current and potential new customers.

Beyond the implementation of its new bus service in January 2008, VTA has made a commitment to continually evaluate the system based on performance standards established in the SDG. The Quarterly Service Performance Report provides a report card on the performance of every line in the system. Based on these quarterly updates, the Annual Service Management Plan will modify bus and rail service through measures such as increases or decreases in service hours or frequency, marketing and promotion, or routing changes.

TRANSIT PLANNING STUDIES

The VTP 2035 vision for improving transit service focuses on key high-ridership corridors, system refinements and improved operating efficiency. To get more from existing investments, take advantage of "green" transportation opportunities and address specific community needs, VTA will use new technologies, innovative planning and marketing strategies, and smaller-sized vehicles where appropriate. The vision for these improvements is to develop an expanding ridership base by providing higher-quality, market-oriented service.

VTP 2035 outlines several planning initiatives and studies to be conducted to prepare for transit delivery, refinement and expansion. These studies, outlined below, are designed to deliver more effective and productive service.

Transit Sustainability Policy, Service Design Guidelines

The Transit Sustainability Policy (TSP) and accompanying Service Design Guidelines (SDG), adopted by the VTA Board in 2007, provide policy and technical guidance for the development of new transit capital projects

using standards and metrics for the range of VTA transit service types. The document also establishes a program for continual monitoring and evaluation of VTA services that in turn inform service changes through the annual service planning process. Using the SDG as a reference point, VTA is exploring improvements to the transit network through several upcoming efforts: the Bus Rapid Transit Strategic Plan, the Light Rail System Analysis, Highway-Based BRT Alternatives Analysis and Transit Corridor Improvement Plans. The SDG will periodically be reviewed and refined as needed to ensure that transit projects in Santa Clara County are held to current standards of efficiency and ridership.

First and Last Mile Study

Providing efficient transit services which rely on density and concentrated job centers is difficult and costly in Santa Clara County. The benefits of offering trunk line transportation services represented by commuter rail, light rail or bus rapid transit—or even conventional bus lines—are often lost at either the origin or destination where potential transit riders are confronted by long walks over difficult terrain or unfriendly environments. Providing efficient and attractive options for the "first and last mile" connection is the focus of this study, which will explore shuttles and other innovative approaches to connecting riders to home, work place and major activity centers.

New Transit Corridors Program

The New Transit Corridors Program consists of a series of studies intended to establish a rational planning framework for future transit capital expansion. While each study investigates a different aspect of the transit capital program, the studies are linked by policy and program objectives established by the VTA Board of Directors.

Bus Rapid Transit Strategic Plan VTA is in the process of producing a strategic plan for implementation of a Bus Rapid Transit (BRT) system in Santa Clara County. The objectives of the strategic plan are to: establish a brand identity for future BRT vehicles, stations and supporting materials; evaluate candidate corridors based on the SDG and develop cost estimates for implementation and future service; and, develop an implementation plan to guide VTA in developing BRT facilities and funding future development and operation of the BRT system.

Depending on the outcome of this effort, supporting studies may be needed. These may include a systems linkage study to identity opportunities to interconnect BRT lines with other modes, and may be incorporated into other efforts.

Light Rail Operations Analysis and Improvements The Light Rail Transit (LRT) System Analysis will evaluate current

and future market conditions along with possible operating or capital improvements to the system in the next 20 years. The overarching goal of the analysis is to increase ridership on the system by making LRT more competitive in the overall travel market. This will be accomplished by improving operating speeds, flexibility and efficiency. It is expected that the study will produce recommended capital and operational improvements. No funding has been identified for the potential capital improvement which could be significant. VTA will need to actively prioritize these investments within its future capital program and seek funding.

Highway-Based BRT Alternatives Analysis The Highway-Based BRT Alternatives Analysis is a comprehensive evaluation of the market for freeway-based express bus services in Santa Clara and its neighboring counties. VTA's own express bus services will also be evaluated for their effectiveness to capture the potential market. How VTA packages this service, from stations and routes to brand identity and vehicles, will be part of the business plan. VTA is working closely with large employers in Santa Clara County in an effort to shape services that meet their employees' needs.

Transit Corridor Improvement Plans Transit Corridor Improvement Plans are

defined in VTA's TSP and SDG as an option for cities or communities that are seeking transit enhancements in a corridor but do not reach the minimum thresholds for upgrades to higher levels of service. VTA will be working with cities and communities as needed to develop Transit Corridor Improvement Plans that will identify future transit upgrades. This process will have special importance with the comprehensive General Plan updates currently underway in many Santa Clara County cities. Moreover, based on the evaluation contained in the BRT Strategic Plan and LRT Systems Analysis, corridors identified for potential future upgrades to BRT or LRT may require or benefit from Corridor Improvement Plans. Additional corridors that are identified for further analysis in other studies and other forums such as board workshops will also be subject to these plans.

Community Bus Program

The community bus concept uses small vehicles (25 seats) that function as circulator-type service in communities that may have low transit ridership or operational obstacles such as hillsides or narrow streets. Vehicles have distinctive branding and routes are designed to integrate with the larger system as circulator and feeder services.

In 2005, VTA introduced a Community Bus pilot program in Los Gatos. In July 2007, the first phase of the Community Bus Program was implemented. This involved bringing contract services in-house (including the Los Gatos pilot program), introducing five new lines and converting existing lines to Community Bus lines. This was followed by expansion of 12 additional routes as part of the new bus service in January 2008. In addition, there are plans to expand Community Bus lines in the future with the purchase of 25 more vehicles as demand increases.

Many of the Community Bus lines were converted from existing local bus routes and did not benefit from a comprehensive planning process to understand needs and opportunities. For new Community Bus lines, VTA will be guided by planning studies which may include a comprehensive evaluation of route design, implementation policies and needs .

Fleet Management Plan

The Fleet Management Plan is a complementary document to the Short Range Transit Plan and outlines a strategic direction for the retirement, replacement and procurement of bus and light rail vehicles. The Fleet Management Plan is updated on a bi-annual basis and assumes a 10-year planning horizon. Significant inputs into the plan are a forecast of operating hours and revenue together with anticipated ridership. In addition, the mix of vehicles is an integral part of the plan. The

fleet mix is largely determined by anticipated product lines—such as BRT, Community Bus and others—offered by VTA.

Transit Facilities Planning

VTA is currently in the process of developing a Facilities Master Plan that will evaluate the future needs of VTA's transit operations and the adequacy of the existing yards and facilities to accommodate those needs. Included in this analysis are assessments of future fleet size and storage requirements, maintenance equipment and facilities and administrative and office space. Other potential uses for VTA property such as joint development opportunities also will be explored.

Several planning efforts related to Transit Centers throughout the VTA system will be undertaken as system expansion occurs and the existing system is modernized to meet future needs. A near-term effort at the Eastridge Transit Center will occur as the Capitol Expressway corridor undergoes transit enhancement. In addition, Palo Alto's transit center will be the subject of a study seeking to better integrate the variety of transit operators serving the mid-peninsula area. Finally, future transit center expansions are anticipated as BRT service comes on-line. A special effort focused on a future transit center at De Anza College will likely begin in advance of the anticipated Stevens Creek BRT project.

Eastridge Transit Center Improvement and Access Plan This planning study will focus on improving transit passenger amenities and pedestrian and bicycle access to the Eastridge Transit Center. The Eastridge Transit Center is the second busiest transfer point in the VTA system, behind the Downtown Transit Mall. The study will seek community input for how to improve access to the transit center in preparation for the reconstruction of the facility as a part of an enhanced transit investment in the Capitol Expressway corridor. In addition, the study will identify strategies for raising the awareness of the center's transit services, particularly in communities where English is not the primary language spoken at home.

Palo Alto Intermodal Transit Center Comprehensive Plan This comprehensive plan will analyze the bus and shuttle transit operational needs at the Palo Alto Intermodal Transit Center and develop a list of capital projects to improve its vehicle circulation, transit operations, passenger flow, bicycle facilities and transit-oriented development opportunities within the transit center. The plan will provide a blueprint for future capital improvements.

De Anza College Transit Center De Anza College serves as a western hub of bus operations for VTA, providing an efficient transfer point for bus passengers to access other major bus lines or feeder services. The existing stop at De Anza College is adequate for today's operations but will need to expand once BRT or other new services come on-line. In addition, VTA would like to upgrade the facility to provide a greater level of passenger amenities such as advanced technology, landscaping, benches and shelters.

Transit Waiting Environments Capital Plan Transit waiting environments, commonly known as bus or light rail stops or stations, will continue to be utilized as transit ridership grows throughout Santa Clara County. Improving these locations where VTA customers access the system will become a challenge as existing facilities age and new service is introduced. The Transit Waiting Environments Study will seek to develop standards for stop and station design and facilities, and seek innovative ways to finance their improvement and construction over the next 20 years.

Technology

The communication of transit information in real-time through media such as signs, mobile devices or web-based portals will increase as VTA invests in real-time hardware and software. Plans for the deployment of these passenger amenities are already taking place with the first installation occurring on the

heavily traveled El Camino corridor. Future wireless communication will bring a greater level of information to VTA passengers.

Alternative Fuel/Zero-Emission Vehicle Program

VTA will investigate options to procure alternative fuel/zero-emission vehicles in accordance with its vehicle replacement program. Staff will explore the feasibility of implementing new technologies as they emerge and in accordance with the California Air Resources Board (CARB) requirements. CARB regulations are currently undergoing review and changes may affect how VTA proceeds in the future. VTA will monitor the CARB process and take actions accordingly.

Airport People Mover

An automated people mover system connecting San Jose International Airport with nearby transit hubs was anticipated as part of the 2000 Measure A program and the Airport Master Plan. Because airport expansion plans have been modified, the City of San Jose is currently exploring public-private partnerships for development of an airport feeder transit system.

Caltrain Capital Needs Study Update

In 2007, VTA conducted a Capital Needs Study evaluating potential capital improvements to the Caltrain system in Santa Clara County. The plan should be updated on a regular basis as projects are completed, the needs of the system change and additional studies are undertaken. The 2009 Study Update will consider capital needs as Caltrain service has evolved and include the results of the access plan discussed below.

Caltrain Station Access Study

The challenge to increasing ridership is dependent on providing efficient access to the stations in Santa Clara County through automobile parking, bicycle storage, pedestrian improvements and transit/shuttle service. The Caltrain Station Access Study will evaluate additional opportunities for improving access to Santa Clara County's stations through all modes. The Great America Station served by ACE and Capitol Corridor trains will also be included in the study.

South County Commute Transit Service Study

Connecting San Martin, Morgan Hill and Gilroy with job centers in Downtown San Jose and northern Santa Clara County will become a greater challenge as South County residential growth continues and freeway capacity is reduced. The South County Commute Transit Service Study will seek to determine the optimal balance between local, express, BRT and commuter rail service for the South County commute market.

California High-Speed Rail Studies

The California High-Speed Rail (HSR) Project is an intra-state high-speed rail link currently being planned by the California High-Speed Rail Authority to help meet the anticipated increase in travel demand between the Bay Area and Southern California. The initial phase of the project calls for a 220-mile-per-hour train to connect the Bay Area and the Los Angeles/Anaheim area. Later phases would link Sacramento in the north and San Diego in the south.

In November 2008, Proposition 1A, a $9.95 billion bond measure for High Speed Rail, was passed by California voters. It authorizes using State bonds for up to $9 billion for capital costs of the first segment of HSR—San Francisco to Los Angeles/Anaheim. It also authorizes $950 million for commuter rail systems that complement HSR and specifically cites the Altamont Pass area. Planning, engineering and right-of-way protection will be among the first activities supported by this bond measure.

According to the HSR Final Program Environmental Impact Report, the Pacheco Pass is the preferred route from the Central Valley to the Bay Area. The route will use the current Union Pacific Railroad/Caltrain alignment from Gilroy to San Francisco in a shared corridor concept with tracks supporting HSR, Caltrain and other commuter rail services, and Union Pacific freight operations. Two stations are identified for Santa Clara County: Gilroy and San Jose Diridon. A potential third station may be located in Palo Alto or Redwood City.

Two different segments in Santa Clara County are identified for planning and engineering purposes. The first segment—San Jose to San Francisco—is subject to a Memorandum of Understanding (MOU) between the Caltrain Joint Powers Board (JPB) and the HSR Authority. VTA, as a member of the Caltrain JPB, will have a major role in reviewing the engineering effort and its impact on local cities and VTA facilities, as well as engaging in joint planning studies for the two HSR stations. The second segment is in the corridor owned by Union Pacific south of Tamien Station through Gilroy to the Santa Clara county line. For this segment VTA will work with the HSR Authority to review engineering work and lead a joint planning effort for the Gilroy Station area.

The passage of the HSR bond opens new opportunities for VTA, the Caltrain JPB, and our local cities to change the nature of the Caltrain/UPRR alignment through Santa Clara County, and potentially achieve economies of scale with activities to modernize Caltrain. VTA's stake in HSR comes in several different areas:

- VTA will work with the High Speed Rail Authority, the JPB and local cities on planning and engineering studies defining capital improvements in the alignment and an ultimate corridor "footprint."
- VTA will work with the JPB and local cities on specific HSR projects, such as grade separations, impacting local road systems and the rail alignment.
- VTA will work with cities on station area land use issues.

Caltrain Electrification and Service Improvements Study

VTA is a partner in the effort to modernize the Caltrain system through electrification and other capital improvements that will allow it to increase peak hour service and overall capacity while reducing noise and air pollution. In addition to electrification, the project includes signal upgrades, positive train control and terminal capacity enhancements in San Jose and San Francisco.

Dumbarton Corridor Study

The Dumbarton Corridor Study seeks to re-introduce commuter rail service to the Dumbarton Rail Bridge, connecting Union City in Alameda County with the Caltrain corridor. Due to funding challenges, the previous target date for implementation has been postponed pending engineering studies and additional funding opportunities. However, a group of transit agencies continues to explore enhancing transit service in the corridor through improvements to the existing express bus network. The Highway-Based BRT Alternatives Analysis will investigate the market and service options for this corridor.

SANTA CLARA COUNTY GOODS MOVEMENT STUDY

Trucks, freight trains and air cargo help to keep Santa Clara County economically competitive and have a significant impact on our transportation infrastructure. Ensuring competitive connections to gateway facilities such as ports and airports is a key component of transportation policy and future economic development in Santa Clara County. In addition, as Santa Clara County seeks ways to reduce greenhouse gas emissions, the true impact of goods movement and methods for making this critical function more sustainable need to be evaluated. The Goods Movement Study will develop a database of major shippers in the county and a thorough understanding of the modes utilized to import and export commercial goods. It will also make projections of how goods movement will change

in the next 25 years and how public agencies can work to ensure a competitive region while maintaining quality of life.

Bus Service Expansion Study

This study will explore options for funding future expansion of bus service. Service expansion may include improved headways, additional early morning and late evening or weekend service, and new bus lines or routing. Service integration plans will also be examined in this context with regard to Caltrain, LRT and BRT service improvements, and the BART project. This study may be conducted in phases and elements may be included in VTA's annual service planning process.

SAN JOSE DIRIDON TRANSIT STATION EXPANSION STUDY FOR BART AND HIGH-SPEED RAIL

Beginning in 2009, the City of San Jose working in collaboration with VTA, Caltrain, and the California HSR Authority will begin a study to develop an expanded Diridon Transit Station in Downtown San Jose which will serve as the regional transit hub for Silicon Valley. The project will integrate existing Caltrain, ACE, Amtrak, LRT and bus services with planned

BART, BRT and high-speed rail services. Station expansion would be integrated with current plans to have a design/build contract ready by 2011 for construction of a San Francisco to San Jose segment of the HSR project.

SILICON VALLEY RAPID TRANSIT PLANNING AND DESIGN

The Silicon Valley Rapid Transit (SVRT/BART) project is engaged in ongoing planning and engineering work. Efforts include station area plans and transit integration plans. More information on the SVRT project is provided in Chapter 4.

Community-Based Transportation Plans

In partnership with MTC, VTA will conduct Community-Based Transportation Plans (CBTP) in areas defined by MTC. The goal of the CBTP process is to advance the findings from MTC's Lifeline Transportation Network Report adopted by the Commission and incorporated into the 2005 RTP. The Lifeline Transportation Network Report identified transit needs in economically disadvantaged communities throughout the San Francisco Bay Area, and recommended local transportation studies in an effort to address them. Each community-based transportation study will involve a collaborative approach that includes residents and community-based organizations (CBOs) that provide services within minority and low-income neighborhoods.

The first CBTP in Santa Clara County focused on the transportation needs of low-income communities in the Gilroy area. This Gilroy CBTP was completed and adopted by the VTA Board in July 2006. The plan produced a list of proposals including:

- Express transit service between Gilroy and San Jose
- Community Bus service
- Enhanced transportation information services
- Low-cost transit pass program
- Bus shelters and other amenities
- Bicycle and pedestrian improvements

Funding sources and opportunities that interested parties can pursue to implement the recommendations are detailed in the Gilroy CBTP.

VTA has conducted studies for East San Jose and Milpitas. A future study is planned for Mountain View in 2011.

Grand Boulevard Initiative

The Grand Boulevard Initiative (GBI) is a collaboration of 19 cities, Santa Clara and San Mateo Counties, local and regional agencies and other stakeholders intended to improve the performance, safety and aesthetics of the El Camino Real corridor from the Diridon Transit Hub in San Jose to Mission Street in Daly City. The ultimate goal is for the corridor

to achieve its full potential as a place for residents to work, live, shop and play, creating links between communities that promote walking and transit and an improved and meaningful quality of life. The GBI builds upon and supports several other transit and land use planning initiatives in Santa Clara County including the 522 Rapid bus service and service improvements being explored as part of VTA's BRT Strategic Plan. El Camino is also part of VTA's countywide Community Design & Transportation (CDT) Program Cores, Corridors, and Station Areas framework, which shows VTA and local jurisdiction priorities for supporting concentrated development in the County.

ACCESSIBLE TRANSPORTATION SERVICES AND PROGRAMS FOR PEOPLE WITH DISABILITIES AND SENIOR CITIZENS

Almost 10 percent of the nation's drivers are older than 65, and that percentage could increase rapidly in the next decade as the post-World War II "baby boom" generation reaches that milestone. By 2030, projections suggest one in five Americans will be 65 or older, and the number of people aged 85 and older—currently the fastest growing segment of the older population—could exceed 10 million. Driving cessation has been found to peak at about age 85; suggesting more of the "oldest old" may be dependent on other forms of transportation in the near future (National Institutes of Health, 2002, http://www.nih.gov/news/pr/jul2002/nia-29.htm).

To meet the expected increased in demand for alternative modes of non-automobile transportation, VTA is continuing to plan for accessible fixed-route bus, light rail and paratransit services during the next 30 years. These efforts include:

- Operating a network of fixed route service including a fleet of accessible bus and light rail vehicles, providing a range of choices for seniors and people with disabilities.
- Ensuring that adequate operating and capital funds are available to address the demand for paratransit services as mandated by the Americans with Disabilities Act (ADA).
- Constructing transit facilities such as transit centers, stations and bus stops that provide for accessibility as mandated by ADA and in some cases exceeds those mandates.
- Developing new technologies, such as real-time transit information, trip planning software, or an automated telephone customer service system, to improve the access to transit information.
- Providing training and educational opportunities to seniors and persons with disabilities on the wide range of mobility options that could meet their particular travel needs.

FIXED ROUTE BUS AND RAIL SERVICE

To ensure that seniors and customers with disabilities have access to work, school, medical care and recreational activities, all of VTA's buses, light rail vehicles, and transit facilities are accessible. Bus and light rail operators receive comprehensive training in providing service to seniors and persons with disabilities.

Seniors and persons with disabilities may apply for a Regional Transportation Card (RTC). The RTC Discount Card program provides eligible individuals with fare discounts as mandated by State and Federal law. With a RTC Discount Card, persons with qualifying disabilities and senior citizens (65 or over) are entitled to a reduced fare on fixed-route bus, rail and ferry systems throughout the San Francisco Bay Area. The card makes it easier for qualified persons to demonstrate eligibility.

Customers who are found eligible for para-transit have the option to use their paratransit photo identification cards to ride VTA bus and light rail services at no cost.

The Golden Getaway program provides bus service for a standard day-pass cost to non-profit senior groups that qualify per FTA regulations (49 CFR Part 604). Service is offered throughout Santa Clara County. Buses are scheduled on a first-come, first-served basis for Thursdays, Saturdays and Sundays. The program objective is to make meaningful connections with seniors through a wide variety of communication outlets, to encourage seniors to ride VTA's fixed route service to their favorite destinations, and to generate a favorable view of VTA's overall service. As part of the program, VTA is available to give groups an on-site, free presentation which will include travel options for seniors, fare information and trip planning assistance.

VTA's plans for new or improved transit services also increase the access and mobility for our customers. Newer services such as BRT and Community Bus are prime examples. Current studies of our express bus and light rail systems will also enhance future mobility options.

The Transit Sustainability Policy, adopted by the VTA Board of Directors, requires an annual review of transit services. The review, called the Annual Transit Service Plan, includes an evaluation of existing services compared to the performance standards contained in the SDG, review of potential new services, assessment of opportunities for service refinement and resource reallocation, route specific service changes and recommendations for further analysis and study.

Paratransit Services

Customers who cannot independently use VTA's fixed route service for some or all trips can apply to use VTA's ADA paratransit service. Paratransit service is provided within the VTA service area and is available on the same days per week and during the same hours of the day as bus and light rail service.

VTA paratransit usage, which includes customers as well as their personal care attendants and companions, has increased each year from FY 2005 as shown in Table 3-1.

VTA's on-going planning for paratransit seeks to continually refine and improve the service, from both cost efficiency and quality of service perspectives. The key focus of VTA's paratransit planning will be to continue to provide the operating and capital funds necessary to meet the ever growing demand. Recent cost related strategies such as purchasing eco-friendly Toyota Prius sedans, entering into fuel purchasing and maintenance agreements with the county and relocating the vendor's operating yard to two VTA-owned facilities have all provided significant benefits.

Long-term vehicle procurement plans and developing a complete paratransit operating and fueling facility are two critical capital planning efforts. Currently 231 vehicles are used exclusively for VTA's paratransit service. One hundred seventy-three were funded by VTA and the remainder have been procured and funded by Outreach, Inc., a local non-profit operator. VTA and Outreach are eligible to procure vehicles using Federal grants, with only a 10 or 20 percent local match, depending on the grant source. Long-term funding and vehicle procurement strategies will need to be developed. The paratransit operator currently uses two VTA controlled sites for daily operations and dispatching and vehicle storage. Modular buildings and sites with very limited improvements are being used. VTA's facility planning will include developing a paratransit operating and fueling facility to accommodate our long-term needs.

Also upcoming is the issuance of a request for proposals for paratransit services. VTA does not and has never provided paratransit service directly. Since July 1993, VTA has contracted with Outreach, Inc. to provide paratransit broker services. VTA's current agreement with Outreach is in effect through June 30, 2011. Outreach receives and schedules trip requests, builds daily vehicle schedules, handles daily service changes, and subcontracts and monitors the daily service provided. Outreach also manages the paratransit eligibility and appeals process, simplifying the process and providing a single point of contact for customers needing paratransit services. Outreach began performing these additional functions on July 1, 2006.

Outreach contracts with two types of vendors to provide paratransit services. Contracts are currently held with local taxi companies to provide service to persons with disabilities not requiring a lift-equipped vehicle (for example, persons with visual impairments or cognitive disabilities). Taxi service accounts for approximately 25 to 30 percent of all

TABLE 3-1 *Paratransit Trips*

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Paratransit Trips	930,540	912,668	981,098	1,025,937	1,055,429
Percent Change	—	-1.9%	7.5%	4.6%	2.9%
By 2035 it is projected that 2 million trips will be provided annually.					

paratransit trips. Most vehicles used in this service are taxis and are not exclusively used for paratransit service. Outreach also contracts with MV Transportation, a nationwide transit provider, to operate sedans and accessible vans (both minivans and larger vans) and to deliver the remainder of the paratransit trips. Santa Clara County provides vehicle maintenance and some fuel through a contract with Outreach.

The new paratransit services request for proposals is planned be issued in late 2009 with the selected firm starting operations on July 1, 2011.

TRANSIT FACILITIES

VTA's transit facility projects are completed within ADA accessibility standards and provide improvements that benefit both seniors and persons with disabilities. VTA has also worked with our local disabled advisory committee, the Committee for Transit Accessibility (CTA) to implement features that exceed ADA accessibility, such as the guide tiles that are installed at transit centers. Some current and upcoming facility projects include:

Bus stop improvement program This program constructs improvements at bus stops throughout the county to meet ADA accessibility guidelines, improve the overall pedestrian environment and build a safe operating area for buses. This program is annually funded, often using Federal grants. The CTA reviews the priorities for these bus stop improvements.

Light rail platform retrofit VTA has retrofitted its Guadalupe South Line light rail passenger platforms to allow level boarding at all of the system's 62 stations. Level boarding increases the accessibility of VTA's light rail service by allowing quick and easy access at every train doorway.

New fare equipment VTA is in the design process for procuring new fareboxes and upgrading light rail ticket vending machines. The CTA has been involved in the design review efforts for both of these projects.

Future projects, such as transit centers, BRT, LRT and others would also be designed using ADA guidelines and include the involvement of the CTA in reviewing accessibility features.

TRANSIT INFORMATION

VTA regularly evaluates what information people need about its services and programs and how people access that information, and explores new ways to provide information. Below are a few of the information services VTA currently offers or has under development.

- Real-time information systems are being implemented. These programs will provide

real-time information on next bus arrival times at stations, transit centers and key bus stops.

- VTA participates in the regional trip planning systems sponsored by the MTC through 511. This system provides schedule, travel time and trip-planning information over the Internet.
- VTA provides multi-language call-in lines where people can speak with live information service representatives who assist them with trip planning, fare and schedule information, transfers and information about the transit system network.
- VTA's website is linked to the Google Trip-Planner which provides step-by-step transit information to customers by connecting Google's map system to VTA's transit service database.
- VTA provides accessible documents to the public via its website and Board Secretary through the use of accessible pdf document formatting.

MOBILITY OPTIONS PROGRAM

VTA has created a Mobility Options Program to provide persons with disabilities and senior citizens with the skills, knowledge and confidence needed to choose the mode of transportation (rail, bus, paratransit, etc.) that best meets their needs. Through this

program, customers are taught the skills that will empower them to freely travel where they want to go. Providing senior citizens and persons with disabilities the skills to use the fixed route system encourages independence and self-sufficiency.

This program has been initiated to help persons with disabilities and seniors gain the skills and knowledge needed to independently travel on VTA's transit system. Participants will receive training provided by either VTA staff or by contractors (including mobility and orientation specialists). A Federal New Freedom Program grant administered by MTC and VTA local funds will fund the initial three years of the Mobility Options Travel Training Program. The program is guided by the Mobility Options Task Force, composed of VTA staff from various departments, Outreach, Inc., Hope Services, San Andreas Regional Center, Silicon Valley Council on Aging, and CTA members.

The goal of the program is to increase utilization of fixed route services by persons who are able and interested in expanding their personal travel options by using VTA's bus and

light rail services. Travel training is planned to be provided in four basic methods including:

- Group travel instruction
- Tailored one-on-one travel instruction
- Specialized training provided by qualified contractors to meet the specific travel training needs of individuals with visual disabilities and individuals with cognitive disabilities
- Peer model travel instruction provided by community organizations with information and "train the trainer" training provided by VTA

VTA will develop a public outreach campaign to ensure community organizations and current and potential passengers receive the information on the program.

INTELLIGENT TRANSPORTATION SYSTEMS

Intelligent Transportation Systems (ITS) refer to a family of technologies that make transportation more efficient, improve safety and/or provide information to travelers. Examples of ITS technology include traffic signal synchronization, roadway conditions signs and realtime transit arrival times. ITS projects tend to be very cost effective as they are enhancements to existing facilities and can create significant improvements to roadway efficiency. Given the Federal and State funding shortfalls and limited ability to expand roadway capacity, investing in ITS technologies is a promising and practical strategy for Santa Clara County.

STRATEGIC ITS PLAN

VTA is developing the Transportation Operations Strategic Plan for Santa Clara County—an ITS plan that will identify an implementation plan and project list for a number of ITS projects. The plan organizes ITS applications in eight program areas:

- Transportation Management
- Transit Management
- Traveler Information
- Incident and Emergency Management
- Commercial Vehicle Operations
- Rural Transportation Management
- Advanced Vehicle Control and Safety Systems
- ITS Planning

BICYCLES

The past few decades have seen an increase in the number of bicycle trails, paths, lanes and facilities in Santa Clara County. VTA's bicycle program aims to continue this trend by expanding the number of bicycle facilities and bicycle-friendly thoroughfares and by promoting bicycle-friendly design.

COUNTYWIDE BICYCLE PLAN

In August 2008, VTA adopted the Santa Clara Countywide Bicycle Plan (CBP). The CBP complements Member Agencies' bicycle plans, which are more focused on improvements serving local needs. The CBP contains policies and implementing actions designed to improve bicycle facilities and interagency coordination, and will promote bicycling and bicycle safety in Santa Clara County. The CBP guides the development of major bicycle facilities by identifying regional needs and new capital projects including a financially unconstrained master list of bicycle infrastructure projects. These projects are eligible for consideration for inclusion in the future Bicycle Expenditure Program (BEP) updates. This list is useful in other VTA and local agency activities such as development review, transit planning, highway projects review, prioritizing local streets and roads projects, and collision monitoring. Lastly, by including these projects in the CBP, Member Agencies may apply for outside (non-BEP) funds. The three major categories of projects that the CBP addresses are:

Cross-County Bicycle Corridors (CCBC) Twenty-four on-street bicycle routes and 17 trail networks are currently in various stages of completion with existing, planned and undeveloped segments. When completed, the CCBC will be the most direct and convenient routes for bike trips to local and regional destinations across city or county boundaries.

Across Barrier Connections (ABC) ABC is a list of locations of freeways, creeks, rivers and active rail lines in the county presenting impenetrable barriers to bicycle circulation. Although the county has over 90 pedestrian/bicycle crossings, approximately 100 more are needed to provide a basic level of connectivity across these barriers.

Safe Routes to Transit A list of projects that provide safe bike access to and from transit centers are consistent with our role in countywide transportation planning, promoting the CDT program and as a transit operator.

BICYCLE TECHNICAL GUIDELINES

The Bicycle Technical Guidelines (BTG) serve as a guide for Member Agencies in planning, design and maintenance of bicycle facilities and bicycle-friendly roadways.

DOWNTOWN SAN JOSE BICYCLE SYSTEM PLANNING

The City of San Jose is directing efforts towards improving Downtown San Jose's bicycle network system. One particular proposal being pursued is the concept of applying physically separated bike lanes ("cycle tracks") to the San Fernando Street corridor.

In general, the concept of cycle tracks is to have bike lanes physically separated from traffic by switching the location of bike lanes and on-street parking; bike lanes are moved next to the sidewalk and the on-street parking becomes the physical barrier separating the bike lanes from vehicular traffic. San Fernando Street was initially chosen as a good candidate for cycle tracks because of its connectivity to major attractions like Diridon Station, San Jose State University, and the downtown core. However, further staff research and analysis show that San Fernando Street is not feasible for such a project due to safety concerns with turning movements, bus conflicts and two-way streets. San Jose is now considering Fourth Street from San Fernando to San Carlos as the preferred location for further study of the concept.

San Jose will continue efforts to enhance the San Fernando Street corridor by developing it into a "premier bicycle boulevard." Several design treatments such as colored bike lanes, bike detection signal priority, buffered bike lanes, and elimination or reduction of on-street parking are being considered. Developing this corridor as a potential bicycle boulevard will require further review due to several issues concerning community feedback on potential impacts and the planned use of San Fernando as a traffic detour route for the pending BART construction project. VTA will continue working with San Jose to develop and implement this concept.

BICYCLE SHARING PROGRAM

In late 2008, a groundswell of interest in developing bike sharing programs swept the county. In 2009, VTA will work with the Silicon Valley Bike Coalition (SVBC), local employers and cities to develop, fund and implement a bike sharing program. The initial steps include a pilot program that would involve identifying consumer needs and markets, a management and operating approach, and key locations. Potential partners include Caltrain, which is experiencing chronic shortage of onboard bicycle capacity, cities with high-demand Caltrain stations, visitors' bureaus and chambers of commerce, and the Silicon Valley Leadership Group and major employers. A Santa Clara County program could:

- Address land use inefficiencies of many suburban sprawl employment sites located far from transit
- Provide access to the first and last mile from major transit stations
- Supplement VTA and employer shuttles between transit and employer sites
- Relieve overcrowding and the routine "bumping" of passengers with bicycles on Caltrain (and on VTA buses)

A pilot program would focus on one or more Caltrain stations which would address all of

the issues identified above and involve the potential partners who have expressed interest. Subsequent programs may have city or sub-regional focus, but all will be designed for countywide compatibility.

VTA offers assistance to any Member Agency needing assistance or input in conducting bicycle-related planning studies.

PEDESTRIANS

A central principle of the CDT Program is design for pedestrians. The county's transportation system and built environment currently focuses on cars rather than people. Pedestrian-oriented places encourage walking and exploration. Design elements of these places include safe and direct walking routes, wide sidewalks and amenities such as street trees, lighting and benches.

COMMUNITY DESIGN AND TRANSPORTATION EXPRESSWAY PEDESTRIAN FUNDING PROGRAM

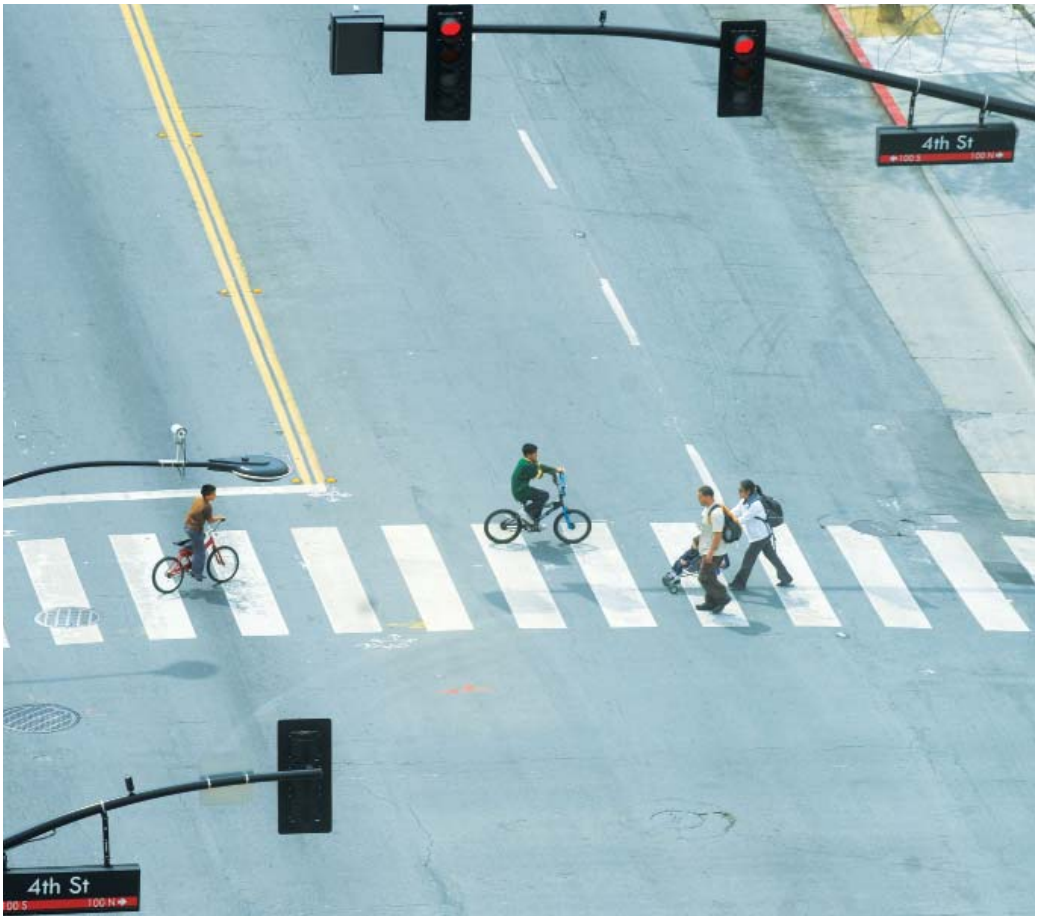
The county expressway study likewise identifies such pedestrian improvements throughout the expressway network.

However, funding availability, coordination challenges and sometimes competing priorities have made project implementation sluggish and sporadic. VTA will work with the county, cities and the Bicycle Pedestrian Advisory Committee to explore funding opportunities for an expressway pedestrian improvement program. A conceptual framework includes requiring coordinated planning and matching funds from the local jurisdictions, the county and VTA. It is currently envisioned that funds for this program would come from the VTP CDT 2035 Program Area allocation.

TRANSPORTATION, LAND USE AND THE ENVIRONMENT

PROGRAMS FOR TRANSPORTATION AND LAND USE INTEGRATION

The performance of the transportation system is directly linked with land use and urban form. The form of development shapes the places in which we live, work and play, defines the spaces we move around in and the travel modes we use. Energy use, climate change, sustainability issues, the viability of alternative modes and the quality of our environments are also intimately related to the interactions of transportation and land uses. Moreover, the transportation/land use connection is becoming increasingly more important to VTA's—and the region's—ability to deliver and maintain a high-quality, multimodal transportation system and effectively address climate protection and energy use issues. Because of these fundamental links between urban form and the travel needs of individuals, VTA has a vital interest



in the planning and design of cities and communities.

THE ROLE OF MEMBER AGENCIES

VTA can't do it alone. To get the highest and best use from transportation investment, and deliver a world-class multimodal transportation system, VTA must rely on the concerted efforts of its Member Agencies. Since opportunities to add capacity to roadways and expand fixed-rail transit are limited and expensive, the land use policies and decisions of Member Agencies are becoming increasingly important factors in VTA's decision-making process for transportation improvements. VTA will expect to see its commitments of billions of dollars in capital and on-going operating funds work in concert with coordinated land use and policy commitments from Member Agencies that support those investments.

LAND USE VISION

VTP 2035 envisions a shift in development patterns from spreading out to growing up

with future development clustered in core areas and downtowns, along main streets and major transportation corridors, and around rail and BRT station areas. Existing and future resources are used more efficiently, and people have greater choices to reduce vehicle miles traveled (VMT) and energy use.

The benefits of this vision are many. Automobile use, VMT, energy consumption, pollution and greenhouse gases are reduced; open spaces and natural areas in undeveloped areas are preserved. Greater choices emerge from an amenity- and activity-rich urban form, concentrated in areas where major investments in transportation and urban infrastructure have already been made. More intensive and diversified development supports a greater range of local services and facilities, making transit service more productive, increasing opportunities for safe walking and biking and reducing trip lengths.

LAND USE GOAL AND OBJECTIVES

The VTP 2035 land use goal and objectives reflect this vision and VTA's role as a transportation provider. The goal and objectives

outline the high level of coordination that VTP 2035 land use programs expect from Member Agencies and regional, State and Federal partners when setting priorities for transportation investments.

GOAL FOR INTEGRATING TRANSPORTATION AND LAND USE

VTA's goal is to provide transportation investments and services that support the maintenance and creation of vibrant urban communities, and protect Santa Clara County's natural and economic resources.

THE VTP 2035 OBJECTIVE FOR INTEGRATING TRANSPORTATION AND LAND USE

- Concentrate development in cores, transit corridors and station areas to support alternate transportation modes and maximize the productivity of transit investments
- Design and manage the transportation system to support concentrated development in selected locations
- Reduce energy use and greenhouse gas emissions
- Provide connectivity in road, bike and pedestrian networks so travelers can choose among many routes and modes linking their origins and destinations
- Integrated 24/7 bicycle and pedestrian networks
- Provide for future transportation system needs by coordinating land development and transportation capital project planning
- Design and construct transportation facilities to enhance the aesthetic quality of the built environment
- Use land efficiently and support concentrated development with strategies including land use intensification and reuse, transportation investments that minimize right-of-way requirements and limiting land area dedicated to surface parking
- Support development that expands housing supply relative to transportation alternatives, proximity to job and activity centers, child care and other essential services, and that provides a range of affordability options and opportunities for both rental housing and home ownership
- Foster an urban design vision that creates a sense of place, human-scale buildings, vibrant public spaces and as many activities as possible within easy walking distance of each other and transit stops
- Plan and design whole communities that integrate housing, work places, shopping, schools, parks, entertainment and public facilities so residents can meet their needs closer to home
- Promote street design standards that consider function and land use content, and provide interconnected multimodal options
- Promote robust partnerships with member and regional agencies

While many of the objectives refer to concentrated, mixed-use development they are not limited to these areas and may also be appropriate in suburban and even rural settings.

TRANSPORTATION, ENERGY AND AIR QUALITY PROGRAM

The Transportation Energy and Air Quality (TEAQ) Program will provide a framework for VTA to develop initiatives, projects and programs; conduct research; and work with partner agencies such as BAAQMD, MTC and ABAG to address climate change and energy issues. It will be linked with VTA's CDT Program and is envisioned as a dynamic program that will evolve and adapt over time as new information, technologies and programs emerge.

Through partnerships between VTA and its partner agencies, the program aims to support the conservation of natural resources, reduction of greenhouse gases, prevention of pollution and use of renewable energy and materials.

The principles of TEAQ will:

- Look toward existing and new technology for applications in VTA operations
- Place high emphasis on demand for fuel efficient and alternative fuel vehicles
- Encourage private and public organizations to pursue green actions

- Support the development of locally produced green energy sources
- Develop and support efforts to pursue new revenue
- Support existing legislative mandates such as SB 32 and AB 375

Over the course of the next few years VTA will work with local jurisdictions and regional partners to develop guidelines for preparing TEAQ plans and/or incorporating TEAQ related elements within the structure of existing plans or programs. Accordingly, VTA's TEAQ Program will focus on funding local efforts in coordination with regional, State and national vision and goals.

In support of the TEAQ Program VTA will:

- Support TEAQ-related efforts through its Legislative Program
- Proactively implement VTA's Sustainability Program
- Explore support from private sector development though its capital and on-going operating programs
- Support regional and local advocacy efforts related to land use and transportation integration
- Support programs such as the EPA SmartWay Program
- Improve transit by focusing on key corridors where local jurisdictions are committed to land use intensification and on first/last mile connections
- Develop express lanes and advocate for pricing roadways and parking
- Convert to alternative fueled, low- or zero-emissions fleets as technology becomes cost-effective
- Support State and local building codes that require LEED Certified construction such as insulation, energy efficient design and passive and active solar design elements
- Explore new technologies through research, test and pilot projects, and partnerships with other agencies
- Develop and implement education and awareness programs

Detailed information about the TEAQ Program can be found in Appendix C.

PARTNERSHIPS FOR SUSTAINABLE TRANSPORTATION

Partnerships are about creating synergy—the interaction of two or more elements or forces so that their combined effect is greater than the sum of their individual effects.

Providing a sustainable transportation system and improving the quality of life in Santa Clara County requires meaningful cooperation and coordination between all groups and jurisdictions in the county—with everyone working toward mutual goals. While working to address transportation issues in the county is VTA's primary responsibility, our

goals cannot be addressed by VTA alone. Partnerships are essential to VTA's success in implementing its transportation and land use programs and in meeting the goals of enhanced livability, economic prosperity and a sustainable future.

The remainder of this section discusses VTA's work with our partners and the future role of VTA leadership on issues related to transportation. Partnerships for Sustainable Transportation considers two basic types of partnerships:

Public/Public Enhanced cooperation between public entities is essential—and will result in better use of public funds and greater success with programs involving countywide issues such as housing, park space, traffic and reducing energy use and greenhouse gas emissions. Even better cooperation between entities with different agendas can yield substantial public benefits.

Public/Private Examples include joint development, provision of shuttle services, TDM programs, and programs to reduce waste and energy use and improve air and water quality.

LAND USE PARTNERSHIPS

Since VTA does not hold land use approval authority, successfully implementing its land use programs requires active partnerships with its Member Agencies, other Bay Area counties, and regional agencies. In addition to the CDT program and the transportation/land use investment strategies previously discussed, VTA engages in other land use activities to further its goals for concentrated mixed-use development near transit. Current and planned efforts include:

- Transit corridors
- Highways
- Local streets and county roads
- Bicycles

The inclusion of land use points in the scoring process results in a significant improvement in the overall ranking for projects judged as advancing the achievement of land use objectives. While these judgments are necessarily subjective, they provide an initial way for the investment strategy to bring land use considerations into the decision-making process for transit and roadways. The result of including land use considerations with roadway projects was the ability of local roadway projects to compete with freeway projects in the evaluation. The result of including land use considerations with transit corridor projects helps to predict whether there will be all-day demand for transit and a sufficient ridership base to warrant the high capital investments in rapid transit technologies.

JOINT DEVELOPMENT PROGRAM

VTA's Joint Development Program furthers the VTP 2035 land use goal and objectives and supports VTA's strategic and fiscal goals. The program was adopted by the VTA Board in January 2005. It is designed to secure the most appropriate private and public sector development of VTA-owned property at, and adjacent to, transit stations and corridors. VTA envisions its station areas and transit corridors as vibrant, prosperous community assets that create a strong sense of place for transit, pedestrians, and the surrounding community, and are destinations in their own right.

The Joint Development Policy provides a framework for creating and pursuing the highest and best opportunities for development around station areas and along corridors. The policy is intended to establish guidelines and procedures for identifying such opportunities to optimize return on investment to VTA. Joint Development also includes coordination with local jurisdictions in station area land use planning to establish development patterns that enhance transit use.

VTA'S TRANSIT SUSTAINABILITY POLICY

As noted previously in Chapters 2 and 3, the Transit Sustainability Policy (TSP) links land

use decision-making with VTA's transit capital investment program and is designed to ensure that VTA's investments in current and future transit services are supported by local land use and policy decisions. Capital project funding and service are linked with the TSP, and apply to both bus and rail projects and services. The TSP provides a policy framework for transit expansion and establishes standards for project and service implementation. The TSP standards are ridership-based and are derived from existing and forecast land uses resulting from local government land use policies. The TSP also provides a foundation for planning studies for transit expansion and improvements including annual transit service plans and corridors studies. With its responsibility as trustee of public transit funds in Santa Clara County, the TSP is intended to assist VTA with continuing to:

- Optimize taxpayer and VTA investments in transit infrastructure and services
- Protect the financial health and sustainability of VTA
- Contribute to enhancing the livability and sustainability of Santa Clara County communities

The TSP was crafted to build practicable and robust partnerships with Member Agencies by outlining the commitments needed to support the proposed transit service. In partnership with local governments, TSP supportive actions may include, but are not limited to, one or a combination of:

- General Plan changes or approved Specific Plans
- Memorandums of Understanding
- Developer Conditions of Approval
- Tax Increment Financing
- Transit Benefit Assessment District
- Dedication of land
- Local funding

PROACTIVE CONGESTION MANAGEMENT PROGRAM AND DEVELOPMENT REVIEW PROGRAM

As the Congestion Management Agency for Santa Clara County, VTA is charged with ensuring that regional roadways operate at acceptable levels of congestion, developing strategies to reduce traffic congestion, promoting integrated transportation and land use planning, and encouraging a more balanced transportation system. VTA reviews development proposals to ensure that transportation impacts are minimized, and that opportunities to facilitate use of transportation alternatives are taken. The CDT program is a fundamental component of this review process. The proactive Congestion Management Program (CMP) process coordinates two project review processes engaged in by VTA staff:

1. Review of environmental documents, site plans and related documents as part of VTA's Development Review Program
2. Review of Transportation Impact Analysis (TIA) reports of proposed projects

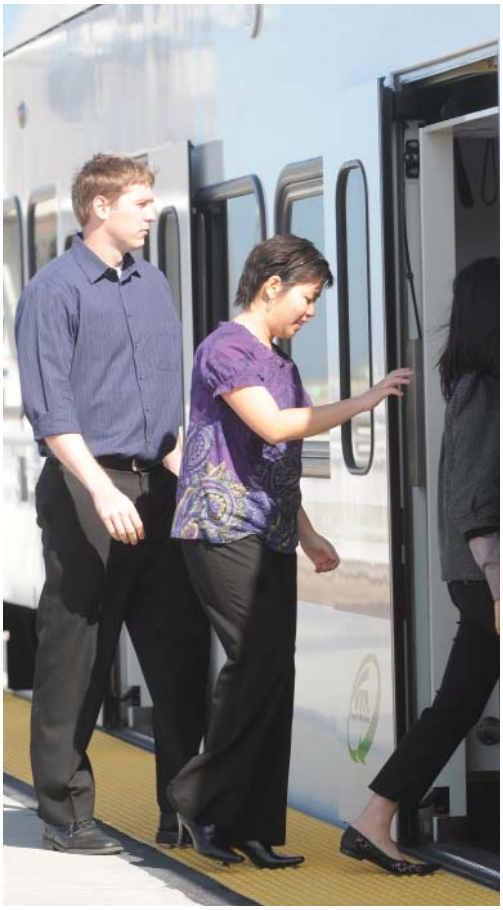
The cities, Santa Clara County and other agencies such as community college districts forward many of their proposals for land development to VTA. In the case of environmental documents and site plans, VTA reviews these proposals to ensure that transportation considerations are adequately integrated into the plans. Areas addressed may include transit access, pedestrian and bicycle access, site design and Transportation Demand Management. In the case of TIAs, VTA staff review the reports for consistency with CMP standards, and to identify potential transportation-related enhancements. VTA then submits comments on development review documents or TIAs to Member Agencies, who may work with the development community to incorporate VTA's concerns. VTA prepares a quarterly report summarizing comments submitted to Member Agencies by VTA staff and responses from Member Agencies to VTA on approved projects.

VTA is currently enhancing its efforts in the proactive CMP and Development Review Program. VTA is identifying ways to better follow up on VTA staff comments over the life of projects. In addition, VTA is improving its tracking of development activities early in the planning process, and assisting Member Agencies through the CDT program with the early review of development proposals. All of these efforts are intended to forge a stronger partnership between VTA, its Member Agencies and the development community to promote stronger, more transit-supportive and livable communities.



4

CHAPTER FOUR *implementation*



Implementing the projects and program described in Chapters 2 and 3 involve multi-stepped processes and decision-making stages. This chapter begins with a brief review of the program area allocations described in Chapter 2, and some of the key funding issues that need resolution before projects can be implemented. This is followed by a summary of the projects and programs that will be developed in the next few years. The chapter concludes with an overview of the VTP 2035 processes for project selection, planning, programming and delivery—and for amending and updating the plan.

PROGRAM AREA ALLOCATIONS AND FUNDING ISSUES

As presented in Chapter 2, VTP 2035 outlines a 25-plus-year, $15.2-billion plan of programs and projects. These programs provide a framework for the overall VTP work program that the VTA Board will work to implement during the timeframe of the plan.

The Board-adopted program area allocations are presented in Table 4-1. In some cases the VTP 2035 allocations cover all project costs. In other cases, funding from other sources must be assembled to fully fund specific projects. For example, complete implementation of the Measure A Transit Program of projects is contingent on VTA's ability to secure a new source(s) of funding for transit.

AVAILABILITY OF FUNDS IDENTIFIED IN VTP 2035

The timing and availability of State and Federal—and in some cases local—transportation dollars will be the primary factors determining when many of the VTP 2035 projects can move forward. At the writing of this document, the statewide budget shortfalls make the availability of State funds for existing programs uncertain. On the Federal side, the ultimate form of the Federal budget and the re-authorization of SAFETEA-LU will determine how much funding will be available in the near and midterm horizons. Locally, VTA's success in securing additional sources of funding for transit is a key factor in developing practical implementation schedules for VTP 2035 Transit Program, including the 2000 Measure A projects. In addition, some transit projects include funding from multiple

partners, and the ability of all partners to contribute their full share will determine when those projects can move forward.

IMPLEMENTATION PROCESS

VTP 2035 does not program funds to projects. Each fund source has its own programming process and cycle. The VTA Board and its partnering agencies take separate and specific actions to tie the funds to individual projects as those cycles occur. Obviously, not all projects can be implemented quickly, and many will be phased in over time and started in outlying years of the plan. However, in response to new Federal legislation governing the development of regional transportation plans, VTP 2035 has organized its transit, roadway, bicycle and ITS projects into near term (before 2015), mid-term (2016–2025) and long-term (2026–2035) horizons. Within these categories the projects receiving the highest scores based on the Board-adopted

TABLE 4-1 *VTP 2035 Program Areas and VTP Allocations*

PROGRAM AREAS	FUND ALLOCATION ('08 $MILLIONS)
Transit	**$9,281**
Highways	**3,101**
Expressways	**263**
Local Streets and County Roads	**628**
Pavement	**1,140**
Local Transportation Projects and Enhancements	**145**
Soundwalls	**10**
Landscape/Litter/Graffiti	**1**
TSM and Ops (ITS)	**100**
Bicycle	**160**
CDT Program	**360**
Total	**$15,189**

project evaluation criteria will generally be considered first for implementation.

Once the programs and project lists are developed, and funding sources are identified, VTP 2035 next looks toward the steps for implementation. Some projects are ready for construction and some are underway in design; others are in planning stages; and still others are waiting to be further defined through studies.

The following section outlines the implementation processes of VTA and other project-related activities that need to occur for project delivery in the near-term, mid-term and long-term horizons.

IMPLEMENTATION PROCESS FOR CAPITAL PROJECTS

Most capital projects move through a lifecycle of nine basic steps from plan to completion, outlined below.

1. **Planning** Defines the transportation need and project goal
2. **Programming** Through a formal process, funds are identified and specified for a project scope and schedule
3. **Preliminary Engineering** Identifies alternatives for attaining the specified goal(s); for each alternative, describes benefits and develops engineering drawings with sufficient detail to perform environmental analysis and estimate construction feasibility

4. **Environmental Clearance** Analyzes environmental impacts, identifies possible mitigations to reduce impacts, and obtains legally mandated State and/or Federal environmental clearance for a chosen preferred alternative
5. **Final Engineering** Finalizes design drawings and produces construction documents for the preferred alternative
6. **Right-of-Way** Obtains necessary right-of-way for project construction
7. **Construction** Builds the project
8. **Operations** Finished project is placed in operation
9. **Maintenance and Oversight** Project is maintained in a state of good repair

NEAR-TERM IMPLEMENTATION ACTIVITIES

This section focuses on the implementation activities that are anticipated to occur over the next four years of the plan—until the next update of this plan. VTA will continue planning and design efforts to ready other projects for implementation in outlying years. VTA will work with Member Agencies and other partners to deliver the VTP 2035 projects and programs by focusing first on the planning and programming efforts required for implementation.

The following provides a summary of the activities expected to occur within the near term. Each section is organized into Highway/Roadway, Transit and other categories, and includes study, planning and construction activities. The projects, programs and studies listed below have identified partial or whole funding and will move forward over the next four years. Some of these projects are contingent on the availability of State or Federal funds within the next three years, and consequently may be delayed if the State and Federal fiscal condition does not improve.

HIGHWAY PROJECTS

State Route 85 and US 101 Express Lanes The State Route 85 and US 101 Express Lanes project will convert existing HOV lanes on SR 85 and US 101 to high-performance express lanes or dedicated toll lanes, which have been proven extremely popular in other areas of the country. Solo drivers will be given the option of paying a toll to use the new VTA express lanes. Carpools with two or more occupants, motorcycles, transit buses and eligible hybrids will continue to use the express lanes free of change.

State Route 99 and US 101 Trade Corridor Study VTA is working on studying a new trade corridor for between US 101 and SR 99 that would have its western terminus in southern Santa Clara County south of Gilroy. This project will investigate the feasibility of operating this new trade corridor

as a tolled facility. The intention is to develop a toll system that could generate revenue for the corridor improvements.

SR 237/I-880 Connector Ramp At the SR 237/I-880 interchange, VTA is proposing to convert existing HOV-to-HOV direct connector ramps to express lanes.

SR 237/I-880 express lane tolls will be collected electronically using the FasTrak technology already in use on Bay Area bridges. Tolls for solo drivers will vary based on the level of congestion and will be adjusted to maintain a free-flowing ride on the express lanes. Final design of the project is expected to be completed in October 2009, with full construction completed in summer 2010.

US 101 Auxiliary Lanes—Embarcadero to SR 85 The US 101 Auxiliary Lanes—Embarcadero to SR 85 project is in the Project Approval/Environmental Document (PA/ED) phase, with the preparation of the environmental document underway. The environmental elements being studied include air, noise, biological and cultural considerations. The draft environmental document was completed in early 2009, with the PA/ED phase expected to be completed in mid-2009. This project is funded through the State's Corridor Mobility Improvement Account (CMIA) program.

I-880 HOV Widening The I-880 HOV Widening project is in the PA/ED phase, with the preparation of the environmental document underway. The project will provide HOV lanes between U.S. 101 and SR 237. The PA/ED phase expected to be completed in mid-2009; construction is expected to begin in mid-2011. This project is funded through the CMIA program.

US 101 Improvements: I-280 to Yerba Buena Road A Mitigated Negative Declaration for the US 101 Improvements: I-280 to Yerba Buena Road project was signed by Caltrans in 2005. Preliminary design was started in August 2007, with Project Study Report/Project Report (PSR/PR) approved in early 2009. Final design is underway and is expected to be complete by late 2009.

I-880/I-280/Stevens Creek/Winchester Improvement VTA is performing preliminary engineering and environmental clearance for the I-880/I-280/Stevens Creek/Winchester Improvement project. Project improvements include: upgrades to the northbound I-880 collector/distributor ramp; improvements to the northbound I-880 on ramp; intersection upgrades at the northbound I-280/I-880 ramp termini; removal of the northbound I-880 to westbound Stevens Creek Boulevard loop off-ramp; and construction of a new northbound I-280 off-ramp at

Winchester Boulevard. Currently, the project is in the preliminary engineering and conceptual design phase. The project is expected to begin construction in late 2011.

US 101/SR 25 Interchange and US 101 Widening—Monterey Road to SR 129 VTA is currently conducting preliminary engineering and environmental clearance for the US 101/SR 25 interchange and US 101 Widening—Monterey Road to SR 129 project. The studies are examining access control, freeway alignment, right-of-way, utilities and a new US 101/SR 25 interchange. The project is expected to be completed by 2015.

Mary Avenue Extension The Mary Avenue Extension project is currently in the PA/ED phase, with the Draft Environmental Impact Report (EIR) circulated for public review in Fall 2007. The project would extend Mary Avenue across US 101 and SR 237 to improve access to the Moffett Industrial Park. The proposed roadway section includes four lanes, with bike lanes and sidewalks on each side. The EIR and the combined PSR/PR were approved by the Sunnyvale City Council in October 2008. Design will begin in 2009 and construction is expected to begin in late 2011.

Charcot Avenue Extension Current work on the Charcot Avenue Extension project includes surveying, traffic studies and construction cost estimates, as well as environmental technical studies of air, noise, biological, cultural and community impacts toward preparation of an Initial Study and Mitigated Negative Declaration for the environmental document. A PSR has been prepared and the project is in the PA/ED phase. The project is expected to commence construction in summer 2010.

SR 152/156 Interchange Construction on the SR 152/156 Interchange project has been underway since March 2007. The flyover was opened to traffic in August 2008 and full project completion is expected in mid-2009.

TRANSIT PROJECTS

Many of the capital and service projects discussed here are included in the 2000 Measure A program of projects; others result from studies and programs developed by VTA and/or its partner agencies. Funding issues related to both capital and operations present significant challenges that must be addressed by VTA prior to full implementation. In early 2009, VTA developed a process to guide the expenditure of Measure A funds.

Capitol Expressway Light Rail (CELR) Final Design and Environmental Clearance for the Capitol Expressway segment has been completed. VTA is currently conducting Value Analysis/Engineering (VA/E) Studies in an effort to improve the project's effectiveness and reduce costs. In addition, VTA is evaluating the feasibility of a modal phasing plan that would build BRT in the corridor as a precursor to future light rail. The Board of Directors will consider modal options and construction funding when it revisits this project along with the entire Measure A Program of projects.

Santa Clara-Alum Rock Transit Improvement Project The Santa Clara-Alum Rock Transit Improvement Project is a phased transit enhancement in Santa Clara County's highest ridership transit corridor. The first phase introduces BRT in the corridor with, at minimum, dedicated lanes on the eastern half of the corridor and mixed flow operations in the western segment. The BRT project is being designed to light rail standards, enabling a future conversion to light rail in a second phase after construction of the BART extension is complete. The project is currently concluding conceptual engineering studies. Preliminary engineering will commence in early 2009 with final design scheduled to take place in 2010. BRT service is scheduled to begin in 2012.

El Camino Real Bus Rapid Transit Conceptual engineering for BRT on the El

Camino Real is scheduled to begin in 2009 followed by preliminary and final engineering. The corridor currently is served by Local Bus 22 and the Rapid 522. Key destinations in the corridor include Stanford and Santa Clara universities, retail and entertainment centers in downtown Palo Alto, Mountain View, Los Altos, Sunnyvale, Santa Clara and San Jose. BRT development on El Camino will be characterized by segments of dedicated lanes with center platforms and segments of mixed flow operations with curb bulb-out stations. Stations and vehicles will feature passenger amenities such as real-time information, high quality waiting environments and off-board fare collection.

Stevens Creek Bus Rapid Transit Conceptual engineering for BRT on Stevens Creek Boulevard and West San Carlos Street is scheduled to begin in 2010 followed by preliminary and final engineering. The corridor currently is served by Local Bus 23. Key destinations in the corridor include Downtown San Jose, the San Jose Convention Center, Valley Fair, Santana Row and Vallco shopping centers and De Anza College. Stevens Creek BRT facilities will include a dedicated lane crossing I-880 and Winchester with other segments of dedicated lane operations. A new transit center at De Anza College is necessary to serve as the western anchor to the line. Stations and vehicles will feature passenger amenities such as real-time information, high quality waiting environments and off-board fare collection.

BART to Silicon Valley The VTA Board approved development of a project extending BART from the planned Warm Springs Extension to Silicon Valley in November 2001. The proposed 16.1-mile extension of the BART system would operate along the existing railroad alignment south of the planned BART Warm Springs Station in Fremont and continue in a tunnel under downtown San Jose and end near the Santa Clara Caltrain Station. The grade-separated project includes six stations: one in Milpitas, four in San Jose, and one in Santa Clara.

Combined Environmental Impact Statement/Environmental Impact Report In support of preparing a combined Draft Environmental Impact Statement/ Environmental Impact Report (EIS/ EIR), in January 2002, VTA distributed a Notice of Preparation (NOP) to advise interested agencies and the public that an EIR would be prepared on the renamed BART Extension Project. In February 2002, the Federal Transit Administration (FTA) published a Notice of Intent (NOI) in the Federal Register stating that an EIS would be prepared covering the project. A combined

Draft EIS/EIR was circulated for public review and comment in 2004. The Draft EIS/EIR was initially written as a combined federal/state document in accordance with the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). However, subsequent to the public circulation of a Final EIS/EIR, VTA withdrew the BART Extension Project from the federal process. VTA agreed with FTA to address funding and project cost effectiveness issues before reentering the federal process. In December 2004, the VTA Board certified the Final EIR.

Supplemental Environmental Impact Report

As the design of the project advanced, several policy and technical matters emerged requiring some changes in the project definition. In response to these changes, VTA distributed a NOP that a draft supplemental EIR (SEIR) would be prepared to address proposed project changes since certification of the Final EIR in 2004. VTA released a Draft Supplemental Environmental Impact Report (Draft SEIR) in January 2007. Subsequently, in June 2007, the VTA Board of Directors certified the Final Supplemental

Environmental Impact Report and approved a revised BART Extension Project.

Environmental Impact Statement

As the state environmental process was concluding, VTA requested of the FTA to be allowed to re-enter the Federal Environmental Impact Statement (EIS) phase of project development. VTA proposed to complete National Environmental Policy Act review of the BART Extension Project, redesignated as the Silicon Valley Rapid Transit (SVRT) Project. FTA concurred and published a Notice of Intent to prepare a Revised Draft EIS in the Federal Register in September 2007. VTA and FTA conducted public and agency scoping meetings in October 2007. The Revised Draft EIS was circulated for public review and comment in March 2009. A federal record of decision on the EIS is anticipated in January 2010.

High Speed Rail Implementation Study The planning for a high speed rail line connecting southern California to Santa Clara County and the Bay Area will take place over the next 20 years as project engineering becomes more detailed and complete. In this early study, VTA will begin preparations by identifying possible "footprints" for a future high speed rail project and identifying the range of planning issues that will accompany future project development work with the High Speed Rail Authority. The study is anticipated to start in Fall 2009 and conclude in 2010.

Community Bus Program VTA introduced a pilot program in 2005 utilizing small vehicles (25 seats) that function as circulator-type service in communities that may have low transit ridership or operational obstacles such as hillsides or narrow streets. VTA introduced five Community Bus routes in July 2007 in South County followed by expansion of 12 additional routes as part of the New Bus Service Plan in January 2008. There are considerations to expand Community Bus in the future where opportunities arise. This is an on-going annual process governed by VTA's TSP and SDG.

New Transit Corridors Feasibility Study The New Corridors Feasibility Study will examine the feasibility of potential rail corridors including those noted in the 2000 Measure A ballot language. The study will use the Board-adopted Transit Sustainability Policy (TSP) and Service Design Guidelines (SDG) to evaluate the feasibility, constructability and cost-effectiveness of providing light rail in these corridors. The study corridors identified in the 2000 Measure A ballot language include Vasona extension to Vasona

Junction, DTEV Eastridge Area to Highway 87, Santa Teresa extension to Coyote Valley, Stevens Creek Blvd., West San Jose/Santa Clara, and North County/Palo Alto.

Community-Based Transportation Plans The goal of these CBTP studies is to advance the findings from MTC's Lifeline Transportation Network Report which identified transit needs in economically disadvantaged communities throughout the San Francisco Bay Area region and recommended local transportation studies in further efforts to address them. Each CBTP involves a collaborative approach that includes residents and CBOs that provide services within minority and low-income neighborhoods. In partnership with MTC and local jurisdictions, VTA will conduct these studies in several communities of concern identified by MTC. These include Gilroy (completed in 2006), east San Jose (completed in 2009), Milpitas (completed in 2009) and Mountain View (2011).

Bus Rapid Transit Strategic Plan VTA is in the process of producing a strategic plan for implementation of a BRT system in Santa Clara County. The objectives of the strategic plan are to: establish a brand identity for future BRT vehicles, stations and supporting materials; evaluate candidate corridors based on VTA's TSP and SDG and develop cost estimates for implementation and future service; and develop an implementation plan to guide VTA in developing BRT facilities and funding future development of the BRT system. The plan is scheduled for completion during 2009.

Light Rail System Analysis and Improvements VTA's light rail system recently celebrated its 20th anniversary and this milestone has enabled VTA to assess the system as a whole to determine whether it is meeting expectations. The LRT System Analysis will evaluate current and future market conditions along with possible operating or capital improvements to the system in the next 20 years. The goal of the analysis is to increase ridership on the system by making it more competitive in the overall travel market. It is expected that the study will produce recommended capital and operational improvements. The plan is scheduled for completion during 2010.

Highway-Based BRT Alternatives Analysis The Highway-Based BRT Alternatives Analysis is undertaking a comprehensive evaluation of the market for freeway- and expressway-based express bus services in Santa Clara and its neighboring counties. VTA's express bus services will also be evaluated for their effectiveness in capturing the potential market. How VTA packages this service, from stations and routes to brand identity and vehicles, will be part

of the business plan. VTA is working closely with large employers in Santa Clara County in an effort to shape services that meet their employees' needs. The plan is scheduled for completion during 2010.

Transit Corridor Improvement Plans Based on the evaluation contained in the BRT Strategic Plan, several corridors were identified for potential future upgrades to BRT or LRT. Additional corridors have been identified for further analysis in other studies and other forums such as board workshops. Transit Corridor Improvement Plans are defined in VTA's SDG as an option for cities or communities that are seeking transit enhancements in a corridor but do not reach the minimum thresholds for upgrades to higher levels of service. VTA will be working with cities and communities to develop Transit Corridor Improvement Plans that will identify future transit upgrades. The anticipated start date is 2012.

Eastridge Transit Center Improvement and Access Plan This study will focus on improving transit passenger amenities and pedestrian and bicycle access to the Eastridge Transit Center. The Eastridge Transit Center is the second busiest transfer point in the VTA system, behind the Downtown Transit Mall. The study will seek community input for how to improve access to the Transit Center in preparation for the reconstruction of the facility as a part of an enhanced transit investment in the Capitol Expressway corridor. In addition, the study will identify strategies for raising the awareness of the center's transit services, particularly in communities where English is not the primary language spoken at home. Estimated completion date is summer 2010.

Transit Waiting Environments Capital Plan Transit waiting environments, commonly known as bus or light rail stops or stations, are the front door to the transit system, and as such deserve high-quality design and amenities. Improving these locations where VTA customers access the system will become a challenge as existing facilities age and new service is introduced. The Transit Waiting Environments Study will seek to develop standards for stop and station design and facilities and seek innovative ways to finance their improvement and construction over the next 20 years. The study will initially be conducted as part of the CDT Manual update scheduled for 2009 with more detailed work scheduled for 2011.

Airport People Mover The City of San Jose is currently exploring public/private partnerships for development of an airport feeder transit system. As described in Measure A, the service would connect the San Jose International Airport, Caltrain, VTA Light Rail

and the planned BART station. In July 2008, the city issued a request for qualifications solicitation directly to private firms. Pending the outcome of this effort VTA has suspended work. The anticipated study start date is 2009.

First and Last Mile Connection Study

Santa Clara County's lower-density suburban nature and travel patterns make providing efficient transit services, which rely on concentrated housing, job and retail centers, difficult. The benefits of trunk line transportation services such as commuter rail, LRT or BRT are lost when the transit stops and stations are not located near housing, jobs and retail hubs, and our land use pattern contains few of these hubs. Thus, without robust first and last mile connections, potential transit riders are often faced with long walks over

difficult terrain. First and last mile services become an integral component of building a viable transit network in a suburban environment like VTA's. First mile condition can be improved with good park-and-ride facilities and innovative shared-ride and parking strategies, strong bicycle pedestrian connections with both residential and employment areas, and the application of new technologies or programs such as car, bike or Segway sharing. First and last mile conditions may also be best served with high frequency, short route shuttles—which in Santa Clara County are often provided directly by employers—but could also be improved with bike sharing and other innovative programs noted above. Providing efficient and attractive first and last mile connections from a variety of options is the subject of this study. The study is expected to begin in 2009.

Palo Alto Intermodal Transit Center Comprehensive Plan The Comprehensive Plan will analyze the bus and shuttle transit operational needs at the Intermodal Transit Center and develop a list of capital projects to improve its vehicle circulation, transit operations, passenger flow, bicycle facilities and transit-oriented development opportunities within the Transit Center. The plan will provide a blueprint for future capital improvements. The estimated completion date is winter 2010.

Caltrain Station Access Study Caltrain continues to attract riders to its Baby Bullet express service and the challenge to increasing that ridership is dependent on providing efficient access to the stations in Santa Clara County through automobile parking, bicycle storage, pedestrian improvements and transit or shuttle service. The Caltrain Station Access Study will evaluate ways to expand opportunities for improving access to Santa Clara County's stations through all modes. The Great America Station served by ACE and Capitol Corridor trains will also be included in the study. The estimated completion date during is winter 2010.

South County Commute Transit Service Study Connecting the South County communities of San Martin, Morgan Hill and Gilroy with job centers in Downtown San Jose and northern Santa Clara County will become a greater challenge as freeway capacity is reduced and South County residential growth continues. The South County Commute Transit Service Study will seek to determine the optimal balance between local, express, BRT and commuter rail service for the South County commute market. The estimated completion date is late 2011.

Caltrain Electrification and Service Improvements Study VTA is a partner in the effort to modernize the Caltrain system

through electrification and other capital improvements that will allow it to increase peak hour service and overall capacity while reducing noise and air pollution. This project will seek to electrify the Caltrain system by 2015. Additional capital improvements include signal upgrades, positive train control and terminal capacity enhancements in San Jose and San Francisco. The anticipated study start date is 2009.

Caltrain Safety Improvements The VTA, in conjunction with the PCJPB, is developing a safety improvement program for the Caltrain commuter rail system within Santa Clara County. This program will not only assess at-grade street crossings similar to a program initiated by PCJPB in San Mateo County, but it will also address other problem locations where pedestrian, cyclist and motor vehicle safety is impacted. Included in the evaluation are at-grade railway/highway crossings, Caltrain stations, and pedestrian-intensive areas outside of street crossings and stations where public traffic frequently crosses, and/or exists adjacent to, the tracks. The anticipated start date is 2009.

INTELLIGENT TRANSPORTATION SYSTEMS

As described in the Transportation Systems Operations and Management Program section in Chapter 2, project planning and development focuses on projects and initiatives that implement technology to improve the operation and management of transportation systems. These operational and management improvements provide benefits not only to vehicular traffic but inclusively provide benefits to transit and non-motorized modes (bicycles and pedestrians). Examples of near-term projects and initiatives include:

Silicon Valley Intelligent Transportation Systems Program Enhancements Through a partnership of local, regional and State agencies, work will continue on the integration of technology-based systems to provide improved operations management of the transportation system. The program has four projects underway or near completion that expand camera surveillance, traffic signal coordination and traffic data exchange in areas covering Los Gatos north to Fremont in Alameda County, around the San Jose Mineta International Airport and westward from downtown San Jose to Cupertino. The Silicon Valley Intelligent Transportation System program has plans to upgrade its existing Wide Area Network to current networking standards and to interface with the Caltrans District 4 Traffic Operations Center in Oakland.

Transit Signal Priority Implementation VTA's BRT program includes the deployment of priority treatment at traffic signal

intersections. Bus Signal Priority (BSP) has been in operation since 2005 along VTA's Route 522 corridor as a result of traffic signal software updates, new traffic signal hardware and the installation of BSP transmitters on buses. VTA has an upcoming effort to upgrade existing BSP equipment along the El Camino Real portion of Route 522 to provide greater flexibility in the setup parameters of the BSP system and to reduce maintenance needs on the BSP equipment.

Regional Transportation Operations Personal Service and Regional Intelligent Transportation Systems Maintenance Service VTA and its Member Agencies are interested in using these transportation systems to their fullest potential by developing a program to manage, maintain and operate existing traffic operations systems (e.g., traffic signals, traffic surveillance cameras, traffic data collection and communication peripherals). Ultimately, this program will move traffic

more efficiently in the region; however, currently, some of these systems are not staffed or funded at appropriate levels.

Traffic Signal Communication and Synchronization Project In 2008, the California Transportation Commission approved a $15 million Traffic Light Synchronization Program (TLSP) Grant for the City of San Jose to upgrade 785 aging traffic signal controllers, install 36 miles of fiber-optic communications to support real-time traffic management, and install 141 traffic surveillance cameras to support real-time traffic management, implementation of traffic responsive corridors in seven key business and commercial districts in the City of San Jose, and synchronize the traffic signals. This program will be implemented during 2009/10.

County Expressway Traffic Operations System The County of Santa Clara Roads and Airports Department has on-going efforts to implement the deployment of fiber-optic communications, traffic signal system improvements and surveillance cameras along all eight expressways. Much of this improvement project was funded by the 1996 Measure B sales tax; however, in 2008, the California Transportation Commission approved a $4.4 million TLSP grant for the County to enhance its existing data collection systems. The enhancement would be used by the County Traffic Operations Center staff and the centralized traffic signal control systems to optimize traffic signal timing to meet changes in demand.

Real-Time Transit Information Project The Real-Time Transit Information (RTI) Project will provide VTA's transit riders with predictive arrival and departure times for all of VTA's bus and light rail routes and vehicles. This real time transit information will be accessible by cell phones and PDAs, internet and on electronic message signs at selected transit stops. These transit stops include bus stops, light rail stations, park-and-ride lots and transit centers. The funding amount and sources that have been secured to support the development and implementation of the RTI System are as follows:

- $1.5 million from the Federal Highway Administration Intelligent Transportation System (FHA ITS) Integration Program
- $0.8 million from the Congestion Mitigation and Air Quality (CMAQ) Improvement Program
- $1.5 million from the Metropolitan Transportation Commission's Regional Measure 2 Program (RM2)
- $0.9 million from local funds

Future funding allocated for this project will be used to expand the number of electronic message signs at key transit centers and bus

stop locations. The project is anticipated to be completed by the end of 2010.

BICYCLE AND PEDESTRIAN PROJECTS

Campbell Avenue Bridge Widening and Los Gatos Creek Trail Improvement at Undercrossing of SR 17, Campbell This project will improve the narrow traffic lanes on the Campbell Avenue roadway bridge over Los Gatos Creek to make room for bike lanes. The project is under design as part of the larger CDT project to improve conditions along Campbell Avenue from downtown Campbell to Los Gatos Creek and then to the east side of SR 17. Design was completed in 2008, and construction will begin in 2009.

Mary Avenue Bicycle/Pedestrian Bridge at I-280, Cupertino and Sunnyvale This project closes a critical gap in the cross-county bicycle corridor network. There is no existing crossing of I-280 between Foothill Expressway and Stelling Road, a distance of 8,000 feet, which disproportionately affects bicyclists and pedestrians. The bicycle/pedestrian bridge has an innovative design and will provide a safe and convenient non-motorized connection between De Anza College in Cupertino and Homestead High School in Sunnyvale along the Mary Avenue corridor. This bridge opened in spring 2009.

Los Altos Adobe Creek Bicycle Bridge This project replaces an existing obsolete bicycle bridge that is jointly owned by the Cities of Los Altos and Palo Alto. It is located on the bicycle/pedestrian pathway along the Hetch Hetchy right-of-way. Design has been completed and Los Altos is scheduled to award a construction contract during spring 2009. Construction is scheduled for completion by early 2010.

Stevens Creek Trail Feasibility Study, Los Altos This study will identify a preferred alignment to extend the Stevens Creek Trail south of the City of Mountain View. Several on-street alignments were evaluated; public outreach was also a major component of the study. The study is scheduled for completion in late 2009.

Foothill Expressway Shoulder Widening at Loyola Corners, Los Altos This project will restripe the shoulders from four feet to seven feet in width under the Loyola Bridge to improve bicycling conditions. The project is under design and is scheduled for completion by August 2009. A longer-term project to redesign and rebuild the Loyola Bridge structure is included in the Expressway Element.

Moody/El Monte Road Bicycle Improvements, Los Altos Hills This project will connect the recently completed

path through Foothill College to the intersection of Stonebrook Drive and El Monte Road. It includes pedestrian signal upgrades at this intersection and the intersection of El Monte Road and the college entrance, a 500-foot bike path on El Monte Road and new sidewalks and retaining walls. The project is scheduled for completion in mid-2009.

Stevens Creek Trail—El Camino Real to Dale, Mountain View This project is the middle segment of Reach 4, which is the final reach of this trail in the City of Mountain View. The Stevens Creek trail begins north of SR 237 at the Bay Trail and ultimately would extend to Cupertino. This project will extend the existing 11 miles of trail another two miles to the south. This project has two phases: Phase I begins just south of El Camino Real and ends at Sleeper Avenue and is fully funded for design and construction. Construction began in September 2008 and the project will be completed by summer 2009. Concurrent with this construction, design for Phase II is underway, scheduled for completion in 2010. Phase II will extend the trail from Sleeper Avenue over Highway 85 to eastside to the corner of Dale/Heatherstone, a distance of about one-third of a mile including a grade separation. The project is fully funded for design and is seeking funding for construction. Once funding is secured, construction of Phase II would be completed within a year.

Guadalupe River Trail—Gold to I-880, San Jose This 6.4 mile long segment of the Guadalupe River trail will be paved so that it has an all-weather surface and will be much more bike-commuter friendly. It will join the existing paved Guadalupe River trail that connects to downtown San Jose and also to the future extension of the Los Gatos Creek Trail. Environmental clearance began in late 2008, followed by design in September 2009 and construction in 2010.

Santa Clara Caltrain/Intermodal Center Pedestrian Bicycle Tunnel, Santa Clara This project will design and construct a bike/pedestrian tunnel under the UPRR railroad tracks. It is being designed in conjunction with the existing Caltrain improvements at this station to eliminate the holdout rule (when an approaching train will delay its arrival while another train is at the station). It would extend the planned Caltrain tunnel to the north and would for the first time enable passengers and area residents to legally cross between the station and the north side of the tracks. It is currently under design. Construction is scheduled to begin in summer 2010, with completion scheduled for summer 2011.

San Tomas Aquino Trail, Santa Clara—Reach 4 This project is the last segment in the City of Santa Clara of the 6-plus mile trail that currently begins north of SR 237. This project constructs a bike/pedestrian path adjacent to San Tomas Expressway in the landscaped shoulder area. The first part of the project, between Monroe and Cabrillo, is under construction and will open in mid-2009.

Saratoga De Anza Trail (recently renamed Joe's Trail) This 1.6 mile trail is being constructed on PG&E right-of-way for its entire distance in Saratoga. It could extend along UPRR right-of-way north and south of Saratoga to become fully integrated as part of the Bautista De Anza National Historic Trail. The groundbreaking was on October 24, 2008 and it is scheduled for completion in September 2009.

Borregas Avenue Bike/Pedestrian Bridge—US 101 and SR 237, Sunnyvale The two bike bridges will provide a safe and convenient connection between the residential

areas of Sunnyvale and the job centers in Moffett Park. They are currently under construction and are scheduled to open in spring 2009.

Complete Streets Program The CMA workplan calls for the development of a Complete Streets Program in accordance with Federal, State and regional programs. This work will begin in 2009 and is expected to conclude in 2010.

Bicycle Sharing Program In late 2008, a ground swell of interest in developing bicycle sharing programs swept the county. In 2009, VTA will work with the SVBC, local employers and cities to study the feasibility of a Bike Sharing Program. The initial steps include a pilot program that would involve identifying consumer needs and markets, a management and operating approach and key locations. Potential partners include Caltrain, which is experiencing chronic shortage of onboard bicycle capacity, cities with high demand Caltrain stations, visitors' bureaus and chambers of commerce, the SVLG and major employers. A Santa Clara County program could:

- Address land use inefficiencies of many suburban sprawl employment sites located far from transit
- Provide access to the first and last mile from major transit stations
- Supplement VTA and employer shuttles between transit and employer sites
- Relieve overcrowding and the routine "bumping" of passengers with bicycles on Caltrain (and on VTA buses)

A pilot program would focus on one or more Caltrain stations which would address all of the issues identified above and involve the potential partners who have expressed interest. Subsequent programs may have a city or sub-regional focus, but both will be designed for countywide compatibility.

COMMUNITY DESIGN AND TRANSPORTATION GRANT PROGRAMS

VTA has created two grant fund programs to support Member Agencies linking the CDT program and the Transportation/Land Use Investment Strategies. CDT grants support Member Agency efforts to implement the concepts and principles of the CDT program. These funds are a key component of the overall investment strategy, demonstrating VTA's on-going commitment to supporting its land use objectives with significant local investments in improving the quality of life in our communities. Grants are awarded on a competitive basis using Board-adopted criteria to provide strong incentives for Member Agencies to implement the precepts of the CDT program. In addition to the ongoing administration of these programs

VTA will pursue additional funding from local, regional, State and Federal sources.

CDT Planning Grants CDT Planning Grants are designed to help VTA Member Agencies refine and build on promising ideas and to prepare those plans, projects and policies for implementation or adoption. The CDT Planning Grant Fund Program will make available approximately $500,000 per annual cycle to VTA Member Agencies for two annual programming cycles scheduled for FY 2010. During this time VTA will work to identify and secure additional funds to continue programming in future years. The program offers two categories of planning grants:

Policy Planning Grants—up to $150,000 for projects that revise existing—or create new—policies, codes, ordinances or enforceable design standards that encourage changes in community form resulting in multimodal, pedestrian-friendly streets and transit-oriented, compact, mixed-use developments along major transportation corridors and in core areas such as downtowns, main streets, commercial nodes and station areas.

Capital Planning Grants—up to $75,000 for capital planning projects that integrate high-quality, pedestrian and multimodal transportation design elements into a public street, corridor, commercial node or station area, and ready those projects for implementation.

CDT Capital Grants CDT Capital Grants are offered to Member Agencies to assist them with implementing transportation-related projects that improve community access to transit, provide multimodal transportation facilities and enhance the pedestrian environment along transportation corridors, in core areas and around transit stations. Grant awards of up to $1.5 million per project are available. VTA currently expects to allocate about $360 million to these programs over the 25-year life of the plan.

CDT Expressway Pedestrian Funding Program The County Expressway Study identifies numerous pedestrian improvements throughout the expressway network. However, funding availability, coordination challenges and sometimes competing priorities have made project implementation sluggish and sporadic. VTA will work with the county, cities and the BPAC to explore funding opportunities for an expressway pedestrian improvement program. A conceptual framework includes requiring coordinated planning and matching funds from the local jurisdictions, the county and VTA.

OTHER PROGRAMS AND PROJECTS

Deficiency Plans/Impact Fees Several cities in Santa Clara County levy development impact fees. These fees may be assessed to

projects through local agency policies, or in conjunction with the CMP deficiency planning process. The CMP statute requires Member Agencies to prepare deficiency plans for CMP system facilities located within their jurisdictions that exceed the CMP LOS standard and cannot be restored back to the LOS standard.

In the late 1990s, during the development of its draft Countywide Deficiency Plan (CDP), VTA investigated a countywide development impact fee dedicated to specific improvements on the CMP network. The VTA Board did not approve the plan; however, interest has increased in recent years and VTA is currently re-examining this concept. During 2009–10, VTA staff will study the concept including options for issuing fees, potential revenues generated from the various options, use of funds and potential economic impacts and benefits. A possible outcome of this work may be VTA Board direction to begin development of a CDP in accordance with CMP statutes.

El Camino/Grand Boulevard Initiative

VTA will continue to participate with ongoing work on the Grand Boulevard Initiative including: developing a Multimodal Transportation Corridor Plan (including the analysis of transit and land use scenarios for the corridor); working with Caltrans and cities along the corridor to facilitate the design exception process for projects along El Camino Real within the Caltrans right-of-way; and a study of the economic needs, opportunities, and strategies that may be needed to cultivate new transit and pedestrian-friendly development.

VTP 2035 DEVELOPMENT PROCESS

SPECIAL CONSIDERATIONS

Several cities in Santa Clara County including San Jose, Milpitas, Santa Clara, Sunnyvale and Mountain View are conducting comprehensive updates to their General Plans. These efforts present tremendous opportunities to better link transportation and land use planning and decision-making. However, these efforts will conclude at various times after the adoption of VTP 2035. VTA is working closely with each of these cities to ensure that VTA's cores, corridors and station areas framework for concentrated growth and multimodal transportation options are fully considered and integrated in these plans. Accordingly, VTP 2035 may need to be amended within the next 24 months to be responsive to these efforts and incorporate program and projects as needed.

VTP CAPITAL PROJECT LIST DEVELOPMENT PROCESS

The VTP uses a systematic approach for planning capital projects to prepare them for the

programming and development process. This process was used to create the current list of projects described in the Capital Investments section in Chapter 2, and will be maintained through the 25-year VTP 2035 planning horizon. It is also intended for use in future updates to VTP 2035.

The VTP 2035 process builds on the foundation of past plans and project lists, and establishes a framework for decision-making under the leadership of the VTA Board of Directors. Primary input comes from VTA and Member Agency planning studies with input from VTA's advisory committees, the environmental and business communities, and the general public. These decisions are based on consistent, technically sound evaluation of project proposals and preceded by clear and consistent communications with outside organizations. After decisions are made to move projects from planning to programming phases, the VTP 2035 approach includes sustained commitment to major planned projects in order to secure funding and proceed successfully to project delivery.

Many steps are involved in delivering a capital project. However, for the purposes of VTP 2035 three general processes govern how projects move from planning documents to construction:

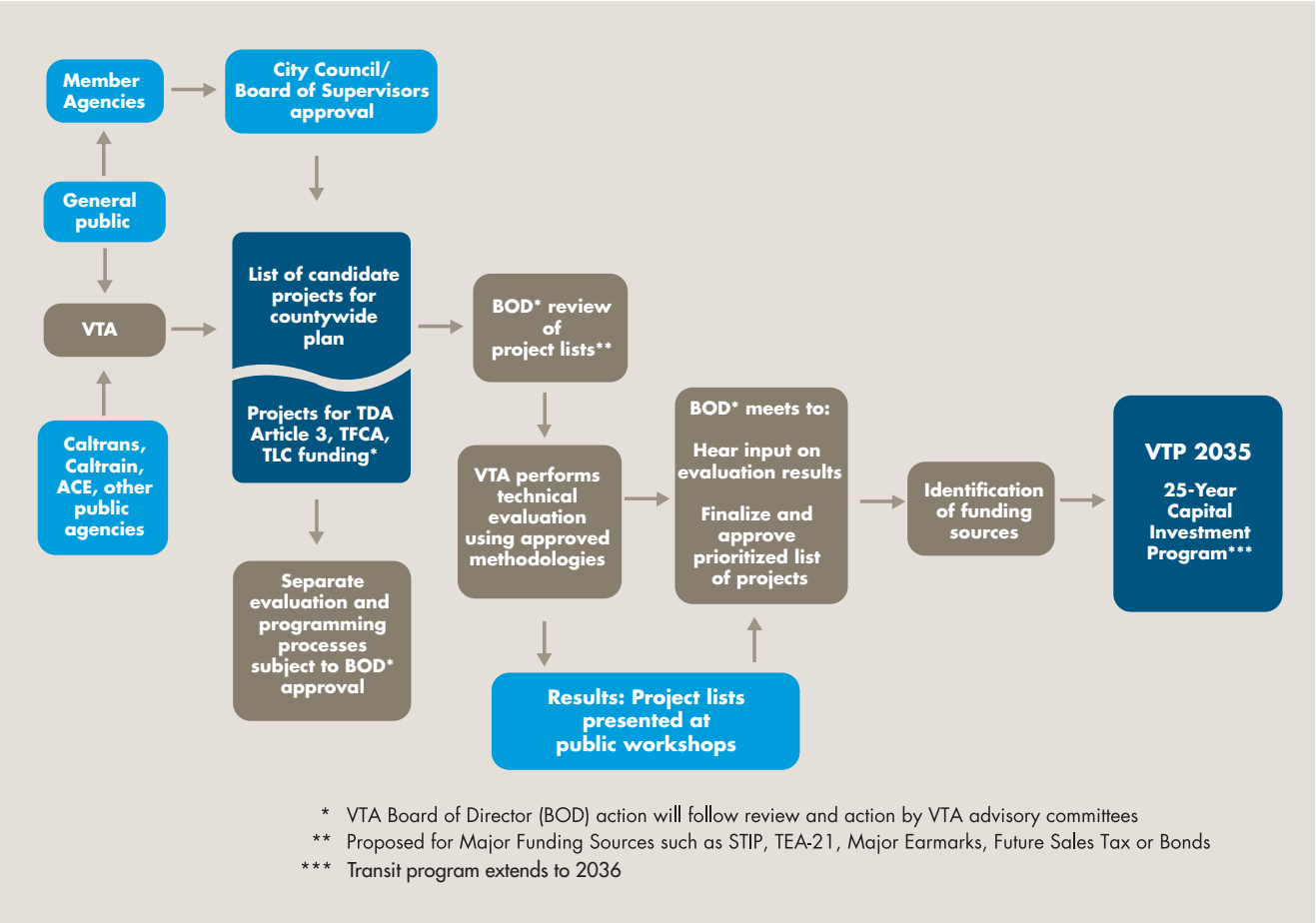
- VTP project selection process
- Project planning, programming, and delivery
- Updating and amending the VTP

VTP PROJECT SELECTION PROCESS

Figure 4-1 on the following page illustrates the process of selecting projects for inclusion in VTP 2035. Oversight of the planning process rests with the VTA Board of Directors and allows for broad community input through VTA committees and other public venues.

To begin the process, VTA solicits proposals from interested agencies and the general public, and may include a formal call-for-projects. In fall 2007, VTA issued a call for VTP 2035 projects. In general, projects included in VTP must result from a planning study and public review process, be sufficiently defined to have project descriptions and reasonable cost estimates, and sponsored by a jurisdiction or public agency (such as a city, the county, Caltrans or Caltrain). This criterion ensures local knowledge of, and commitment to, proposed projects. Projects are next submitted to VTA for consideration in one or more of the program areas identified in VTP 2035. This process also provides a venue for project sponsors to update project descriptions and cost estimates, and to add or remove projects from existing lists.

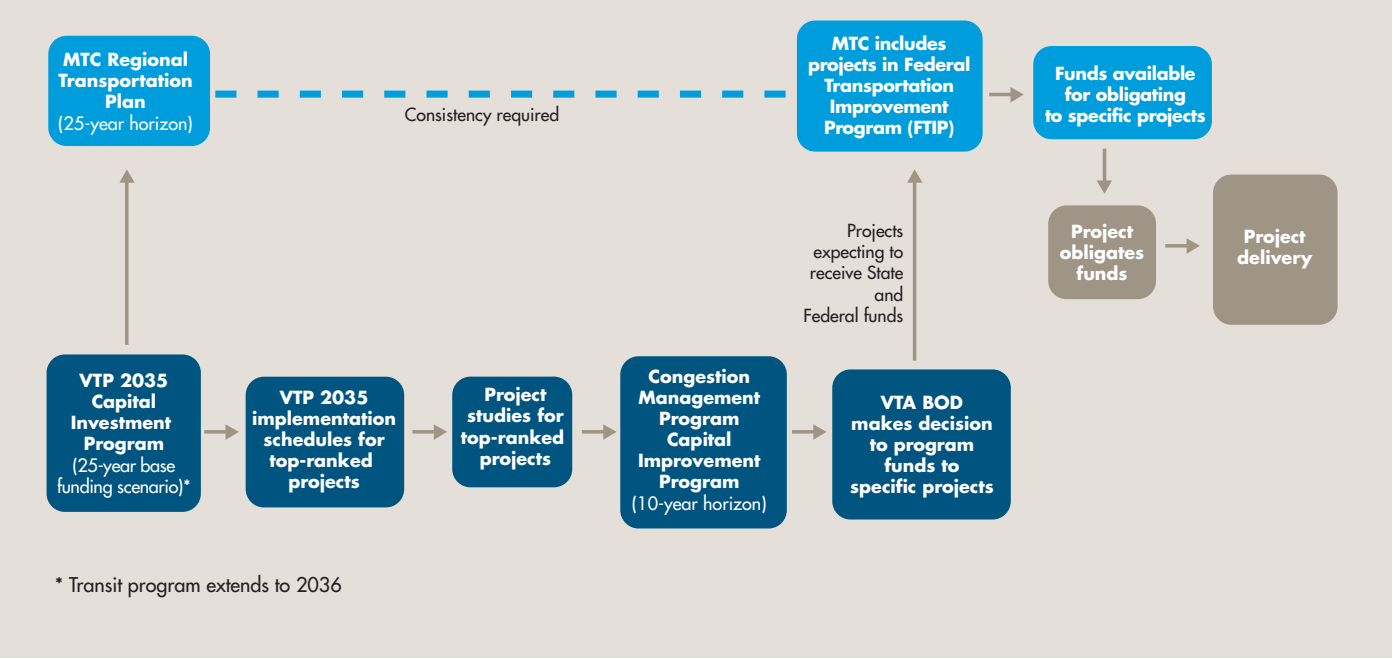
FIGURE 4-1 *Project Selection Process*



VTA then evaluates the proposed projects using technical methodologies that are approved by VTA's Technical Advisory Committee and Board. Evaluation results are presented to Member Agencies and at committee meetings. This step functions as a feedback loop to provide for public comment on VTA's evaluation. Based on evaluation scores, the VTA Board then finalizes and approves the list of projects.

Once the VTA Board approves the list of projects it is submitted to MTC for inclusion in the RTP, and individual projects can proceed into programming phases. Projects must be included in the fiscally constrained section of the RTP to be eligible for State or Federal funding, to purchase right-of-way, or to move into environmental or construction phases.

FIGURE 4-2 *Project Planning, Programming and Delivery*



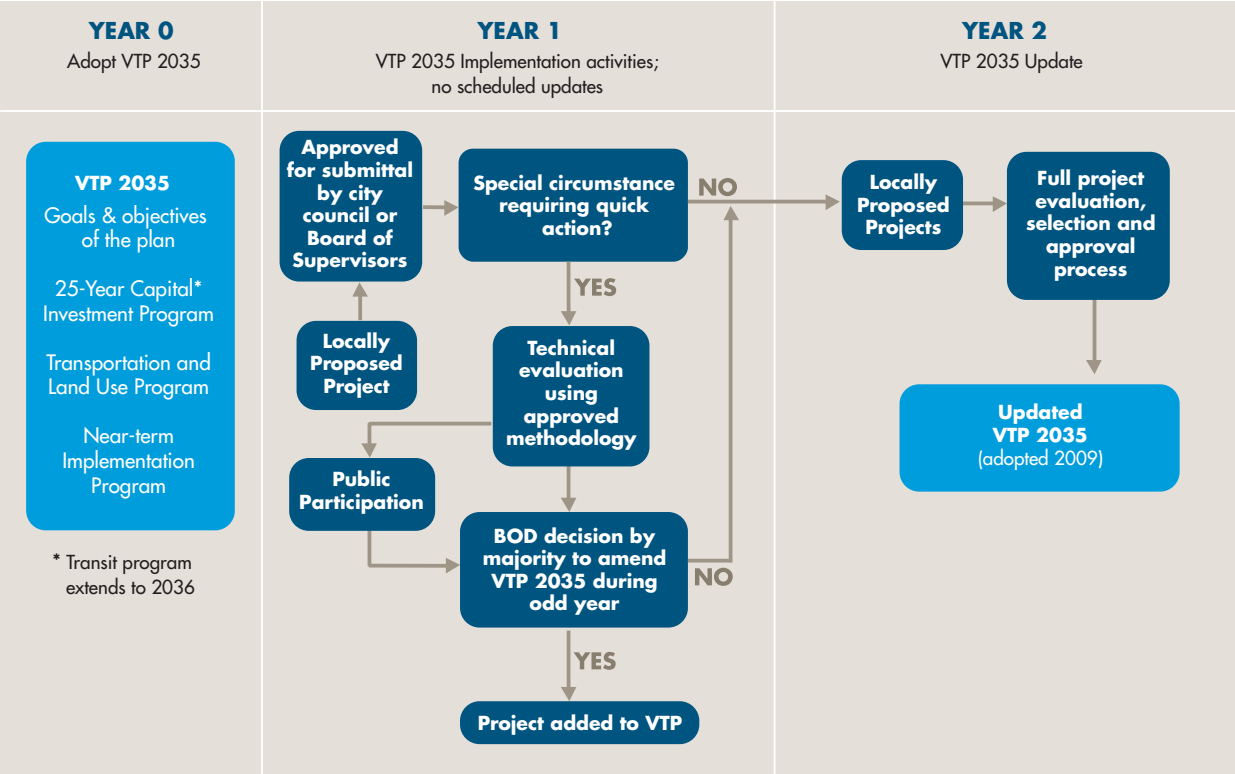
PROJECT PLANNING, PROGRAMMING, AND DELIVERY PHASES

This section describes what happens to a project once it emerges from VTP 2035 as an agency priority. Figure 4-2 presents a flowchart of the process by which a transportation project moves from VTP 2035 through project delivery.

At the local level, projects appearing in VTP 2035 generally result from VTA and Member Agency planning studies. In cases where project planning or engineering studies have already been completed, those studies will provide the starting point for more advanced studies or engineering. Based on these planning studies, the VTA Board places the top-ranked projects in the CMP's CIP. Top-ranked projects are determined by using a set of Board-adopted evaluation criteria similar to those developed for the initial project evaluation but more focused on elements of project delivery including project readiness, availability of funds and environmental clearances. The VTA Board can then make decisions to program funding for specific projects—a process which may involve another set of evaluation criteria.

Beyond the local level, the MTC takes projects appearing in VTP 2035's CIP and

FIGURE 4-3 *Updates and Additions*



places them in MTC's RTP where they may appear in the constrained or unconstrained portion of the RTP. Once the VTA Board approves the programming of funds to specific projects from specific sources, MTC places those projects in its Federal Transportation Improvement Program (FTIP). Only projects in the RTP can be placed in the FTIP. Funds from State and Federal sources are then made available to be obligated to these projects. Finally, the agencies' sponsors of the projects obligate the funds in order to finance construction.

UPDATING THE VTP

Notwithstanding VTP 2035's process of analysis and evaluation, things change and VTA regularly updates the plan at a minimum of every four years in a cycle coinciding with the update of the RTP. Plan updates will include the project planning, selection, programming and delivery processes described above.

However, VTA recognizes that special circumstances may arise that require a plan amendment during an off-year. The VTP therefore includes a process for amending the plan that

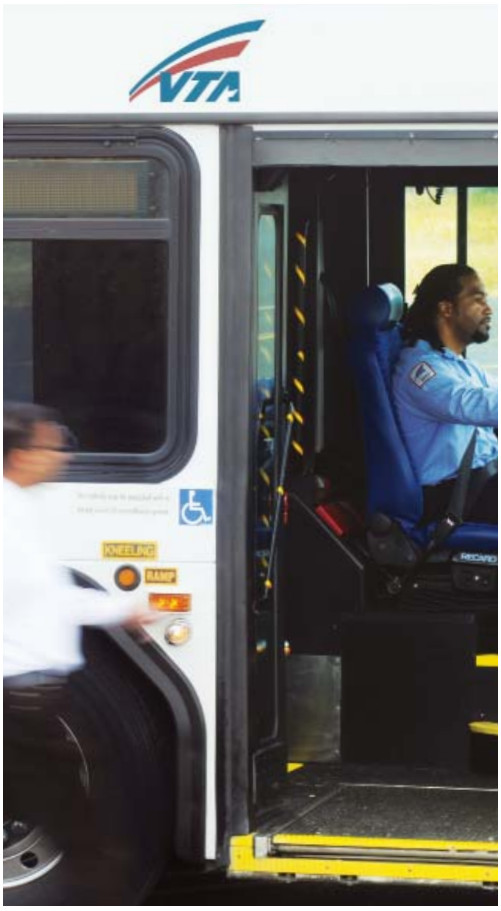
allows for off-year changes. A flowchart of the process for amending VTP 2035 is shown in Figure 4-3.

Special circumstances such as time-limited funding availability, a new source of State or Federal funding, or contributions from a local developer, may require quick action. In these cases, the VTP process allows for projects to be added in off-years. Off-year project proposals undergo the same technical analysis required during full plan updates, and a majority vote of the VTA Board is required to approve VTP amendments. Project proposals not accepted during off-years can be reconsidered during the subsequent update of the entire plan. VTA will conduct a public participation process for the proposed amendment, the level of which will be based on the scale of the proposed amendment.

VTP 2035 PROJECTS WITHOUT ALLOCATED FUNDING

Projects appearing in the VTP 2035 Capital Investment Program that do not have allocated funding for construction are considered in the "unconstrained" portion of the VTP 2035 and the RTP. Funding options for these projects will be re-evaluated with the next update of the VTP.

If funding for a project is identified before VTP 2035 is updated, and the sponsoring agency has determined the project is a top priority, it may move into planning and preliminary design phases without needing to be included in the financially constrained portion of VTP 2035 or the RTP. If the project is considered of "regional significance" and needs to acquire right-of-way or move into final environmental, engineering and construction phases before the next VTP update, VTP 2035 and the RTP need to be amended, requiring at minimum regional transportation systems and air quality conformance analysis involving significant staff time and resources. In these cases, Member Agencies should notify VTA as soon as possible so staff may explore a range of possible actions and coordinate activities with MTC.


VTA
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CHAPTER FIVE *strategic planning element*

The Strategic Planning Element provides a framework for VTA to ensure that the agency is positioned to deliver the planning, funding, building and operating solutions described in VTP 2035. VTA Strategic Planning considerations reach beyond VTP 2035 and encompass all facets of the organization—from Board and Committee responsibilities to administrative functions such as human resource management, budgeting and financial planning to project delivery functions such as construction management and transit operations.

THE PURPOSE OF THE VTA STRATEGIC PLANNING ELEMENT

The Strategic Planning Element is a new component of the Valley Transportation Plan development process. Given the economic, environmental, regulatory and societal changes that are likely to occur over the course of VTP 2035, VTA as an agency must continually evolve to maintain its effectiveness. The strategic plan will be updated periodically to ensure that VTA continues to be well-positioned to respond to these anticipated changes.

VTA was formed in 1995 through the merger of the Santa Clara County Transit District and the Congestion Management Agency. As a result, VTA manages a wide spectrum of transportation decision-making processes for the county, including transportation planning, programming and service delivery. The merger also created a closer link between transportation planning and land use policy.

VTA's mission and organizational structure served it well during its formative years. VTA successfully built and operated many of the transportation systems identified in predecessor plans. However, the recent recession and revenue shortfalls, combined with rising transportation costs and evolving housing and employment patterns within the county, are compelling reasons to reexamine transportation strategies.

To adapt to this changing environment, VTA initiated a series of activities to reexamine not only its mission and vision, but also how it is organized and governed to deliver services. This examination identified changes that are needed to ensure that VTA continues to meet its responsibilities in the future. VTA responded by making key strategic changes and accomplished the following:

- Developed a new mission and vision
- Realigned VTA's internal organization to improve its ability to achieve its mission effectively and efficiently
- Assisted the Board of Directors with taking a more countywide/regional approach to transportation decision-making

VTA's Strategic Plan aligns the agency's vision and mission with goals that support VTA's ability to obtain the objectives of VTP 2035. Supporting the goals are strategies that VTA will follow to advance the programs and projects enumerated in the plan. VTA will track key indicators to determine its success in delivering the plan. Figure 5-1 illustrates the relationship of these strategic planning elements.

The Strategic Plan Element describes VTA's new mission and vision, and the new governance and organizational structure. It charts the analysis of the agency's strengths and weaknesses, as well as its opportunities and external threats. It describes VTA's strategic goals and specific strategies to achieve these goals. It shows how VTA is transforming so that it is prepared to deliver VTP 2035 programs and projects, and how it will continue to undergo critical analysis to improve its ongoing functions and evolve its corporate culture.

VISION, MISSION AND VALUES

VTA's new vision and mission statements provide strategic direction and establish a framework for decision-making. VTA recently evolved these statements to capture its primary focus on providing market-based services that are tailored to respond to the needs of the community, reflect resource constraints, protect environmental resources and emphasize the importance of designing solutions that improve mobility and increase ridership to improve the quality of life for the people in Santa Clara County. Concurrently, VTA adopted a set of values that support the vision and mission.

VISION

VTA builds partnerships to deliver transportation solutions that meet the evolving mobility needs of Santa Clara County.

MISSION

VTA provides sustainable, accessible, community-focused transportation options that are innovative, environmentally responsible and promote the vitality of our region.

VALUES

VTA's values reflect what we believe and how we will behave. They guide the agency's decision-making and are applied to everything VTA does.

Dependability

We provide services, and deliver projects, on schedule and within budget.

Quality

We ensure that the services we deliver, and projects that we build, are well designed and maintained to preserve the investment that has been made.

Sustainability

We design our services and projects to minimize the negative impacts on our environment, and in a way that can be maintained over time.

Safety

Our services are delivered in a way that promotes the health and safety of our employees and the public.

Integrity

We conduct our business in an ethical, honest, transparent manner.

Diversity

We value, respect and serve the unique needs of our community.

Accountability

As stewards of the natural resources and tax revenues of the county, we take responsibility for our actions and honestly report our successes and challenges to stakeholders and the public.

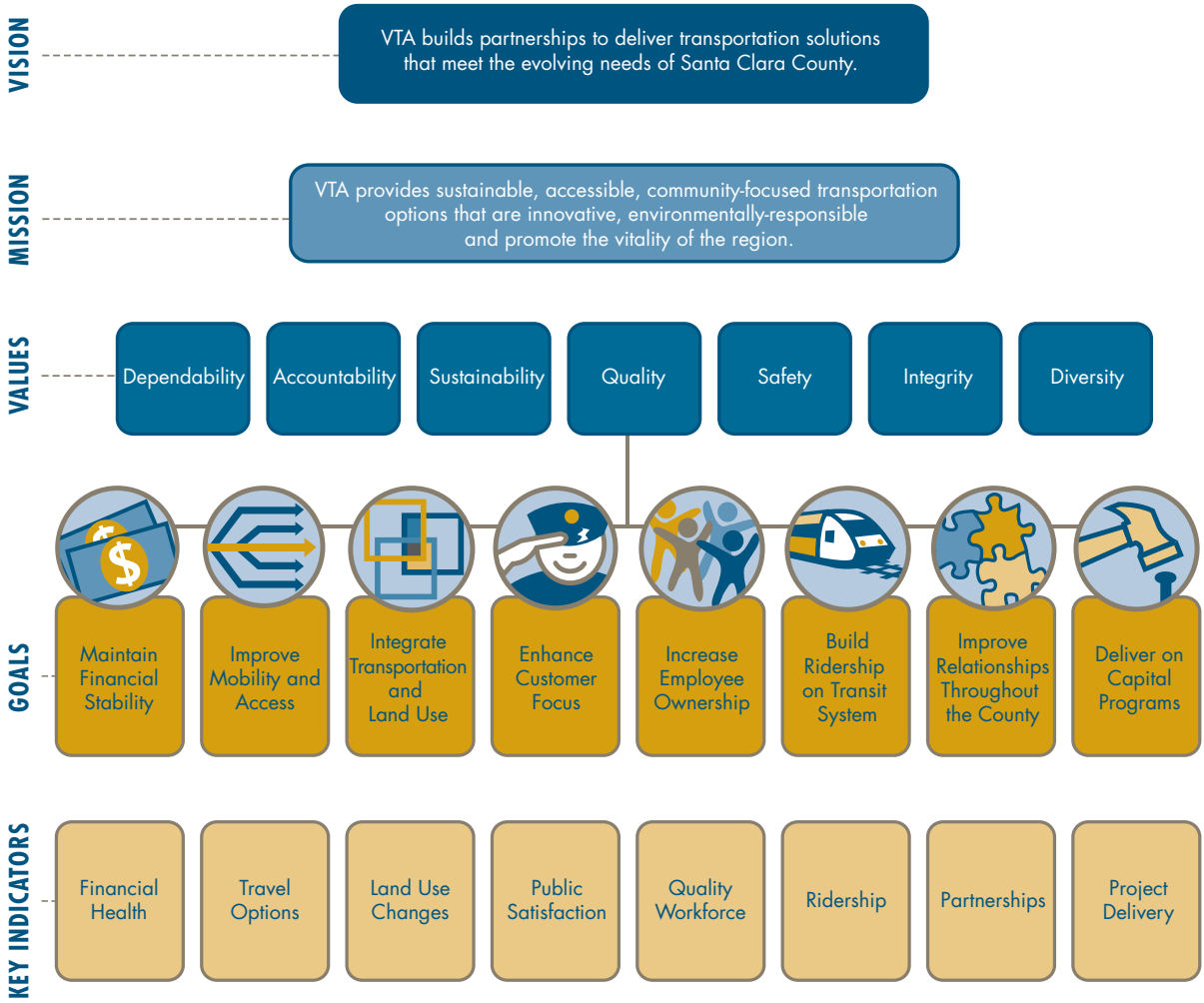
ORGANIZATIONAL STRUCTURE

This Strategic Plan Element describes how VTA is structured to fulfill its responsibilities for transportation planning, programming and service delivery. The new structure is guided by a critical review of the agency's past performance.

RESTRUCTURING VTA

At the urging of the Board chair, and under the leadership of the new General Manager, VTA initiated a comprehensive assessment of its organizational structure and financial management. This independent review was designed to examine how VTA conducts business and assess its performance. It recommended changes to improve VTA's ability to

FIGURE 5-1 *VTA Strategic Plan*



deliver cost-effective service and provided recommendations in three areas: governance, organizational structure and financial management. Table 5-1 (page 144) shows the recommendations from the organizational and financial assessment.

The Board endorsed the findings and recommendations, and directed the General Manager to develop and institutionalize both structural and procedural changes throughout the organization. The results of these changes are evident in the Board governance practices and in the organizational structure described below.

Governing Board

VTA's organizational structure is centered around the Board of Directors. The Board sets

VTA policy and has decision-making authority. The Board has 12 voting members and two ex-officio, non-voting members, all of whom are elected officials appointed to serve on the Board by the jurisdictions they represent.

In the past year, the Board has taken steps to address the governance findings and recommendations from the organizational assessment. Among the substantive changes, the Board:

- Eliminated the rotation schedule within city groupings to promote longer tenure and build transportation expertise among Directors
- Created an Audit Committee as a standing committee of the Board with fiduciary oversight responsibilities
- Developed a Board work plan to support decision-making and guide the activities of standing and advisory committees
- Initiated a process to engage advisory committees in improving their input to the Board on matters within their respective areas of responsibility and expertise
- Improved the quality and timing of Board materials, including additional information about financial impacts, potential conflicts of interest and input from standing committee discussions

The Board's work is now more transparent and accessible to stakeholders and the public.

In an effort to further satisfy its responsibility for providing policy guidance to the VTA staff and utilizing the governance structure to fully vet strategic policy matters, the Board, during this last year, considered and approved a number of policies intended to strategically guide the development of VTA business programs over the long term. Before approving these policies the Board sought input from the Board advisory and standing committees. An example of such a policy is the Board's adoption of the Transit Sustainability Policy. This policy serves to guide the development of new service plans for VTA's bus business and was presented to the Board advisory committees for their consideration and input. The Transit Sustainability Policy was also considered by and recommended to the Board for adoption by the Transit Planning and Operations Committee. The Board intends to continue to use this model for policy development and adoption as it considers new or revised policies in its future work plans. Policies for future development and consideration include a policy that will serve to ensure the long-term financial health of VTA, a policy that will provide guidance for the delivery of the Measure A Program, and a joint development policy that will guide the management and development of VTA's real estate portfolio.

Board Committees

The VTA Board of Directors has established a set of standing and advisory bodies to review and provide input on policy matters. This allows Board members to carry out an in-depth

review of a wide range of complex policy issues before the Board takes final action. Four standing committees consist of four Board members each. Five advisory committees meet monthly, and a handful of policy advisory boards meet when projects in their area of focus are active.

Standing Committees

The Board has four standing committees that advise on policy matters within their assigned areas of responsibility, as defined in the administrative code. Committee input and recommendations are noted in the materials that are forwarded to the full Board for final approval.

Administration and Finance Committee Reviews policy recommendations about the general administration of VTA, including administrative policies and procedures, legislative affairs, human resources and fiscal issues.

Congestion Management Program and Planning Committee Reviews policy recommendations about the Congestion Management Program and Countywide Transportation Plan, including the integration of transportation and land-use planning, the programming of discretionary State and Federal funds, and air-quality planning.

Transit Planning and Operations Committee Reviews policy recommendations about transit planning, transit capital projects, transit operations and marketing.

Audit Committee Exercises the Board's fiduciary and oversight responsibilities, including the integrity of VTA's financial statements, compliance with legal and regulatory requirements, and assuring an effective system of internal management and financial controls. The Audit Committee is responsible for selecting the Auditor General and approving the annual audit work plan. It also recommends a public accounting firm to conduct the annual financial audit.

Advisory Committees

The Board has established a group of advisory committees. These committees do not set VTA policy, but instead review policies under development to ensure that they meet the needs of constituents, customers, elected officials, the business community and other stakeholders. In addition, designated policy advisory boards meet when projects in their area of focus are active.

The five advisory committees meet once a month. The role of each committee and its membership is described below.

Bicycle and Pedestrian Advisory Committee Advises the Board on funding and planning issues for bicycle and pedestrian projects, and serves as the countywide bicycle advisory committee for Santa Clara County.

This committee is comprised of 16 voting members, one from each of the 15 cities and one from the county.

Citizens Advisory Committee Advises the Board on issues of interest to the committee's members and the communities they represent and serves as the oversight body for the 2000 Measure A Transit Sales Tax Program.

This committee consists of 17 members representing business, labor, environmental and other community groups.

Committee for Transit Accessibility Advises the Board on bus and rail accessibility issues, paratransit service, public facilities and programs and the Federal Americans with Disabilities Act (ADA).

This committee is made up of 21 members, including nine representatives from human service agencies within the county, 12 individuals with disabilities, and one Board member as a liaison.

Policy Advisory Committee Ensures that all jurisdictions within the county have access to the development of VTA's policies.

This committee includes 16 members, one from each of the 15 cities and one representing the county.

Technical Advisory Committee Advises the Board on technical issues related to transportation.

This committee is composed of 16 members, one from each of the 15 cities and one from the county.

TABLE 5-1 *Organizational and Financial Assessment Recommendations*

GOVERNANCE		
Recommendation *Implement governance processes and practices to enable transformation*		
Detailed Elements		
• Adopt the spirit of Sarbanes-Oxley practices, where applicable > Establish an Audit Committee > Implement an Auditor General function > Establish Board training on duties and responsibilities > Focus the Board on its fiduciary responsibilities > Conduct annual Board self-evaluations	• Make the Board structure function effectively > Make the General Manager a Board member > Develop an annual Board Work Plan > Revalidate the Board's role in VTA policy making > Reduce the number of Advisory Committees	> Change the Oath of Office to require a regional focus > Improve the conduct of Board and Committee meetings • Improve the quality of information that the Board receives

TABLE 5-1 (CONT'D) *Organizational and Financial Assessment Recommendations*

ORGANIZATION

Recommendation *Operate VTA like a business*

Detailed Elements

- Establish goals, objectives and performance management processes for the executive management team
- Delegate appropriate authority and accountability
- Require that all decisions be made within financial constraints
- Initiate a program to identify and implement required controls

Recommendation *Align VTA's mission with its operating practices*

Detailed Elements

- Revise VTA's Mission to focus on transportation as a core business
- Develop a comprehensive transformational strategy and plan

Recommendation *Align the organization structure and executive team under the new strategy*

- General Manager to define and communicate the Vision and near-term structural changes
- Appoint or hire a Chief Transformation Officer
- Create the Office of External Affairs
- Select and appoint the new executive management team

Recommendation *Build VTA's commitments to the Commercial Development Program*

Detailed Elements

- Commit to the Commercial Development Program's goals and objectives
- Adhere to the policies and procedures set forth by VTA's development experts
- Establish an account for the revenues generated by the Program, and develop a philosophy about how these revenues will be used

Recommendation *Make VTA a better place to work*

Detailed Elements

- Establish norms for the conduct of business
- Communicate the need for and purpose of VTA's new mission, strategy and structure
- Establish and communicate roles and responsibilities on a broad basis
- Establish and implement a performance management system
- Create and implement an Organizational Development Plan, making training a priority

TABLE 5-1 (CONT'D) *Organizational and Financial Assessment Recommendations*

FINANCIAL		
Recommendation *Upgrade the SAP System*		
Detailed Elements		
• Immediately initiate a project for implementing the latest upgrades for the SAP software	• Consider implementing new modules that support VTA's operational and financial transformation initiatives	
Recommendation *Develop a labor negotiation strategy that is aligned with VTA's financial capabilities*		
Detailed Elements		
• Develop a labor contract negotiation strategy that reflects the context of the existing expenditure constraints	• Extend VTA's labor-management partnership to contract negotiations	
Recommendation *Improve VTA's financial condition and stability*		
Detailed Elements		
• Balance VTA's 30-Year Revenue and Expenditure Plan • Develop an effective asset management system • Cash • Real estate • Capital project planning and maintenance	• Strengthen financial reporting for VTA decision-making • Provide the true picture of VTA's financial condition and liquidity • Institutionalize full disclosure about the short- and long-term financial consequences of proposals • Include financial policy as a prominent part of Board fiduciary duty	• Identify and promote financial strategies within VTA • Explore measures to reduce unfunded pension and retiree health care obligations • Develop new revenue sources for VTA • Close the gap between capital project demands and funding • Reduce reliance on operating reserves

Transportation Corridor Policy Advisory Boards Ensures that local jurisdictions affected by major transportation improvement projects are involved in planning, design and construction.

These boards are comprised of a rotating group with two VTA Board members and elected officials from jurisdictions within the corridor.

VTA'S STRUCTURE

The organizational assessment found that VTA's structure could be better aligned to more effectively deliver services. VTA's transformation efforts addressed this concern

by redefining the roles and responsibilities of each division to reduce overlap and redundancy and foster coordination and cooperation between divisions.

VTA's broad array of responsibilities and functions are organized into seven divisions, as depicted in the organization chart (Figure 5-2 on the following page). With the same responsibilities of a president and chief executive officer, VTA's General Manager oversees and manages all facets of the organization under policy direction from the Board of Directors. While each division has distinct roles and responsibilities, they work collaboratively to deliver results. The streamlined organizational structure aligns VTA's operating practices with the agency's new vision and mission.

VTA's structure continues to transform and evolve to ensure an efficient and effective organization, which is the primary objective of the reorganization.

ENVIRONMENTAL ANALYSIS

An understanding of the current and future environment in which VTA operates can help to identify the opportunities and threats potentially facing the Agency. Similarly, identifying VTA's strengths and weaknesses can help build a more efficient and effective organization. Drawing on interviews with current and former Board members and with agency staff (including the General Manager and division chiefs), as well as external assessments conducted by an independent consultant and by the Bureau of State Audits, VTA has compiled a list of strengths, weaknesses, opportunities and threats (SWOT). The SWOT analysis (Table 5-2 on page 150) is being used by the Agency to make strategic choices that will ensure that it can deliver the programs described in VTP 2035.

GOALS AND STRATEGIES

Strategic goals are a fundamental component of the planning process, as they provide a framework for the development of strategies to attain the objectives of VTP 2035. VTA's Strategic Plan is built on its vision, mission and values. The agency has defined eight goals that, taken together, advance VTA's new vision and mission.

VTA STRATEGIC PLAN GOALS

1. **Maintain Financial Stability:** VTA seeks to manage costs, maximize revenues and balance system expansion with maintenance of existing service.
2. **Improve Mobility and Access:** VTA will invest resources and services in areas with greatest need to enhance the quality of life of all residents, including vulnerable populations. VTA will provide a selection of transportation modes to attract choice riders, as well as promote the economic vitality of our region.

FIGURE 5-2 *VTA's Responsibilities and Organization*

3. **Integrate Transportation and Land Use:** VTA will advance the principles and practices in the Community Design and Transportation Program and promote transit-oriented and pedestrian development in the county.
4. **Enhance Customer Focus:** VTA will put customers first by providing safe, reliable, demand-driven service that reflects community input and promotes the benefits of transit.
5. **Increase Employee Ownership:** VTA aims to offer professional development, advancement opportunities and reward personal investment to make VTA an employer of choice.
6. **Build Ridership on Transit System:** Increase VTA's operating efficiency, reduce road congestion and promote sustainability.
7. **Improve Relationships throughout the County:** Leverage resources, facilitate information sharing and tap expertise in private and public sector organizations.
8. **Deliver on Capital Program:** Build projects that complement and enhance the core services within available resources.

DIVISION STRATEGIES

Building on VTA's goals and objectives, each division has defined the strategies it will employ to ensure its efforts support the vision and mission. Division strategies are aligned with one or more goals, as illustrated in Table 5-3 (page 151). Division managers have defined near-term activities (those that can be accomplished within a two-year timeframe) under each strategy. These activities and associated performance measures are reflected in division work plans, which are reviewed by the General Manager to ensure that ongoing efforts are aligned with the strategic plan.

KEY INDICATORS

The VTP 2035 Strategic Planning Element has eight key indicators, which will help VTA track progress toward achieving its goals:

- Financial Health
- Travel Options
- Land Use Changes
- Public Satisfaction
- Quality Workforce
- Ridership
- Partnerships
- Project Delivery

Appendix D, Systemwide Performance Results, provides a summary of the performance of the VTP 2035 programs and projects. This includes traffic level-of-service, mode split, vehicle miles traveled, vehicle hours of delay (duration of congestion), air quality, transit access, and travel time.

TABLE 5-2 *VTA SWOT Analysis*

INTERNAL

Strengths

- VTA is proactively advocating for public support for land use patterns that support transit, biking and walking, and for the use of new technologies and programs
- VTA has dedicated revenue sources for both capital and operating expenditures
- VTA combines the organizational structure of multiple transportation agencies (e.g. transit builder and operator, CMA, funding authority) and enjoys integration and opportunity of scale efficiencies compared with neighboring counties
- Fleet and infrastructure are relatively new and in good condition
- Board of elected officials from each jurisdiction provides a solid framework for policy making
- Staff is experienced and dedicated
- General Manager is experienced and willing to innovate
- Organization demonstrated high level of responsiveness to internal audit findings
- Recent organizational changes and new Board and evolving policies are reshaping the agency to achieve greater efficiency and service effectiveness
- New transit service model is focusing on key corridors where transit is in high demand and competitive with automobiles
- Can improve Board and committee structure and procedures
- Can improve Board focus on regional/countywide VTA transportation issues
- Employee rotation programs and succession planning efforts can support evolving agency needs

Weaknesses

- High transit operating cost compared industry average
- Funding demands greatly exceed projected resources
- Funds to build are more reliable than funds to operate and maintain
- Long-term maintenance has been a low priority
- More effort would help fully engage agency partnerships
- Board members tend to focus on local rather than VTA/countywide/regional issues
- High turnover rates limits the historical perspective of the Board
- High learning curve for new Board members
- Difficult to find Board members with transportation experience
- Predicted employee retirements could trigger significant loss of institutional knowledge
- Financial controls can be improved
- Dependence on sales tax (+70% of operating revenues) leaves agency vulnerable to economic cycles
- Pool of elected officials who know transportation issues well to serve as potential board members is limited
- Board members, as local elected officials, are challenged to support regional measures, where local benefit appears to be limited
- Retirements of senior staff will result in leadership gaps and loss of institutional knowledge

EXTERNAL

Opportunities

- Santa Clara County is a desirable place to live and work
- Network of potential express lanes may provide new local revenue sources
- Santa Clara County citizens have a proven willingness to tax themselves for desired programs
- Projected Santa Clara County growth over 25 years can yield significant improvements in transit and pedestrian friendly development patterns
- Transit's significant role with climate protection, energy use and other environmental factors
- Rising fuel costs can attract new ridership
- Public support for public transit is growing
- Public is more willing to consider new funding mechanisms, especially those that manage growth in congestion and provide for transit expansion
- Increasing support for public/private partnerships
- Legislation including AB32 and SB375 contain requirements that support agency goals
- History as a self-help county
- Current levels of jobs and population and projected growth in the county

Threats

- Typical low-density, single-use development pattern is difficult to efficiently serve with transit
- Limited political support and advocacy for VTA efforts
- Growth; VTA will be challenged to maintain the status quo in light of projected growth in population and jobs
- Funding needs for capital, operations and maintenance
- Historic and current typical land development patterns
- Continued financial uncertainty at State and Federal levels
- Certain areas of VTA's work force competes with other agencies for skilled labor force and businesses that often have higher pay and better benefits
- Regional, State and national policies can create new unfunded mandates

TABLE 5-3 *Division Strategies and Goals*

DIVISION	STRATEGIES	GOALS (refer to Figure 5-1 for key)
Administrative Services	• Manage agency risk through risk identification, mitigation and prevention • Build human capital • Promote partnerships with represented and non-represented employees • Leverage technology to deliver agency services	
Congestion Management Agency	• Secure grants and leverage local contribution • Establish vision and path for transportation investments in Santa Clara County • Set up projects for success • Capture the value of VTA assets • Align division resources and future responsibilities and challenges	
Engineering and Construction	• Develop and implement a uniform project delivery model • Deliver projects (on time and within budget) • Develop comprehensive reporting structure on project and program status	
External Affairs	• Increase revenue • Manage division resources • Promote benefits of VTA services • Learn and share information about evolving mobility and accessibility needs • Promote importance of integrated land use and educate community • Improve communication with staff at all levels in VTA and solicit input in decision-making and planning efforts • Ensure response to and resolution of customer complaints	
Fiscal Resources	• Satisfy external financial reporting requirements • Develop and maintain financial planning tools • Prepare and disseminate information for agency financial decision-making • Manage financial transactions • Support development of new revenue sources • Provide procurement and contract management services that meet the needs of other division objectives • Manage agency risk through risk identification, mitigation and prevention	

TABLE 5-3 (CONT'D) *Division Strategies and Goals*

DIVISION	STRATEGIES	GOALS
Operations	• Maintain an effective and efficient annual service plan • Refine and expand application of performance tools • Factor operating and maintenance expenses into capital project planning • Manage Division resources for greater efficiency and effectiveness • Improve system security • Upgrade Fleet Maintenance Management Program • Review paratransit service delivery	
Silicon Valley Rapid Transit	• Reenter Federal New Starts process and position project for federal funding • Develop SVRT financial plan and seek funding revenues • Position SVRT project as a high priority at the local and regional levels • Build the SVRT Project Delivery Team	

MEASURES AND METRICS

VTA currently uses a wide range of measures and metrics to gauge the performance and status of its activities. Table 5-4 presents measures for gauging VTA's progress with achieving its Strategic Plan Element goals. VTA is currently in the process of developing additional strategies for measuring and refining its services and business practices, and better linking those with its goals. The results of this process may refine or add to those listed in Table 5-4. This includes traffic level-of-service, mode split, vehicle miles traveled, vehicle hours of delay (duration of congestion), air quality, transit access, and travel time.

UPDATING THE STRATEGIC PLAN ELEMENT

In conclusion, the Strategic Planning Element is dynamic, and will be periodically updated and used to measure VTA's progress in meeting its goals. It will be considered in each update of the VTP, if not more frequently, and used to inform the Board's discussion of programs and projects.

TABLE 5-4 *Goals, Indicators, Measures and Metrics*

GOALS	KEY INDICATORS	MEASURES	METRIC
Maintain Financial Stability	Financial Health	Maintain adequate levels of funding to sustain the existing transit system and secure new funds for expansion	y/n
Improve Mobility and Access	Travel Options	Diversification of mode share	+ / -
		Increase share of alternate modes (transit, carpool, car-share, walk, bike)	+ / -
		Decrease VMT and VHT	+ / -
		Percent of population with access to transit	+ / -
Integrate Transportation and Land Use	Land Use Changes	Jobs and housing approvals within 1.3 mile of transit and cores, corridors and station areas	+ / -
		City Plan changes that focus development within 1/3 mile of transit	+ / -
Enhance Customer Focus	Public Satisfaction	Increase VTA's customer satisfaction rate	+ / -
		Maintain or improve system reliability	y/n
		Ensure that comprehensive public participation is a key input to transportation plans and projects	y/n
		Build awareness of VTA (measure through annual phone surveys)	+ / -
Increase Employee Ownership	Quality Workforce	Conduct annual employee surveys and respond to key areas of organizational areas identified	y/n
		Provide training, education and coaching opportunities for employees	y/n
Build Ridership on the Transit System	Ridership	Increase ridership: riders per capita, ridership in COA core corridors, ridership in CDT cores, corridors and station areas, ridership per passenger mile, ridership per passenger hour	+ / -
Improve Relationships Throughout the County	Partnerships	Build support for VTA services and programs	+ / -



appendices

Appendix A: Detailed Project Lists and Descriptions

Appendix B: Community Design and Transportation Program

Appendix C: Transportation, Energy and Air Quality Program

Appendix D: Systemwide Performance Measures

Appendix E: Summary of VTA Guiding Policies

Appendix F: Glossary of Terms

Appendix A: Detailed Project Lists and Descriptions

LOCAL STREETS AND COUNTY ROADS CONSTRAINED PROJECT LIST

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R1	**Hacienda Ave. Improvements**—Reconstructs and reconfigures Hacienda Ave. between Winchester Blvd. and San Tomas Aquino Rd.	Campbell	$3.5	$2.8
R2	**Campbell Ave. Bicycle and Pedestrian Improvements under SR 17**—Widen both sides of Campbell Ave.; install new sidewalk behind the abutment walls; replace the existing abutment walls with new retaining and wing walls with portals on both sides of East Campbell Ave.	Campbell	$3.0	$2.4
R3	**Rancho Rinconada Traffic Calming Project**—Develops a neighborhood traffic management plan for the Rancho Rinconada Neighborhood.	Cupertino	$0.1	$0.1
R4	**IOOF Ave. Overcrossing**—Construct a new overcrossing at US 101 and IOOF Ave. The new overcrossing will consist of a two-lane structure with six-foot shoulders/ bicycle lanes and eight-foot sidewalks.	Gilroy	$14.5	$9.5

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R5	**Gilroy Orbital Concept (NW Quadrant): Buena Vista Ave. to Monterey Rd.**—Construct a new four-lane arterial that extends Buena Vista Ave. from Santa Teresa Blvd. to Monterey Rd.	Gilroy	$8.5	$6.0
R6	**Las Animas Ave. Overcrossing**—Construct new overcrossing at US 101 and Las Animas Ave. The new overcrossing will consist of a two-lane structure with six-foot shoulders/bicycle lanes and eight-foot sidewalks.	Gilroy	$9.2	$6.4
R7	**Tenth St. Bridge Project**—Construct a four-lane bridge across Uvas Creek that connects existing Tenth St. on the east side of the channel with a new section of Tenth St. on the west side of the channel. The bridge will have four travel lanes plus bike lanes and sidewalks. The project also includes a new traffic signal at the intersection of Tenth St. and Uvas Park Dr.	Gilroy	$14.0	$9.5
R8	**Miramonte Ave. Bikeway Improvements**—Upgrades the bike route (Class III) on Miramonte Ave. to a bike lane (Class II) between Mountain View City Limits at the northern end of Foothill Expwy. at the southern end.	Los Altos	$1.4	$1.1
R9	**SR 9 Gateway Enhancements at University Ave. and North Santa Cruz Ave.**—Enhance the capacity and appearance by reconfiguring the intersections for bicycle and pedestrian safety with traffic signalization.	Los Gatos	$3.0	$2.4
R10	**Blossom Hill Rd. at University Ave. Intersection Improvements**—Install sidewalk, wheelchair ramps and a bicycle lane to improve pedestrian and bicycle movements. This project will also replace existing outdated traffic signals.	Los Gatos	$1.0	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R11	**Calaveras Blvd. Overpass Widening with Operational Improvements**—Replace the four-lane bridge over the Union Pacific railroad tracks with a new six-lane structure as well as new bicycle and pedestrian facilities on both sides. Includes intersection improvements at Abel St. and from the overpass west to Abbott Ave. on Calaveras Blvd.	Milpitas	$70.0	$56.0
R12	**Montague Expwy. and Great Mall Pkwy./Capitol Ave. Grade Separation**—Elevate Great Mall Pkwy./Capitol Ave. over Montague Expwy., placing it at the same level of the Tasman East Light Rail system. Montague Expwy. and all turn movements will remain at-grade level.	Milpitas	$60.0	$48.0
R13	**Dixon Landing Rd. Widening**—Project consists of widening Dixon Landing Rd. from four to six travel lanes between North Milpitas Blvd. and I-880. This project will also include provision of bicycle lanes, sidewalks and an upgrade to the Union Pacific Railroad crossing (located just east of the Milmont Rd. signalized intersection). These improvements will allow for enhanced traffic flow on this critical east-west connector route.	Milpitas	$60.0	$48.0
R14	**Dixon Landing Rd. and North Milpitas Blvd. Intersection Improvements**—The Dixon Landing Rd. and North Milpitas Blvd. intersection is a key northern gateway into the City of Milpitas. Construct an additional northbound and southbound left-turn lane and an eastbound left and right-turn lane to improve level of service at this location.	Milpitas	$3.0	$2.4
R15	**Butterfield Blvd. South Extension**—Extends Butterfield Blvd. from Tennant Ave. to Watsonville Rd. Constructs new roadway segment and railroad overpass bridge, extends drainage channel, upgrades traffic signals, installs median and landscaping, bike lanes and sidewalks.	Morgan Hill	$18.8	$9.4

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R16	**Santa Teresa Blvd. Improvements**—Construct a new roadway segment to provide connection between West Main Ave. and DeWitt Ave. at Spring Ave. The new segment will be a four-lane arterial with median, landscaping, sidewalks and bike lanes.	Morgan Hill	$10.2	$5.1
R17	**Rengstorff Ave. Grade Separation**—This project will construct a grade separation, depressing Rengstorff Ave. under the Caltrain tracks and reconnecting the roadway to a new at-grade Rengstorff Ave. and Central Expwy. intersection.	Mountain View	$65.0	$64.9
R18	**Palo Alto Smart Residential Arterials**—Designs and constructs Automated Traffic Signal System elements, Electronic Driver Speed Advisory signs and lighted pedestrian crossings along five residential streets: Embarcadero Rd., University Ave., Middlefield Rd., Charleston Rd. and Arastradero Rd.	Palo Alto	$10.0	$8.0
R19	**Autumn Pkwy. Improvement from Union Pacific Railroad to Park Ave.**—Extend new four-lane multimodal street from Union Pacific Railroad crossing to St. John St. and improve existing Autumn St. from St. John St. to Park Ave.	San Jose	$33.0	$26.4
R20	**North First St. Core Area Grid Streets**—Several local streets will be constructed to form a "grid system" of streets to serve future development and provide connections to all major arterials in North San Jose.	San Jose	$61.0	$0.0
R21	**Chynoweth Ave. Extension from Almaden Expwy. to Winfield Blvd.**—Road will provide a new four-lane connection. Chynoweth Ave. bridge will include construction of a new connector, bike lanes and sidewalks.	San Jose	$15.0	$12.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R22	**Charcot Ave. Extension Over I-880**—Planned Charcot Ave. overpass will cross I-880 and provide extension from Charcot Ave. to Old Oakland Rd. Connection will provide an alternative east/west route to Brokaw Rd. and Montague Expwy. as well as provide for bicycle and pedestrian access.	San Jose	$34.0	$17.0
R23	**Coleman Ave. Widening from I-880 to Taylor St.**—Widen Coleman Ave. to six lanes as part of an enhanced highway gateway to serve planned expansion of Downtown San Jose.	San Jose	$13.0	$10.4
R24	**King Rd. Bridge Replacement and Widening at Penitencia Creek**—Eliminate roadway bottleneck along King Rd. and replace bridge to accommodate flood control and bicycle and pedestrian trail facilities along Penitencia Creek, a bicycle and pedestrian access route to the planned Berryessa BART station.	San Jose	$5.0	$4.0
R25	**Branham Ln. Widening from Vista Park Dr. to Snell Ave.**—Widen Branham Ln. to four lanes and add sidewalks, bike lanes and median islands. Eliminate roadway bottleneck and enhance bicycle and pedestrian facilities to create part of a multi-modal transportation corridor along planned "agriculture heritage" park and connecting with Branham Light Rail Station, Guadalupe River Trail and Coyote Creek Trail.	San Jose	$10.3	$8.2
R26	**Blossom Hill Rd. Bike/Ped Improvements**—Provides bicycle and pedestrian overcrossing at Blossom Hill Rd./ Monterey Highway area over Union Pacific Railroad tracks.	San Jose	$10.0	$0.0
R27	**Caltrain Pedestrian Crossing Bridge at Blossom Hill Station**—Pedestrian bridge connecting Edenvale Transit Village, which includes 2,000 housing units, to Caltrain Rail Station.	San Jose	$2.5	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R28	**Almaden Rd. Improvement from Malone Rd. to Curtner Ave.**—Project will provide significant bottleneck relief, continuous bicycle and pedestrian improvements, sidewalk improvements and bicycle trail connections.	San Jose	$5.4	$4.2
R29	**Downtown Couplet Conversion Projects**—Conversion of one-way couplets to two-way streets, reduce lanes and add bike lanes along 10th St. and 11th St., Almaden Ave. and Vine St., and 2nd St. and 3rd St.	San Jose	$22.0	$11.0
R30	**North San Jose Bicycle and Pedestrian Improvements**—New bike lanes and sidewalks to convert previously auto-oriented streets into multimodal streets.	San Jose	$33.0	$0.0
R31	**Snell Ave. Widening from Branham Ln. to Chynoweth Ave.**—Widen Snell Ave. and add median landscaping to relieve congestion, improve safety, enhance aesthetics.	San Jose	$4.0	$3.2
R32	**Zanker Rd. Widening from US 101 to Tasman Dr.**—Widen Zanker Rd. from to six lanes to support traffic circulation in North San Jose area.	San Jose	$54.0	$0.0
R33	**Branham Ln./Monterey Hwy Grade Crossing Project**—Reconstructs the Branham Ln. intersection with Monterey Hwy below the Caltrain and Union Pacific Railroad corridor to improve safety and accommodate California High Speed Rail. Includes R35 - Caltrain Grade Separation at Branham Ln.	San Jose	$30.0	$24.0
R34	**Neiman Blvd. Pedestrian Overcrossing at Capitol Expwy.**—Project provides new connection for bicycle and pedestrian safety and improved access to Eastridge Transit Center.	San Jose	$8.0	$6.4
R35	**Caltrain Grade Separation at Branham Ln.**—Included in R33.	San Jose	—	—

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R36	**Senter Rd. Widening from Umbarger Rd. to Lewis Rd.**—Eliminates roadway bottleneck, improves bicycle and pedestrian facilities and installs median landscaping.	San Jose	$5.4	$4.3
R37	**North San Jose Miscellaneous Intersection Improvements**—Makes improvements to various intersections in North San Jose.	San Jose	$29.0	$0.0
R38	**Bird Ave. Pedestrian Corridor**—Development of bicycle lanes, sidewalks and interchange improvements.	San Jose	$3.0	$2.4
R39	**Park Ave. Improvements from Bird Ave. to SR87**—Widen Park Ave. to add median islands and improve bike/ped facilities at gateway to Downtown San Jose.	San Jose	$4.1	$3.3
R40	**Oakland Rd. Improvements from 101 to Montague – Phase 2**—Completes widening of Oakland Rd. to six lanes for improved capacity and traffic flow and adds median islands for enhanced safety and aesthetics.	San Jose	$10.0	$5.0
R41	**Auzerais Ave. Bicycle and Pedestrian Improvements from Sunol St. to Race St.**—Adds bicycle lanes, sidewalks and streetscape amenities in the Midtown area improving connection between high-density housing and Light Rail Transit.	San Jose	$1.9	$1.5
R42	**Caltrain Grade Separation at Skyway Dr.**—Roadway underpass grade separation at Caltrain railroad tracks and future High Speed Rail. Includes significant safety and multimodal access improvements.	San Jose	$25.0	$20.0
R43	**San Carlos St. Bridge Replacement and Widening at Caltrain/ Vasona LRT**—Replace structurally deficient bridge with improved facilities for biking and walking.	San Jose	$10.0	$8.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R44	**Great America Pkwy./Mission College Blvd. Intersection Improvements**—Intersection Improvements at the intersection of Great American Pkwy. and Mission College Blvd. This includes widening and capacity improvements to add triple left turns in two directions and traffic signal upgrades.	Santa Clara	$6.5	$5.2
R45	**El Camino Real and Lafayette St. Intersection Improvements**—Widening and capacity improvements and signal systems upgrades at the intersection of El Camino Real and Lafayette St.	Santa Clara	$1.0	$0.8
R46	**Reconstruction/Rehabilitation of Various Streets**—Reconstruction and Rehabilitation of entire streets network. Includes street pavements, sidewalks, curbs and gutters and utilities.	Santa Clara	$15.0	$12.0
R47	**El Camino Real/San Tomas Expwy. Intersection Improvements**—Intersection Improvements at El Camino Real and San Tomas Expwy., including widening and capacity improvements and traffic signal upgrades.	Santa Clara	$0.8	$0.6
R48	**Center Ave. and Marcella Ave. two-lane Connection**—Extend Center Ave. approx. 0.2 miles as a two-lane roadway to connect to Marcella Ave.	Santa Clara County	$3.0	$2.4
R49	**DeWitt Ave./Sunnyside Ave. Realignment at Edmunsen Ave.**—Aligns DeWitt Ave. with Sunnyside Ave. to eliminate the existing offset intersection and introduce shoulder treatments.	Santa Clara County	$6.6	$5.3
R50	**Hill Rd. Extension from East Main Ave. to Peet Rd.**—Constructs a new two-lane alignment for Hill Rd. from East Main Ave. across Half Rd. and connect to Peet Rd. Project also includes realigning existing Peet Rd. approach to Half Rd. to line up and connect with an extension of Hill Rd.	Santa Clara County	$8.0	$6.4

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R51	**Marcella Ave. Two-Lane Realignment**—Realign existing two-lane Marcella Ave. into a straighter line (eliminate 90-degree zig-zag along the alignment) to improve line of sight and level of service.	Santa Clara County	$6.0	$4.8
R52	**Foothill-Loyola Bridge**—Widen Loyola Bridge over Foothill Expwy. to add a third lane (for left turns), six-foot shoulders for bicycle use and five-foot sidewalks with pedestrian ramps.	Santa Clara County	$1.0	$0.8
R53	**Fitzgerald Ave./Masten Ave. Realignment at Monterey Rd.**—Straighten the existing off-set intersection to provide an aligned intersection and add a left-turn lane to Fitzgerald Ave. It will also provide bike lanes and sidewalks.	Santa Clara County	$0.6	$0.5
R54	**Alum Rock Ave. Pedestrian Connection to Miguelita Bridge**—Construct pedestrian facilities, pedestrian ramps and install signage, striping and crosswalks to close the sidewalk gap on Alum Rock Ave. eastbound approach to the newly constructed Miguelita Creek Pedestrian Bridge.	Santa Clara County	$0.4	$0.3
R55	**Santa Teresa Blvd. & Tilton Ave. Traffic Signal Improvements**—Installation of traffic signal at the intersection of Santa Teresa Blvd. and Tilton Ave.	Santa Clara County	$0.6	$0.5
R56	**Railroad Crossing Improvements at Church Ave. and Monterey Hwy.**—Improves the railroad crossing and traffic operation and safety at the Church Ave. and Monterey Hwy. intersection for all modes of transportation.	Santa Clara County	$0.7	$0.6
R57	**McKee Rd. Pedestrian Improvements**—Construct sidewalks and pedestrian ramps along McKee Rd. between White Rd. and Staples Ave. Install signage, striping and crosswalks; and create parking restricted zone due to visual obstruction if needed.	Santa Clara County	$0.4	$0.3

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R58	**Watsonville Rd. Center Turn Lane**—Add center lane and right turn improvements where needed to serve driveways and cross streets and improve paved shoulders for bicycle use.	Santa Clara County	$7.0	$5.6
R59	**Santa Teresa Blvd. & San Martin Ave. Traffic Signal Improvements**—Installation of traffic signal at the intersection of Santa Teresa Blvd. and San Martin Ave.	Santa Clara County	$0.6	$0.5
R60	**Doyle Rd. Bicycle and Pedestrian Trail Connection**—Provide bicycle and pedestrian access from where Doyle Rd. deadends into Lawrence Expwy. (currently a T-intersection) to the trail west of Lawrence Expwy. Project involves adding a crosswalk on Lawrence Expwy., modifying the signal system for the crossing, modifying a soundwall to create an opening for the bicyclist/pedestrians and making other bicycle/pedestrian improvements necessary for trail access.	Santa Clara County	$0.4	$0.3
R61	**SR 9 Pedestrian Safety Improvement**—SR 9 Pedestrian Safety Improvements consist of pedestrian sidewalk/paths and include supporting improvements such as AC dikes, drainage improvements, utility under grounding/relocation, retaining walls/concrete barriers, driveway/property restorations, ADA compliant curb ramps, clearing/grubbing, tree removal and signing/striping. A bicycle and pedestrian bridge spanning Los Gatos Creek and connecting to the existing creek trail is also part of this project.	Saratoga	$2.0	$1.6
R62	**Citywide Signal Upgrade Project Phase II**—Provide Traffic Management System at City Hall and communication equipment to all upgraded signals. Interconnect signals along Coordination Corridors and coordinate with Management System.	Saratoga	$0.5	$0.4

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R63	**Herriman Ave./Saratoga Ave. Traffic Signal**—Install a traffic signal at the intersection of Herriman Ave. and Saratoga Ave. that currently meets traffic warrants.	Saratoga	$0.3	$0.2
R64	**Prospect Rd. Median Project**—This project will provide new medians with landscape along Prospect Rd. between Saratoga Ave. and Saratoga-Sunnyvale Rd. This is a joint project between the City of Saratoga and City of San Jose. The existing median along Prospect Rd. consist of State detail 22 striping.	Saratoga	$2.0	$1.6
R65	**Verde Vista Ln. Traffic Signal**—Install a traffic signal at the intersection of Verde Vista Ln. and Saratoga-Sunnyvale Rd. that currently meets traffic warrants.	Saratoga	$0.3	$0.2
R66	**Saratoga Ave. Rehabilitation and Overlay Project**—Provide pavement rehabilitation and overlay for several segments along Saratoga Ave., including new striping and bike facilities in the final striping wherever feasible and consistent with local plans. The project will consist of two phases along Saratoga Ave.	Saratoga	$0.8	$0.6
R67	**Saratoga Ave. Sidewalk Pedestrian Improvement**—Provide the necessary sidewalk gap closure that exists between the project limits, including new concrete gutters, curbs, sidewalks and handicap ramps.	Saratoga	$0.3	$0.2
R68	**Mary Ave. Extension**—Reduces congestion and increases access to the Moffett Industrial Park area by extending Mary Ave. north across SR-237, reconfiguring the Mathilda Ave./US-101 interchange, re-routing Moffett Park Dr. and modifying the eastbound SR 237/Northbound Mathilda Ave. flyover to create an alternative north/south route.	Sunnyvale	$58.0	$29.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R69	**Lawrence Expwy. and Wildwood Ave. Realignment and Signalization**—Realigns Wildwood Ave. to connect directly with Lawrence Expwy. and creates a new signalized intersection at Lawrence Expwy. and Wildwood Ave.	Sunnyvale	$5.0	$4.0
R70	**Comprehensive Sidewalk Network for Employment Areas**—Completion of sidewalks on all City streets in industrial areas.	Sunnyvale	$8.1	$6.5
R71	**Sunnyvale Local Street Improvements**—Intersection widening and sidewalk improvements at various locations citywide.	Sunnyvale	$14.7	$0.0
R72	**Sunnyvale Downtown Specific Plan Transportation Improvements**—Intersection and streetscape enhancements, bikeways, signal improvements and roadway reconfiguration.	Sunnyvale	$13.0	$10.4
R73	**Installation of Pedestrian Countdown Signals**—Installation of pedestrian countdown signals at all signalized intersections citywide.	Sunnyvale	$0.2	$0.2

LOCAL STREETS AND COUNTY ROADS UNCONSTRAINED PROJECT LIST

R74	**Blossom Hill Rd. and Union Ave. Intersection Improvements**—Widen roadway, install new traffic signals and modify intersection to improve circulation and safety.	Los Gatos	$3.0	$0.0
R75	**Los Gatos-Almaden Rd. Improvements**—Installation of storm drain system, curb and gutter and sidewalk to provide continuous bicycle and pedestrian facilities from Cherry Blossom Ln. to Taft Dr.	Los Gatos	$2.5	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R76	**Los Gatos Blvd. Widening - Lark Ave. to Samaritan Dr.**—Road widening and installation of sidewalks and bicycle lanes between Lark Ave. and Samaritan Dr.	Los Gatos	$0.8	$0.0
R77	**Union Ave. Widening and Sidewalks**—Widen Union Ave. and install sidewalks to complete pedestrian and bicycle routes and improve circulation.	Los Gatos	$0.6	$0.0
R78	**Wedgewood Ave. Traffic and Pedestrian Safety Improvements - Phase II**—Addresses traffic safety improvements, pedestrian safety improvements and storm drainage issues.	Los Gatos	$1.0	$0.0
R79	**Wood Rd. Gateway on Santa Cruz Ave.**—Installation of a roundabout to calm traffic entering and exiting SR 17 adjacent to Wood Rd.	Los Gatos	$1.0	$0.0
R80	**Downtown Palo Alto Traffic Signals Upgrade**—Install emergency vehicle pre-emption detectors and video detection cameras at 30 signalized intersections on University Ave., Lytton Ave. and Hamilton Ave. between Middlefield Rd. and Alma St.	Palo Alto	$1.2	$0.0
R81	**Quito Rd. Sidewalk Improvements**—This project will provide the necessary sidewalk gap closure that exists between the project limits. This project will include new concrete gutters, curbs, sidewalks and handicap ramps. Approximately 1100 linear feet of sidewalk will be placed along the eastside of Quito Rd.	Saratoga	$0.3	$0.0
R82	**Citywide Traffic Calming Program**—Traffic calming capital construction in Sunnyvale residential neighborhoods.	Sunnyvale	$3.0	$0.0
R83	**Installation of In-Pavement Lighted Crosswalks**—Installation of in pavement lighted crosswalks at 10 locations citywide.	Sunnyvale	$0.7	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
R84	**Installation of Radar Speed Signs for School Areas**—Installation of 20 pole mounted radar speed feedback signs in school zones or on school routes.	Sunnyvale	$0.2	$0.0
R85	**Replacement of Signal Controllers Citywide**—Replacement of signal controllers that have reached the end of their functional life.	Sunnyvale	$2.7	$0.0
R86	**SR 82 Gateway Program**—Enhance gateways to Sunnyvale on El Camino Real with focal point features such as towers, fountains, beacons, gateposts, pylons and/or signs.	Sunnyvale	$4.0	$0.0
R87	**Junipero Serra Blvd. Traffic Calming**—Construct a continuous eight to twelve foot wide median with bulb-outs at each end and possibly in the middle as a traffic calming measure near Stanford University.	Santa Clara County	$1.7	$0.0
R88	**Magdalena at Country Club intersection signal**—Install new traffic signals at the Magdalena Ave./Country Club Dr. intersection and coordinate with existing signals at Foothill Expwy. and Magdalena Ave. as well as Fremont Ave. and Springer Rd.	Santa Clara County	$0.7	$0.0

HIGHWAY CONSTRAINED PROJECT LIST

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H1	**SR 85 Express Lanes: US 101 (South San Jose to Mountain View)**—Convert existing HOV lanes on SR 85 to express lanes.	Mountain View, Los Altos, Sunnyvale, Cupertino, Saratoga, Campbell, Los Gatos and San Jose	$72.0	$72.0
H2	**SR 87 Express Lanes: SR 85 to US 101 (Conversion)**—Convert HOV lane to express lane.	San Jose	$30.0	$30.0
H3	**US 101 Express Lanes: San Mateo Countyline to SR 85 in Mountain View (Conversion)**—Convert existing HOV lanes to express Lanes on US 101 from the San Mateo County line to SR 85 in Mountain View.	Palo Alto, Mountain View, Sunnyvale, Santa Clara, San Jose	$12.0	$12.0
H4	**US 101 Express Lanes: SR 85 (San Jose) to Cochrane Rd. (Conversion)**—Convert existing HOV lanes to express lanes on US 101 from SR 85 in South San Jose to Cochrane Rd. in Morgan Hill.	San Jose, Morgan Hill, Santa Clara County	$23.0	$23.0
H5	**US 101 Express Lanes: SR 85 in Mountain View to SR 85 in San Jose (Conversion)**—Convert existing HOV lanes to express lanes on US 101 between SR 85 Mountain View and SR 85 in San Jose.	Palo Alto, Mountain View, Sunnyvale, Santa Clara, San Jose	$90.0	$90.0
H6	**US 101 HOV/Express Lanes: Cochrane Rd. to Masten Ave.**—Build HOV/express lanes on US 101 from Cochrane Rd. to Masten Ave.	Morgan Hill, Santa Clara County	$93.0	$93.0
H7	**US 101 HOV/Express Lanes: Masten Ave. to 10th St.**—Build HOV/express lanes on US 101 from Masten Ave. to 10th St. in Gilroy.	Gilroy, Santa Clara County	$59.0	$59.0
H8	**US 101 HOV/Express Lanes: 10th St. to SR 25**—Build HOV/express lane on US 101 between 10th St and SR 25 in Gilroy.	Gilroy, Santa Clara County	$43.0	$43.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H9	**SR 237 Express Lanes: I-880 to Mathilda Ave. (Conversion)**—Convert existing HOV lanes to express lanes from I-880 to Mathilda Ave.	Milpitas, San Jose, Santa Clara, Sunnyvale, Mountain View	$20.0	$20.0
H10	**SR 237 Express Lane Connectors (Milpitas) to I-880**—Convert HOV direct freeway connectors, I-880 southbound to SR 237 westbound and SR 237 eastbound to I-880 northbound to express direct connectors.	Milpitas	$5.0	$5.0
H11	**SR 237 HOV/Express Lanes: Mathilda Ave. to SR 85**—Build new HOV/express lanes on SR 237 between Mathilda Ave. and SR 85.	Sunnyvale and Mountain View	$70.0	$70.0
H12	**I-280 Express Lanes: Leland Ave. to Magdalena Ave. (Conversion)**—Convert existing HOV lanes to express lanes on I-280 from Leland Ave. to Magdalena Ave.	San Jose, Cupertino, Los Altos	$50.0	$50.0
H13	**I-280 Express Lanes: US 101 to Leland Ave.**—Build HOV/express lanes on I-280 between US 101 and Leland Ave.	San Jose	$21.0	$21.0
H14	**I-280 HOV/Express Lanes: Southbound El Monte Rd. to Magdalena Ave.**—Build HOV/express lane on I-280 southbound from El Monte Rd. to Magdalena Ave.	Los Altos Hills	$12.0	$12.0
H15	**I-680 HOV/Express Lanes: Calaveras Blvd. to US 101**—Convert to HOV/express lane on I-680 between Calaveras Blvd. and US 101.	Milpitas and San Jose	$30.0	$30.0
H16	**I-880 Express Lanes: Alameda Countyline to US 101 (Conversion)**—Convert existing HOV lanes to express lanes on I-880 from Alameda Countyline to US 1o1.	Morgan Hill, Santa Clara County	$20.0	$20.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H17	**SR 17 Southbound/Hamilton Ave. Off-Ramp Widening**—Widen off ramp to include extra lane at Hamilton Ave. from southbound SR 17.	Campbell	$1.0	$1.0
H18	**SR 25/Santa Teresa Blvd./US 101 Interchange (includes US 101 widening between Monterey Rd. and SR 25 and connection to Santa Teresa Blvd.)**—Constructs a full interchange at the intersection of US 101 and SR 25. The project also includes a widening of US 101 between Monterey Hwy and SR 25 and an extention to Santa Teresa Blvd.	Gilroy	$233.0	$233.0
H19	**SR 85 Northbound to Eastbound SR 237 Connector Ramp and Northbound SR 85 Auxiliary Lane**—Widens off-ramp from northbound SR 85 to eastbound SR 237 to two lanes. Constructs auxiliary lane on eastbound SR 237 between SR 85 on-ramp and Middlefield Rd. Constructs braided off-ramp on eastbound SR 237 between SR 85 and Dana St.	Mountain View	$26.0	$26.0
H20	**Fremont Ave. Improvements at SR 85**—Ramp improvements at Fremont Ave. interchange and reconfiguration at Bernardo Ave.	Sunnyvale	$3.0	$3.0
H21	**SR 85/Cottle Rd. Interchange Improvements**—Interchange improvements with minor ramp reconfiguration at SR 85 and Cottle Rd.	San Jose	$5.0	$0.0
H22	**SR 87/Capitol Expwy./Narvaez Ave. Interchange Improvements**—Make changes to the SR 87 interchange, with possible adjustment at Narvaez Ave.	San Jose	$10.0	$5.0
H23	**US 101/Montague Expwy./San Tomas Expwy./Mission College Blvd. Interchange Improvements**—Construct partial cloverleaf interchange at US 101 and Montague Expwy.	Santa Clara County	$12.0	$10.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H24	**US 101/Trimble Rd./De La Cruz Blvd./Central Expwy. Interchange Improvements**—Modifies existing loop cloverleaf ramp from southbound US 101 to Trimble Rd. into a partial cloverleaf ramp (diagional ramp with signalized intersection). The southbound US 101 on-ramp from De La Cruz Blvd./Central Expwy. will be modified to one mixed-flow lane and one HOV lane with ramp metering equipment.	San Jose	$34.0	$17.0
H25	**US 101/Blossom Hill Rd. Interchange Improvements**—Reconfigure interchange at US 101/Blossom Hill Rd. in San Jose; modifications are on the local roadway system, including widening of Blossom Hill Rd. over US 101.	San Jose	$20.0	$9.0
H26	**US 101/Mabury Rd./Taylor St. Interchange Improvements**—Constructs a new interchange with full access to the US 101 freeway.	San Jose	$49.0	$24.0
H27	**US 101 Southbound Auxiliary Lane: Great America Parkway to Lawrence Expwy.**—Auxiliary lane on US 101 from Great America Pkwy. to Lawrence Expwy.	Sunnyvale	$3.0	$3.0
H28	**US 101/Old Oakland Rd. Interchange Improvements**—Interchange improvements at US 101 and Old Oakland Rd. Project may include additional widening of Old Oakland Rd.	San Jose	$20.0	$10.0
H29	**US 101 Southbound Widening from Story Rd. to Yerba Buena Road**—Adds a lane on southbound US 101 between south of Story Rd. to Yerba Buena Rd. The project also includes the modification of the US 101/ Tully Rd. interchange to a partial cloverleaf.	San Jose	$63.0	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H30	**US 101/Capitol Expwy. Interchange Improvements (includes new Northbound on-ramp from Yerba Buena Rd.)**—Converts the interchange into partial cloverleaf interchage and adds ramp storage capacity.	San Jose	$40.0	$40.0
H31	**US 101/Tennant Ave. Interchange Improvements**—Constructs a new bridge parallel to existing bridge over US 101, widens Tennant Ave. to four lanes with bike lanes and sidewalks. A northbound loop on-ramp will be constructed.	Morgan Hill	$17.0	$8.5
H32	**US 101 Southbound Auxiliary Lane Widening: I-880 to McKee**—US 101 Southbound add an auxiliary lane from 1-880 to McKee Rd.	San Jose	$9.0	$9.0
H33	**US 101 Auxiliary Lanes - SR 85 to Embarcadero Rd.**—Auxiliary lanes on US 101 in Mountain view and Palo Alto, from SR 85 to Embarcadero Rd.	Mountain View	$103.0	$0.0
H34	**US 101 Ramp Metering Facilities: 10th St**—Installation of ramp metering devices at the 10th St. interchange, with possible ramp widening.	Santa Clara County	$7.0	$7.0
H35	**US 101 Ramp Metering Facilities at Leavesley Rd.**—Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	$10.0	$10.0
H36	**US 101 Ramp Metering Facilities: Masten Ave.**—Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	$5.0	$5.0
H37	**US 101 Ramp Metering Facilities: San Martin Ave.**—Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	$5.0	$5.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H38	**US 101 Ramp Metering Facilities: Tennant Ave.**—Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	$6.0	$6.0
H39	**US 101 Ramp Metering Facilities: E. Dunne Ave.**—Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	$5.0	$5.0
H40	**US 101 Ramp Metering Facilities: Cochrane Ave.**—Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	$6.0	$6.0
H41	**US 101 Ramp Metering Facilities: Coyote Creek Golf Dr.**—Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	$5.0	$5.0
H42	**US 101 Ramp Metering Facilities: Bailey Ave.**—Installation of ramp metering devices at the interchange, with possible ramp widening.	Santa Clara County	$4.0	$4.0
H43	**US 101 Ramp and Intersection Improvements: Southbound off-ramp at Tennant Ave.**—Widen off-ramp from to three lanes to provide a second right turn lane.	Santa Clara County	$1.0	$1.0
H44	**US 101 Ramp/Intersection Improvements: Southbound Ramp at 10th St.**—Improve the US 101 southbound ramp at 10th St.	Santa Clara County	$3.0	$3.0
H45	**US 101 Ramp/Intersection Improvements: US 101 Southbound and Northbound Ramps at Masten Ave.**—Signalize ramp termini.	Santa Clara County	$1.0	$1.0
H46	**US 101 TOS Improvements**—Incident management, CCTV, speed control system in South County area between SR 85 and Monterey Rd.	Santa Clara County	$35.0	$35.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H47	**US 101/Hellyer Ave. Interchange Improvements**—Reconfigure interchange at US 101/Hellyer Ave. in San Jose by widening the overcrossing from to four lanes and installing traffic signals at each of the two off-ramp intersections.	San Jose	$14.0	$12.0
H48	**US 101/Zanker Rd./Skyport Dr./Fourth St. Interchange Improvements**—Constructs a new interchange connecting Zanker Rd. and Old Bayshore Highway, with North Fourth St. and Skyport Dr. at US 101.	San Jose	$90.0	$45.0
H49	**US 101 Southbound Auxiliary Lane Improvement Between Ellis St. and SR 237**—Constructs a southbound auxilliary lane on US 101 from Ellis St. interchange to eastbound SR 237.	Sunnyvale	$4.0	$4.0
H50	**US 101 Ramp/Intersection Improvements: Southbound off-ramp at Cochrane Rd.**—Widen southbound off ramp to three lanes.	Santa Clara County	$1.0	$1.0
H51	**US 101 Ramp/Intersection Improvements:Northbound off-ramp at Cochrane Rd.**—Widen eastbound approach to Cochrane to provide 2nd thru lane.	Santa Clara County	$1.0	$1.0
H52	**US 101 Ramp/Intersection Improvements at Dunne Ave.**—Local street improvements.	Santa Clara County	$2.0	$2.0
H53	**US 101/Buena Vista Ave. Interchange Improvements**—Project includes construction of a flyover southbound on-ramp to braid with the existing truck exit at the CHP Inspection Station. Off-ramp diagonal ramps will be constructed.	Gilroy	$27.0	$27.0
H54	**US 101 Ramp/Intersection Improvements: US 101 Southbound Ramps at San Martin Ave.**—Signalize ramp termini at US 101 and San Martin Ave.	Santa Clara County	$1.0	$1.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H55	**US 101 Southbound Improvements from San Antonio Rd. to Charleston Rd./Rengstorff Ave.**—Southbound improvements on US 101 from San Antonio Rd. to Charleston Rd./Rengstorff Ave.	Palo Alto, Mountain View	$19.0	$19.0
H56	**US 101 Widening to Six-Lane Freeway: SR 25 to SR 129**—Widen US 101 to six lanes from SR 25 to SR 129.	Santa Clara County	$170.0	$0.0
H57	**SR 152 Improvements: Intersection Improvement at Ferguson Road**—Provides lighting and widening improvements at the intersection of SR 152 from Ferguson Rd.	Santa Clara County	$2.0	$2.0
H58	**SR 152 Ramp/Intersection Improvements: SR 152 at Bloomfield Ave.**—Ramp and intersection improvements for SR 152 at Bloomfield Ave.	Santa Clara County	$2.0	$2.0
H59	**SR 152 Ramp/Intersection Improvements: SR 152 at Frazier Lake Rd**.—Intersection improvements at SR 152 at Frazier Lake Rd.	Santa Clara County	$2.0	$2.0
H60	**SR 152 Ramp/Intersection Improvements: SR 152 at Watsonville Rd.**—Construct a left turn lane on eastbound SR 152 at the Watsonville Rd. intersection, add a refuge area for motorists turning left onto eastbound SR 152, improve the shoulders to provide motorists with additional recovery area and overlay the existing pavement.	Santa Clara County	$3.0	$3.0
H61	**New SR 152 Alignment: SR 156 to US 101**—Construct new SR 152 alignment between SR 156 and US 101 and conversion to toll highway.	Gilroy, Santa Clara and San Benito Counties	$350.0	$350.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H62	**SR 237/El Camino Real/Grant Rd. Intersection Improvements**—Extends the westbound SR 237 left-turn storage lane, extends the northbound El Camino Real right-turn lane to Yuba Drive, extends southbound El Camino Real left-turn storage lane and constructs southbound El Camino Real right-turn lane to Grant Rd.	Mountain View	$4.0	$4.0
H63	**SR 237 Westbound On-Ramp at Middlefield Rd.**—Construct westbound loop on-ramp from northbound Middlefield Rd. to westbound SR 237. Eliminate the signalized intersection at Middlefield Rd./ westbound SR 237 diagonal on-ramp. Realign frontage road to form a new intersection at Middlefield Rd./Ferguson Dr.	Mountain View	$11.0	$11.0
H64	**SR 237 Eastbound Auxiliary Lane between Zanker Rd. and North First St.**—SR 237 eastbound auxiliary lane between Zanker Rd. and North First St.	San Jose, Santa Clara County	$7.0	$7.0
H65	**SR 237/Mathilda Ave. and US 101/Mathilda Ave. Interchange Improvements**—Convert north side of northbound US 101/Mathilda Ave. interchange to partial cloverleaf; remove northbound US 101 loop ramp to southbound Mathilda Ave.; add diagonal ramp from southbound Mathilda Ave. to northbound US 101; add auxiliary lane on northbound US 101 between Mathilda Ave. and SR 237; remove Mathilda Ave. on-ramp to westbound SR 237.	Sunnyvale	$15.0	$15.0
H66	**SR 237/North First St. Interchange Improvements**—Interchange improvements at SR 237 and North First St.	San Jose	$2.0	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H67	**SR 237 Westbound to Northbound US 101 Ramp Improvements** —Widens westbound Route 237 on-ramp from SR 237 to northbound US 101 to two lanes. Adds auxilliary lane on northbound US 101 from SR 237 on-ramp to Ellis St. interchange.	Sunnyvale	$9.0	$9.0
H68	**SR 237 Eastbound Auxiliary Lanes: Mathilda Ave. to Fair Oaks Ave.**—Build auxiliary lanes between Mathilda Ave. and Fair Oaks Ave. on eastbound SR 237.	Sunnyvale	$6.0	$6.0
H69	**I-280 Northbound - Second Exit Lane to Foothill Expwy.**—Constructs a second exit lane from northbound I-280 to Foothill Expwy.	Cupertino, Los Altos	$2.0	$2.0
H70	**I-280 Northbound Winchester Blvd. Interchange Improvements**—Included in H73.	San Jose	—	—
H71	**I-280 Downtown Access Improvements between 3rd St. and 7th St.**—Reconstructs the existing northbound I-280 off-ramp at 7th St. to connect directly to 3rd St.	San Jose	$25.0	$20.0
H72	**I-880/Montague Expwy. Interchange Improvement**—Construct partial cloverleaf interchange at US 101 and Montague Expwy.	Milpitas, San Jose, Santa Clara County	$12.0	$0.0
H73	**I-880/I-280/Stevens Creek Blvd. Interchange Improvements**—Eliminates the eastbound off-ramp loop and reconfigures the off-ramp to eastbound Stevens Creek Blvd. which will include construction of a signal and highway lighting. This project also includes H70 - I-280 Northbound Winchester Blvd. Interchange improvements.	San Jose	$64.0	$59.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H74	**I-880 Widening for HOV Lanes from SR 237 to Old Bayshore**—Widen I-880 for HOV lanes in both directions between Route 237 in Milpitas to US 101 in San Jose.	Milpitas, San Jose	$95.0	$0.0
H75	**I-880 Northbound Auxiliary Lane - Coleman Ave. to First St.**—I-880 northbound auxiliary lane between Coleman Ave. and First St.	San Jose	$13.0	$13.0

HIGHWAY UNCONSTRAINED PROJECT LIST

H76	**I-880 HOV/Express Lanes: US 101 to I-280**—Build HOV/Express Lane on I 880 between US 101 and I 280.	San Jose	$160.0	$0.0
H77	**SR 85 Southbound Auxiliary Lanes from Stevens Creek Blvd. to Saratoga-Sunnyvale Rd.**—Constructs auxiliary lane on SR 85 northbound/southbound from Saratoga-Sunnyvale to Stevens Creek Blvd. and related TOS improvements.	Cupertino	$15.0	$0.0
H78	**I-880 Southbound Auxiliary Lane - First St. to Coleman Ave.**—I-880 Southbound Auxiliary lane between Coleman Ave. and First St.	San Jose	$17.0	$0.0
H79	**SR 237 Westbound Auxiliary Lane between Coyote Creek Bridge and North First St.**—Widens and constructs auxiliary lane on eastbound SR 237 between North First St. to Zanker Rd.; and includes TOS elements.	Milpitas, San Jose	$17.0	$0.0
H80	**US 101 Northbound Auxiliary Lane Widening: I-880 to McKee**—Northbound auxiliary lane widening on US 101 between I-880 and McKee Rd.	San Jose	$10.0	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H81	**SR 85/ El Camino Real Interchange Improvement**—SR 85 auxiliary lanes between El Camino Real and SR 237, and SR 85/El Camino Real interchange improvements.	Mountain View	$21.0	$0.0
H82	**SR 85 Northbound Auxiliary Lanes from North of Winchester Blvd. to Saratoga Ave.**—Proposes auxiliary lanes from Saratoga Ave. to Winchester Blvd. on SR 85 in both directions along with related TOS improvements.	Saratoga, San Jose, Campbell, Los Gatos	$18.0	$0.0
H83	**US 101 Northbound Auxiliary Lane Widening: Tennant Ave. to Dunne Ave.**—Auxiliary lane widening on US 101 between Tennant Ave. and Dunne Ave. in Morgan Hill.	Morgan Hill, Santa Clara County	$11.0	$0.0
H84	**US 101 Southbound Auxiliary Lane Widening: Tennant Ave. to Dunne Ave.**—Auxiliary lane widening on US 101 Southbound between Tennant Ave. and Dunne Ave.	Morgan Hill, Santa Clara County	$11.0	$0.0
H85	**I-680/Montague Expwy. Interchange Improvement**—Construct partial clover-leaf interchange at I-680 and Montague Expwy. including improvements on Montague Expwy.	San Jose (Santa Clara County)	$18.0	$0.0
H86	**SR 85 Auxiliary Lanes: Homestead Ave. to Fremont Ave.**—Creates SR 85 northbound and southbound auxiliary lanes between Homestead Ave. and Fremont Ave.	Sunnyvale, Cupertino	$22.0	$0.0
H87	**US 101 Auxiliary Lane Widenings: Trimble Rd. to Montague Expwy.**—Widen US 101 for northbound and south-bound auxiliary lane from Trimble Rd. to Montague Expwy.	San Jose, Santa Clara	$12.0	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H88	**SR 85 Northbound Auxiliary Lanes from Stevens Creek Blvd. to Saratoga/ Sunnyvale Road**—Constructs auxiliary lanes on northbound and southbound SR 85 between Saratoga-Sunnyvale Rd. and Stevens Creek Blvd. and related TOS improvements.	Cupertino, San Jose	$15.0	$0.0
H89	**I-280 Northbound Saratoga Ave. - Connect Auxiliary Lanes to Complete Fourth Lane**—Connect auxiliary lanes to complete fourth lane on northbound I-280 at Saratoga Ave.	San Jose	$20.0	$0.0
H90	**SR 85 Southbound Auxiliary Lanes from North of Winchester Blvd. to Saratoga Ave.**—Proposes auxiliary lanes from Saratoga Ave. to Winchester Blvd. on SR 85 in northbound and southbound directions along with related TOS improvements.	Saratoga, San Jose, Campbell, Los Gatos	$18.0	$0.0
H91	**US 101 Southbound Braided Ramps between Capitol Expwy. and Yerba Buena Rd.**—Adds a braided ramp onto southbound 101 between Capitol Expwy. and Yerba Buena Rd. Includes improvements at Capitol Expwy. interchange.	San Jose	$24.0	$0.0
H92	**SR 237 Eastbound to Mathilda Ave. Flyover Off-Ramp**—Convert north side of northbound US 101 at Mathilda Ave. interchange to partial cloverleaf. Remove Northbound US 101 loop ramp to southbound Mathilda Ave. Add diagonal ramp from southbound Mathilda Ave. to northbound US 101; add auxiliary lane on northbound US 101 between Mathilda Ave. and SR 237. Remove Mathilda Ave. on-ramp to westbound SR 237.	Sunnyvale	$20.0	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H93	**SR 237 Westbound to Southbound SR 85 Connector Ramp Improvements (including SR 85 auxiliary lanes between El Camino Real and SR 237)**—Construct a collector/distributor road in the westbound direction on SR 237 from the Central Expwy. overcrossing to SR 85. Widen off-ramp from westbound SR 237 to southbound SR 85 to two lanes. Add auxiliary lane in the southbound direction between SR 237 and the El Camino Real interchange on SR 85.	Mountain View	$37.0	$0.0
H94	**US 101 Northbound Auxiliary Lane Widening: 10th St. to Leavesley Rd.**—US 101 northbound widening of auxiliary lane between 10th St. and Leavesley Rd. in Gilroy.	Gilroy	$20.0	$0.0
H95	**US 101 Southbound Auxiliary Lane Widening: 10th St. to Leavesley Rd.**—US 101 southbound widening of the auxiliary lane from 10th St. to Leavesley Rd.	Gilroy	$21.0	$0.0
H96	**I-280 Northbound Braided Ramps between Foothill Expwy. and SR 85**—Reconfigures the existing I-280 northbound off-ramp to Foothill Expwy. into a braided ramp with the southbound SR 85 to northbound I-280 direct connector.	Cupertino, Los Altos	$40.0	$0.0
H97	**US 101 Northbound Braided Ramps between Capitol Expwy. and Yerba Buena Rd.**—Adds a braided ramp onto northbound US 101 between Capitol Expwy. and Yerba Buena Rd., including improvements at the Capitol Expwy. interchange.	San Jose	$24.0	$0.0
H98	**SR 85 Northbound/Southbound Auxiliary Lanes from Saratoga-Sunnyvale Rd. to Saratoga Ave.**—Proposes auxiliary lanes from Saratoga-Sunnyvale Rd. to Saratoga Ave. on SR 85 in northbound and southbound directions, along with related TOS improvements.	San Jose, Saratoga	$37.0	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
H99	**Moffett Blvd./US 101 Overcrossing Replacement**—Replacement of Moffett Blvd over crossing of US 101.	Mountain View	$20.0	$0.0
H100	**US 101/Oregon Expwy./Embarcadero Rd. Improvements**—Improvements to US 101/Oregon Expwy./Embarcadero Rd.	Santa Clara County	$50.0	$0.0
H101	**US 101 Southbound to Eastbound SR 237 Connector Improvements**—Realign exit lane from southbound US 101 to eastbound SR 237 loop ramp. Widen loop ramp from southbound US 101 to eastbound SR 237 to two lanes. Construct new SR 237 bridge over US 101 to provide auxiliary lane leading to the new two-lane connector. Reconstruct the eastbound SR 237 off-ramp to southbound US 101.	Sunnyvale	$64.0	$0.0
H102	**SR 85 Auxiliary Lanes between Fremont Ave. and El Camino Real**—Construct auxiliary lanes in both directions between Homestead Rd. and El Camino Real, reconstruct The Dalles Ave. pedestrian overcrossing, widen Fremont Ave. overcrossing structure and widen the Stevens Creek Blvd. structure.	Los Altos, Mountain View, Sunnyvale	$56.0	$0.0
H103	**US 101/Coyote Valley Parkway Interchange**—Reconfigure interchange at US 101 and Coyote Valley Pkwy. by widening on-ramps and off-ramps.	San Jose	$25.0	$0.0
H104	**I-680 Northbound/Southbound Auxiliary Lanes from McKee Rd. to Berryessa Rd.**—Addition of auxiliary lanes in both directions of I-680.	San Jose	$53.0	$0.0
H105	**I-880/US 101 Interchange Improvements**—Reconfiguration of the interchange at I-880 and US 101.	San Jose	$1,000.0	$0.0

EXPRESSWAY CONSTRAINED PROJECT LIST

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
X1	**Almaden Expwy. – Widen Coleman to Blossom Hill**—Widen Almaden Expwy. to eight lanes between Coleman Ave. and Blossom Hill Rd.	Santa Clara County	$10.5	$10.5
X2	**Capitol Expwy. – TOS Infrastructure**—Add TOS infrastructure on Capitol Expwy. between US 101 and Almaden Expwy.	Santa Clara County	$3.5	$3.5
X3	**Central Expwy. – Auxiliary Lanes between Mary Ave. and Lawrence Expwy.**—Provide auxiliary acceleration and/or deceleration lanes on Central Expwy. between Lawrence Expwy. and Mary Ave. to improve ramp operations and safety.	Santa Clara County	$17.0	$17.0
X4	**Central Expwy. – Convert Measure B HOV lane (De La Cruz Blvd. to San Tomas Expwy.)**—Converts Measure B HOV lane on Central Expwy. between San Tomas Expwy. and De La Cruz Blvd. to mixed flow.	Santa Clara County	$0.1	$0.1
X5	**Central Expwy. – Convert HOV queue Jump Lane at Bowers Ave.**—Convert HOV queue jump lanes along Central Expwy. at Bowers Ave. to general use	Santa Clara County	$0.1	$0.1
X6	**Central Expwy. – Six lanes from Lawrence Expwy. to San Tomas Expwy.**—Widen Central Expwy. between Lawrence Expwy. and San Tomas Expwy. to six through lanes, consistent with the original planned width of Central Expwy.	Santa Clara County	$13.6	$13.6
X7	**Foothill Expwy. – Extend deceleration lane at San Antonio Rd.**—Extends the existing westbound deceleration lane of Foothill Expwy. at San Antonio Rd. by 250 feet.	Santa Clara County	$0.7	$0.7

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
X8	**Foothill-Loyola Bridge**—Widen Loyola Bridge over Foothill Expwy. to add a third lane for left turns, six-foot shoulders for bicycle use and five-foot sidewalks with pedestrian ramps.	Santa Clara County	$7.0	$5.0
X9	**Lawrence Expwy. – Additional Left Turn Lane at Prospect**—Provide a second left turn lane from eastbound Prospect Rd. to northbound Lawrence Expwy. and modify existing traffic signals.	Santa Clara County	$2.6	$2.6
X10	**Lawrence Expwy. – Close Median, Right In/Out**—Close median at Lochinvar Ave. and right-in-and-out access at DeSoto Ave., Golden State Dr., Granada Ave., Buckley St., and St. Lawrence Dr./Lawrence Station Rd. on-ramp.	Santa Clara County	$1.5	$1.5
X11	**Lawrence Expwy. – Arques Square Loop Grade Separation**—Construct interchange at intersection of Lawrence Expwy. and Arques Ave. with square loops on Kern Ave. and Titan Way.	Santa Clara County	$45.0	$0.0
X12	**Lawrence Expwy. – Expand to Eight Lanes from Moorpark Ave. to South of Calvert Dr.**—Widens Lawrence Expwy. from to eight lanes between Moorpark Ave./ Bollinger Rd. and south of Calvert Dr.	Santa Clara County	$5.2	$5.2
X13	**Montague Expwy. – Eight Lanes from Trade Zone Blvd. to Park Victoria Dr.**—Widen Montague Expwy. to eight lanes between Trade Zone Blvd. and I-680 and to eight lanes between I-680 and Park Victoria Dr., including filling in deck over I-680. Designate new lanes between Trade Zone Blvd. and I-680 as HOV lanes.	Santa Clara County	$20.0	$7.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
X14	**Montague Expwy. – Eight Lanes from Lick Mill Blvd. to Trade Zone Blvd.**—Widen Montague Expwy. to eight lanes between Lick Mill Blvd. and Trade Zone Blvd. and widening of Guadalupe River Bridge and Penitencia Creek Bridge. The new lanes will be HOV lanes.	Santa Clara County	$12.0	$0.0
X15	**Montague Expwy. – Trimble Rd. Flyover**—To construct a new flyover interchange at Trimble Rd. and Montague Expwy.	Santa Clara County	$32.0	$0.0
X16	**Montague Expwy. – Mission College Blvd. At-Grade Improvements**—To provide intersection improvements by enhancing and modifying the operational characteristics of the intersection.	Santa Clara County	$4.0	$4.0
X17	**Oregon Expwy./Page Mill Rd. – I-280 Page Mill Rd. Modification for Bicycle Travel**—Modifies the I-280 freeway connections to enhance safety and improve operations primarily for bicyclists and pedestrians traveling on Page Mill Rd. through the interchange area.	Santa Clara County	$6.6	$6.6
X18	**San Tomas Expwy. – SR 17/San Tomas Expwy. Improvements**—At-grade improvements at SR 17/San Tomas Expwy: Re-stripe the eastbound through lane on White Oaks Rd. to provide an optional left as a third left turn lane; provide second right-turn lane on southbound off-ramp.	Santa Clara County	$2.6	$2.6
X19	**San Tomas Expwy. Box Culvert**—Rebuild 3.9 miles of box culvert under San Tomas Expwy.	Santa Clara County	$13.2	$13.2
X20	**San Tomas Expwy. – Eight Lanes between Williams Rd. and El Camino**—Widens San Tomas Expwy. to eight lanes between Williams Rd. and El Camino Real (SR82) with additional left-turn lane from eastbound and westbound El Camino Real to San Tomas Expwy.	Santa Clara County	$40.7	$40.7

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
X21	**Santa Teresa Blvd./Hale Ave. Corridor – Realign DeWitt Ave. S-Curve**—Realign existing "S" curve between approximately Edmundson Ave. and Spring Ave.	Santa Clara County	$2.5	$2.5
X22	**Santa Teresa Blvd./Hale Ave. Corridor – TOS Infrastructure Improvements**—Add TOS Infrastructure on Santa Teresa Blvd. between Day Rd. and Mesa Rd.	Santa Clara County	$5.0	$5.0
X23	**SCC Motorist Traffic Information and Advisory Systems**—Install traffic information outlets such as electronic information changeable message signs along expressways, advisory radio, cable TV feeds and web page to provide real time traffic information to expressway users.	Santa Clara County	$5.0	$5.0
X24	**Signal Coordination/Interconnect with Cross Streets**—To implement signal coordination between expressway signals and major cross-street signals.	Santa Clara County	$5.0	$5.0
X25	**TOS Infrastructure Improvements**—Implement ITS elements: Automated Traffic Count Collection System, Wireless Controller Communication System, Wireless Vehicular Detection System and Signal and Video Infrastructure Upgrades.	Santa Clara County	$10.0	$10.0
N/A	**Almaden Expwy. SR 85 Interchange PSR**—Initiate a Caltrans Project Study Report/Project Development Study (PDS) to reconfigure SR 85/Almaden interchange.	Santa Clara County	$0.4	$0.0
N/A	**Central Expwy. – Median Curbs**—Install median curbs where missing and enhance existing median curbs as needed between SR 85 and SR 237 to improve safety and operations.	Santa Clara County	$0.8	$0.0
N/A	**Lawrence Expwy. – I-280 Project Study Report**—Prepare Caltrans Project Study Report for Tier 1C project at the Lawrence Expwy./Calvert Dr./I-280 interchange area.	Santa Clara County	$1.0	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
N/A	**Oregon Expwy. – Alma Bridge Feasibility Study**—Alma Bridge Replacement Feasibility Study.	Santa Clara County	$0.3	$0.0

EXPRESSWAY UNCONSTRAINED PROJECT LIST

TBD	**Lawrence Expwy. – Kifer Rd. Interchange**—Construct urban interchange at the intersection of Lawrence Expwy. and Kifer Rd.	Santa Clara County	$59.0	$0.0
TBD	**Lawrence Expwy. – Monroe St. Interchange**—Construct urban interchange at the intersection of Lawrence Expwy. and Monroe St.	Santa Clara County	$59.0	$0.0
TBD	**Montague Expwy. – McCarthy Blvd. Square Loop Interchange**—Construct a square loop grade separation project at Montague Expwy. and McCarthy Blvd./ O'Toole Ave. intersection.	Santa Clara County	$37.0	$0.0

TRANSIT PROJECTS

T1	**Additional Measure A Operating and Capital Needs**[1]	All Cities	$1,954.0	$1954.0
T2	**ACE Upgrade**—The proposed project will provide VTA's share of funds for additional train sets, passenger facilities and service upgrades for the ACE service from San Joaquin and Alameda Counties.	Santa Clara, San Jose	$24.0	$24.0
T3	**BART to Milpitas, San Jose and Santa Clara**[2]—Extend BART from Fremont through Milpitas to downtown San Jose and the Santa Clara Caltrain Station.	Milpitas, San Jose, Santa Clara	$6,172.0	$6,172.0

[1] Funds assumed to be available over the 25-year plan timeframe to fund the Measure A Program and additional transit capital and operating expansion projects

[2] BART cost includes total TCRP programmed to BART extension Warm Springs to Santa Clara/San Jose, including prior expenditures.

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
T4A	**Bus Rapid Transit – El Camino BRT**[3]—The proposed project will implement a new Bus Rapid Transit (BRT) corridor in The Alameda and El Camino Real. (This is not an R3434 project.)	Mountain View, Palo Alto, Los Altos, Sunnyvale, Santa Clara, San Jose, Cupertino	$207.0	$207.0
T4B	**Bus Rapid Transit – Stevens Creek BRT**[4]—The proposed project will implement a new Bus Rapid Transit corridor along San Carlos St./Stevens Creek Blvd. from Diridon Station to De Anza College.	Mountain View, Palo Alto, Los Altos, Sunnyvale, Santa Clara, San Jose, Cupertino	$127.0	$127.0
T5A	**Caltrain Electrification Tamien to San Francisco**[5]—The project includes the installation of ten traction power sub-stations, an overhead catenary system to supply power to the trains, signal and grade crossing circuitry changes and related com-munications improvements.	Palo Alto, Mountain View, Los Altos, Sunnyvale, Santa Clara, San Jose, Morgan Hill, Gilroy	$222.0	$222.0
T5B	**Caltrain Electrification Gilroy to Tamien**[6]—Electrify Caltrain line from Tamien to Gilroy	Palo Alto, Mountain View, Los Altos, Sunnyvale, Santa Clara, San Jose, Morgan Hill, Gilroy	$123.0	$123.0
T6	**Caltrain Service Upgrades**—Construct service improvements on Caltrain line such as locomotives, access and signal systems.	Palo Alto, Mountain View, Sunnyvale, Santa Clara, San Jose, Morgan Hill, Gilroy	$203.0	$203.0

[3] Project from Diridon Station to Palo Alto

[4] Project from downtown San Jose to De Anza College

[5] Project is electrification only. Does not include capital funds needed for additional vehicles or service expansions. VTA share of cost only.

[6] Project is electrification only. Does not include capital funds needed for additional vehicles or service expansions

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
T7	**Caltrain – South County**—Double track segments on the Caltrain line between San Jose and Gilroy.	San Jose, Morgan Hill, Gilroy	$86.0	$86.0
T8A	**Santa Clara/Alum Rock Phase I: BRT**[7]—The project will provide Bus Rapid Transit as Phase I of the project in the Santa Clara-Alum Rock corridor with the ability to convert to light rail at a future date if the community desires	San Jose	$128.0	$128.0
T8B	**Santa Clara/Alum Rock Phase II: LRT**[8]—The near term development strategy (Phase I) for the corridor is Bus Rapid Transit in the Santa Clara-Alum Rock Corridor with the ability to convert to light rail at a future time (Phase II) if the community desires.	San Jose	$265.0	$265.0
T8C	**Capitol Expwy. LRT**[9]—Provides light rail extension in the East Valley. Extends the Capitol Ave. light rail line 2.6 miles from the existing Alum Rock Transit Center to a rebuilt Eastridge Transit Center.	San Jose	$334.0	$334.0
T8D	**Nieman LRT Extension**[10]—Phase II of Capitol Expwy. project that would extend light rail from Eastridge Transit Center to the Capitol Station on the Guadalupe LRT line.	San Jose	$137.0	$137.0
T8E	**Monterey Hwy BRT**[11]—One of three DTEV projects that would build Bus Rapid Transit on Monterey Hwy.	San Jose	$87.0	$87.0
T9	**Dumbarton Rail Corridor**—Rehabilitate existing rail infrastructure, procure rolling stock and commission rail transit service over the Dumbarton bridge between communities on east bay and peninsula.	Palo Alto	$44.0	$44.0

[7] Project from Eastridge via Capitol Expressway/Alum Rock/Santa Clara to Downtown San Jose
[8] Project from Santa Clara/Alum Rock to Diridon Station
[9] Project from Eastridge to existing Alum Rock LRT Station
[10] Project from Eastridge south to Nieman Ave.
[11] Project from Downtown San Jose to Santa Teresa LRT Station

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
T10	**Hwy 17 Bus Service Improvements**—The proposed project will increases bus service between Santa Clara County and Santa Cruz County over SR 17.	Los Gatos, Campbell, San Jose	$2.0	$2.0
T11	**Vasona Junction**[12]—Extension of Vasona Light Rail line two stations to Vasona Junction in Los Gatos.	Los Gatos, Campbell	$99.0	$99.0
T12	**Mineta San Jose International Airport APM Connector**—The proposed project will provide transit link to San Jose International Airport from VTA's Guadalupe Light Rail Transit Line, and from Caltrain and future BART in Santa Clara, using automated People Mover technology.	San Jose	$264.0	$264.0
T13	**Palo Alto Intermodal Center**—Expand the Palo Alto Caltrain Station and Bus Transit Center.	Palo Alto	$59.0	$59.0
T14	**ZEB Demonstration Program**—Demonstration program to achieve goal of zero emmissions to be in compliance with CARB's fleet rule.	All Cities	$20.0	$20.0
T15	**ZEB Facilities Program**—The ZEB program includes installation and modification of VTA facilities to support the demonstration program.	All Cities	$78.0	$78.0
T16	**Sunnyvale-Cupertino BRT**[13]—Bus Rapid Transit between Sunnyvale and Cupertino.	Sunnyvale/ Cupertino	$68.0	$68.0
T17	**North San Jose Transit Enhancements**[14]	San Jose	$35.0	$35.0

[12] Project from Campbell to Netflix/Highway 85 via Winchester Blvd.
[13] Project not in 2000 Measure A ballot
[14] Project included the North San Jose Development Area Deficiency Plan

TRANSPORTATION SYSTEMS OPERATIONS & MANAGEMENT (ITS) PROJECTS

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
S1	**Hamilton Ave. Intelligent Transportation System**—Expand on the ITS infrastructure currently on Hamilton Ave. by linking three signals via wireless interconnect to the Smart Corridor signals to the east. Will include signal retiming of these three signals.	Campbell	$0.4	$0.0
S2	**Citywide Traffic Signal System Upgrade**—Replace older traffic signal controllers with new controllers and signal system software that is compatible with NTCIP and Silicon Valley-ITS Data Exchange Network Software protocols.	Campbell	$0.2	$0.0
S3	**Winchester Blvd. Intelligent Transportation System**—Expand upon existing ITS equipment on Winchester Blvd. by installing new conduit, fiber and fiber equipment.	Campbell	$0.4	$0.0
S4	**Reactivation of Traffic Count Stations**—Reactivating traffic count stations along arterials such as Hamilton Ave., Winchester Blvd. and Campbell Ave.	Campbell	$0.1	$0.0
S5	**Installation of Pedestrian Countdown Timers**—Install countdown pedestrian signals at locations near schools, locations with frequent jaywalking and locations with high pedestrian volumes.	Campbell	$0.2	$0.0
S6	**City of Gilroy Adaptive Traffic Control System**	Gilroy	$0.9	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
S7	**City of Gilroy Event Management System**—Develop and implement changeable message signs, highway advisory radio, information kiosk and traveler information system for special events and incident management in the Gilroy area.	Gilroy	$0.9	$0.0
S8	**City of Gilroy Traffic Signal System Upgrade**—Upgrade traffic signal controller and communications systems with the current technology, including Interconnect, to replace outdated equipment and provide city with centralized traffic management system.	Gilroy	$3.9	$0.0
S9	**City of Gilroy Flood Watch Camera Installations**—Deployment of CCTV cameras to provide real-time video to the City of Gilroy Emergency Operations Center to be used to conduct traffic management and emergency operations activities in times of significant flooding.	Gilroy	$0.5	$0.0
S10	**ITS Enhancements on Santa Teresa Blvd.**—Signalization modifications along Santa Teresa Blvd.	Gilroy	$2.0	$0.0
S11	**10th St. and Downtown Signals Upgrade**—Controllers, adaptive, detectors along 10th St. in Gilroy.	Gilroy	$1.5	$0.0
S12	**SR 152 Signal System Upgrade**	Gilroy	$2.3	$0.0
S13	**Gilroy Community Bus Signal Priority**	Gilroy	$0.4	$0.0
S14	**Gilroy Other Signals Upgrade**	Gilroy	$1.0	$0.0
S15	**Gilroy Downtown Parking Management System**	Gilroy	$0.3	$0.0
S16	**Town of Los Gatos Traffic Signal System Upgrade**	Los Gatos	$0.3	$0.0
S17	**South Milpitas Blvd. SMART Corridor**	Milpitas	$0.5	$0.0
S18	**City of Milpitas Traffic Signal Upgrade**—Citywide improvements to signal timing.	Milpitas	$0.8	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
S19	**Citywide Traffic Signal Operation Center**—Construct traffic signal operation center.	Morgan Hill	$1.3	$0.0
S20	**Citywide Wireless Vehicle Detection System Installation**—Install wireless vehicle detection system at all signalized intersections within the City.	Morgan Hill	$0.9	$0.0
S21	**Citywide Traffic Signal Upgrade and IP Traffic Signal Access**—Upgrade the City's existing traffic signal system through the installation of new traffic signal controllers, software and Internet accessible traffic signal communications.	Mountain View	$2.5	$0.0
S22	**Grant Rd. Adaptive Traffic Signal**—Upgrade the existing traffic signal interconnect system on Grant Rd. to a new adaptive traffic signal system.	Mountain View	$1.4	$0.0
S23	**Shoreline Blvd. Adaptive Traffic Signals**—Upgrade the existing signal interconnect system to adaptive traffic signals.	Mountain View	$1.7	$0.0
S24	**Rengstorff Ave. Traffic Signal Improvements**—Along Rengstorff Ave., modify signal timing and upgrade certain signals.	Mountain View	$0.4	$0.0
S25	**Smart Residential Arterials Project**—Project consists of design and construction of Automated Traffic Signal System elements, Electronic Driver Speed and Travel Advisory signs and lighted pedestrian crossings along five residential arterial streets.	Palo Alto	$6.2	$0.0
S26	**Citywide Traffic Signal System Upgrades**—Replace outdated traffic signal controllers, cabinets and communication chips including installation of time of day GPS system equipment for each signalized intersection.	Palo Alto	$1.8	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
S27	**Citywide Traffic Signal CCTV/ Emergency Vehicle Preemption Project**—A citywide program to give priority to emergency vehicles via signal timing adjustments.	Palo Alto	$1.4	$0.0
S28	**Silicon Valley Transportation and Incident Management Center**—Setup of a location that will monitor traffic incidents as well as travel information.	San Jose	$7.5	$0.0
S29	**San Jose Proactive Signal Retiming Program**—A citywide program that will monitor current traffic signals and improve them where necessary.	San Jose	$25.0	$0.0
S30	**San Jose Transportation Communications Network Enhancements**—Provides fiber optic communications to support advanced traffic management infrastructure.	San Jose	$24.0	$0.0
S31	**San Jose Traffic Signal System Upgrades**—A citywide program that will look at older signal systems and upgrade them where needed.	San Jose	$8.0	$0.0
S32	**Downtown San Jose Area Freeway Management System**—An equipment package that will monitor downtown freeways and provide incident management tools to assist with traffic.	San Jose	$2.0	$0.0
S33	**Downtown San Jose Local Street Advanced Traffic Management System**—Expands "real time" traffic management system provided in Arena area.	San Jose	$3.0	$0.0
S34	**Downtown San Jose CMS Upgrades**—Upgrades aging changeable message sign infrastructure in Arena area.	San Jose	$1.4	$0.0
S35	**King Rd./Story Rd. Area Advanced Traffic Management System**—Provides "real time" traffic management for high traffic congestion location.	San Jose	$3.0	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
S36	**Silicon Valley ITS Program Upgrades**—Upgrades infrastructure for existing county-wide ITS system.	San Jose	$27.0	$0.0
S37	**Countywide Freeway Traffic Operation System and Ramp Metering Improvements**—Complete planned installation of monitoring cameras, electronic message signs and ramp metering on freeway system.	San Jose	$25.0	$0.0
S38	**Silicon Valley TiMC – San Jose Police Department Integration**—Allows for special management of traffic signals for public safety incidents.	San Jose	$2.0	$0.0
S39	**City of San Jose Red Light Running Enforcement Program**—Installation of cameras at various intersections to capture red light runner incidents.	San Jose	$0.5	$0.0
S40	**San Jose Traffic Signal Interconnect**	San Jose	$4.0	$0.0
S41	**SVITS Hybrid Analogy/Digital Video System**—An video component of a greater traffic management system.	San Jose	$0.2	$0.0
S42	**Silicon Valley TiMC-Ramp Metering Integration**	San Jose	$8.0	$0.0
S43	**Coyote Valley ITS**—A system of signal upgrade, interconnect, and CCTV cameras throughout Southern San Jose in the Coyote Valley.	San Jose	$6.0	$0.0
S44	**Monterey Highway ITS**—A system of signal upgrade, interconnect, and CCTV cameras throughout the Monterey Highway area.	San Jose	$4.8	$0.0
S45	**San Jose Mobile Video Surveillance for Emergency Response**	San Jose	$0.3	$0.0
S46	**San Jose Emergency Vehicle Preemption System**	San Jose	$6.6	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
S47	**SVITS Connection to Sunnyvale**—A system of CCTV, signage and the development of a traffic management center in the City of Sunnyvale.	San Jose	$3.5	$0.0
S48	**Construction Information Management System**—A system of signage and other traffic notifications to alert travelers of any delays.	San Jose	$0.1	$0.0
S49	**Winchester/Stevens Creek Area Advanced Traffic Management System**—A system of traffic cameras, signal timing upgrades and other traffic management tools.	San Jose	$2.0	$0.0
S50	**Eastridge/Evergreen Area Advanced Traffic Management System**—A system of traffic cameras, signal timing upgrades and other traffic management tools.	San Jose	$4.0	$0.0
S51	**Almaden/Blossom Hill Area Advanced Traffic Management System**—A system of traffic cameras, signal timing upgrades and other traffic management tools.	San Jose	$2.0	$0.0
S52	**Santa Clara Communications Network Upgrade**—Convert City's existing copper twisted wire pair communication infrastructure to new fiber optic cable network.	Santa Clara	$3.5	$0.0
S53	**Santa Clara Traffic Signals Upgrade**—Citywide traffic signal modifications.	Santa Clara	$3.2	$0.0
S54	**Santa Clara TMC Upgrade**—Convert City's existing traffic operations room to a new Traffic Management Center.	Santa Clara	$0.4	$0.0
S55	**City of Saratoga Citywide Signal Upgrade Project-Phase II**	Saratoga	$0.2	$0.0
S56	**Citywide Accessible Pedestrian Signals**—Update city-owned signals with audible signals for the visually impaired.	Saratoga	$0.3	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
S57	**Traffic Adaptive Signal Controller Update**—Expand the City's adaptive traffic signal control system to all major arterials.	Sunnyvale	$3.3	$0.0
S58	**Citywide CCTV Camera Deployment**—Installation of Closed Circuit Television Cameras for traffic monitoring and incident management on the major arterials.	Sunnyvale	$1.1	$0.0
S59	**Citywide Traffic Signal Controller Update**—Acquire and install new traffic signal controller and cabinets to upgrade City-maintained traffic signals citywide.	Sunnyvale	$0.6	$0.0
S60	**Citywide Count and Speed Monitoring Stations**—Deploy count and speed monitoring stations at various locations around the City to provide up-to-date/current statistical information regarding vehicular traffic on arterials.	Sunnyvale	$1.0	$0.0
S61	**Citywide ITS Communications Infrastructure**—Install fiber optic cables to support ITS implementation, communication, video and data sharing within the City and with adjorning municipalities.	Sunnyvale	$1.7	$0.0
S62	**Traffic Management Center Integration**—Implement physical connection to the area-wide data and video information sharing networks to improve the ability to coordinate operations with neighboring transportation management systems.	Sunnyvale	$0.3	$0.0
S63	**Emergency Preemption Receiver Installation**—Provide priority and safe passage to emergency vehicles at signalized intersections.	Sunnyvale	$1.0	$0.0
S64	**Capitol Expwy. TOS**—Install TOS infrastructure on Capitol Expwy. including fiberoptic trunkline, CCTV, ethernet-capable controller, battery backup system and system detector loops.	Santa Clara County	$3.5	$0.0

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
S65	**County Expressway Countdown Pedestrian Signal Heads**—Replace signal heads throughout the expressway system where necessary.	Santa Clara County	$0.5	$0.0
S66	**TOS Infrastructure Improvements**—Enhance expressway traffic operations systems components and functions, improve signal cross coordination with adjacent city signals and provide connectivity between Santa Clara County and cities for sharing of ITS data/communications.	Santa Clara County	$10.0	$0.0
S67	**Signal Coordination/Interconnect with Cross Streets**—Signal coordination/ interconnect between expressway signals and city/Caltrans signals on cross streets.	Santa Clara County	$5.0	$0.0
S68	**SCC Motorist Traffic Information and Advisory Systems**—Motorist traffic information and advisory systems (electronic changeable message signs, advisory radio and web page).	Santa Clara County	$5.0	$0.0
S69	**Adaptive Pedestrian Timing Demonstration Project**—Adaptive pedestrian timing-dynamic FDW by detecting pedestrians in crosswalk.	Santa Clara County	$1.0	$0.0
S70	**Expressway Bike Detection**—Install bicycle detection on expressway shoulders close to stop bar at all signalized intersections in both directions of the expressway approach to the intersections.	Santa Clara County	$2.1	$0.0

BICYCLE PROJECTS CURRENTLY FUNDED BY BICYCLE EXPENDITURE PROGRAM/VTP ALLOCATION

The Bicycle Program in VTP 2035 is presented with a programmatic area allocation of $160 million. The projects currently in the Bicycle Expenditure Plan (BEP) are listed along with their allocation. Some of these projects already have programmed funds, totaling about $25 million. Those projects not anticipated to need additional funding from the BEP are indicated by a footnote.

During spring 2009, the BEP was reviewed and rescored, with the inclusion of requests for revised allocation amounts for existing BEP projects and the addition of new projects. This process created the new BEP project list for the 25-year timeframe.

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
B1	**Campbell Ave. Improvements at SR 17 and Los Gatos Creek**[1]—Widen both sides of Campbell Ave. to accommodate bicycle lanes, install new sidewalks to accommodate pedestrians and replace abutting walls on both sides.	Campbell	$1.50	$0.00
B2	**Los Gatos Creek Trail Expansion on west side (Hamilton Ave. to Campbell Ave.)**—Bridge widening over Los Gatos Creek, installing sidewalks and bike lanes. Trail goes under Campbell Ave. but comes up to grade to get onto roadway.	Campbell	$2.50	$2.00
B3	**Mary Ave. (I-280) Bicycle and Pedestrian Overcrossing**[2]—Scope of work includes bridge, landscaping and associated improvements.	Cupertino	$15.00	$0.00
B4	**Uvas Creek Trail Feasibility Study**—Feasibility Study of three alternatives for the Uvas Creek trail from Gilroy Sports Park to Gavilan College.	Gilroy	$0.15	$0.12
B5	**Adobe Creek Bicycle/Pedestrian Bridge Replacement**—Replace existing bridge over Adobe Creek that is jointly owned by the Cities of Los Altos and Palo Alto. It is located on the bicycle/pedestrian pathway along the Hetch-Hetchy right-of-way.	Los Altos	$0.50	$0.00

[1] This project is receiving $950,000 in Transportation Enhancement (TE) funds from the American Recovery and Reinvestment Act.

[2] This project is fully funded; the BEP will need to reimburse the Local Program Reserve up to $3.5 million.

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
B6	**Moody Rd./El Monte Rd. Bike Improvements Segments 1, 2 and 3**[3]—Bike and Pedestrian improvements along Moody Rd. and El Monte Rd. that will create new trail connections from Los Altos through Foothill College.	Los Altos Hills	$3.50	$0.00
B7	**El Monte Rd. from Stonebrook Dr. to Voorhees**—New landscaping and intersection improvements to existing pathway.	Los Altos Hills	$0.20	$0.16
B8	**West Llagas Creek Trail**[4]–Spring Rd. to Edes Ct.—Install Class I bike path adjacent to West Little Llagas Creek. Final phase- Spring Ave. to Edes Ct.	Morgan Hill	$0.65	$0.50
B9	**Stevens Creek Trail Reach 4 Segment 2 (Sleeper Ave. to Dale/Heatherstone)**—Segment of Stevens Creek Trail will travel from Sleeper Ave. on the west side of SR 85, over SR 85 to Dale Ave./Heatherstone Way.	Mountain View	$10.00	$7.00
B10	**Stevens Creek Trail Reach 4 Segment 2 (Dale/Heatherstone Wy. to Mountain View High School)**—Segment of Stevens Creek Trail will travel from Dale Ave./ Heatherstone Way to Mountain View High School by crossing SR 85, completing Stevens Creek Trail in Mountain View.	Mountain View	$12.00	$10.00
B11	**Bicycle Boulevards Network Project**—Expand Bicycle Boulevard Network pursuant to adopted bicycle plan.	Palo Alto	$5.00	$3.93
B12	**California Ave. Caltrain Undercrossing**—replacement of California Ave. pedestrian and bicycle undercrossing of Caltrain tracks with new ADA compliant structure.	Palo Alto	$13.00	$10.40

[3] Segments 1–3 of this project (between Rhus Road and Stonebrook Rd.) have received the full BEP allocation for this project and are fully funded. Segments 1 and 2 are open and Segment 3 is under construction. Segments 4 and 5 will need additional BEP allocation.

[4] This project was designed and programmed in three segments. Segment 1—the Wildlife Trail—is completed. Segment 2 is fully programmed and under construction. Segment 3 from Spring Ace to Edes Court will need the remaining third of the BEP Allocation.

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
B13	**Almaden Expwy. Bicycle and Pedestrian Overcrossing**—Construct a 360-foot bicycle and pedestrian bridge over expressway to connect neary by trails and the Almaden Light Rail Station.	San Jose	$5.70	$4.60
B14	**Guadalupe River Trail (Montague Expwy. to Alviso)**— A partially paved trail segment along the Guadelupe River from Gold Street to Montague Expwy. Elements of the trail include a 12-foot paved AC trail with striping and signage, a seating area midpoint, call boxes, and a gateway structure at Montague Expwy. with historical elements.	San Jose	$5.00	$2.62
B15	**Los Gatos Creek Trail (Auzerais Ave. to Park Ave.)**—San Carlos St. Segment—Completion of the last reach of the Los Gatos Creek Trail including design, land acquisition and environmental review.	San Jose	$5.00	$2.94
B16	**Los Gatos Creek Trail (Park to Santa Clara)—Diridon Station Segment**—Completion of the last reach of the Los Gatos Creek Trail, including design, land acquisition and environmental review.	San Jose	$7.30	$5.86
B17	**Coyote Creek Trail (Montague Expwy. to Oakland Rd.)**— The completion of the creek trail in the North San Jose Segment.	San Jose	$7.50	$6.00
B18	**Coyote Creek Trail (Oakland Rd. to Watson Park)**—The completion of the creek trail of the Berryessa BART Station Segment.	San Jose	$7.50	$6.00
B19	**Coyote Creek Trail (Watson Park to Williams St. Park)**—The completion of the creek trail of the Northside to Naglee Park Neighborhood Segment.	San Jose	$5.00	$4.00
B20	**Coyote Creek Trail (Williams St. Park to Kelley Park)**—The completion of the creek trail of the I-280 Underpass Segment.	San Jose	$2.50	$2.00

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
B21	**Branham Ln./US 101 Bicycle and Pedestrian Overcrossing**—Pedestrian overcrossing over US 101 connecting to Branham Ln. on both sides. Extend bikeway east connecting with Coyote Creek Trail, extend west of Branham across town connecting with 87 Bike Path, Guadalupe river Trail and Los Gatos Creek Trail.	San Jose	$7.00	$5.60
B22	**San Tomas Aquino Creek Trail**–North of Monroe Ave. to SR 237.	Santa Clara	$10.00	$0.00
B23	**San Tomas Aquino Creek Trail**– Monroe Ave. to Cabrillo Ave. to southern city limit.	Santa Clara	$1.60	$1.30
B24	**PG&E De Anza Trail (Reach 3)**—Develop and construct reach 3 trail along PG&E ease-ment through Saratoga. Scope of work includes bike path, bike/ped signals and bridges.	Saratoga	$2.50	$0.22
B25	**SR 9 Bicycle and Pedestrian Safety Improvements**[5]—SR 9 through Monte Sereno, Los Gatos and Saratoga; Bikcycle and Pedestrian safety improvements includ- ing new bike lanes and shoulder widening for improved mobility for non-motorized public. 4.4 miles of SR 9 will be treated to improve bicyclist and pedestrian safety and convenience along this main route.	Saratoga/Los Gatos	$2.70	$0.00
B26	**Sunnyvale East Drainage Trail (JWC Greenway to Tasman Dr.)**—Provide access to the trail and Tasman Drive from the mobile home park located to the north of Tasman Drive.	Sunnyvale	$1.33	$1.04
B27	**Borregas Bike Lanes between Weddell and Persian**–Bike lanes between Weddell Dr. and Persian Dr.	Sunnyvale	$0.06	$0.05

[5] This project received the bulk of its funding from outside the BEP; it is anticipated to be completed with only $20,000 of BEP funds.

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
B28	**Borregas Bike Bridge over US 101 and SR 237**[6]—Provides a straight continuous bicycle and pedestrian connection on Borregas Ave. alignment over two freeways.	Sunnyvale	$8.70	$0.00
B29	**Bernardo Ave. Caltrain Undercrossing**—Eliminate a barrier for bicyclists traveling to the north of Sunnyvale on Bernardo Ave. by constructing an undercrossing of the Caltrain railroad tracks.	Sunnyvale	$8.50	$1.00
B31	**McKean Rd. Shoulder Improvements (Harry Rd. to Bailey Ave.)**—Shoulder improvements to facilitate bicycle travel.	Santa Clara County Roads	$6.60	$3.96
B32	**Foothill - Loyola Bridge**[7]—Short-term: restripe shoulders to 7 feet in width under the Loyola Bridge.	Santa Clara County Roads	$0.46	$0.00
B33	**Loyola Bridge over Foothill Expwy.**—Bicycle improvements on the Loyola Bridge over Foothill Expressways consisting of the addition of bike lanes.	Santa Clara County Roads	$7.00	$1.00
B34	**Page Mill/I-280 Interchange Improvements**—Bicycle improvements at the Page Mill/I-280 interchange consisting of improved access for bikes and pedestrians over I-280.	Santa Clara County Roads	$6.60	$1.32
B35	**Santa Clara Caltrain Undercrossing**—Extend planned Caltrain tunnel to east side of Union Pacific tracks.	VTA	$8.00	$2.73
B36	**Pilot Bicycle Parking Program**— Develop a VTA systemwide station bicycle parking program.	VTA	$0.25	$0.03
B37	**Widen Los Gatos Creek Trail on east side (Camden Ave. to Campbell Ave.)**—Widen existing east side of the trail between Camden Ave. and Campbell Ave. from eight feet to twelve feet and include drainage improvements.	Campbell	$0.30	$0.24

[6] This project is fully programmed and funded and under construction and will most likely not need any additional funds from the BEP.

[7] This project was revamped to provide a more cost-effective solution to bike access under the Loyola Bridge than a total reconstruction of the Loyola Bridge. The indicated Project Cost and VTP Allocation, therefore, are much less than the previous project. That project is still listed in the Expressway Element of this plan.

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
B38	**San Tomas Aquino Creek Trail**—Provide a connection between east and west banks of San Tomas Aquino Creek in conjunction with the development of a new San Tomas Aquino Creek Trail.	Campbell	$1.50	$1.20
B39	**Portals Project: Widening Campbell Ave. under SR 17**—Widen both the north and south sides of Campbell Ave. for a bike lane and install new sidewalk on both sides of Campbell Ave.	Campbell	$3.00	$2.40
B40	**Western Ronan Channel SCVWD service road (Leavesley Rd. to Llagas Creek)**—12 foot wide bicycle/pedestrian trail with 18-24 inch wide aggregate shoulders on each side.	Gilroy	$2.70	$2.16
B41	**Gilroy Sports Park (Santa Teresa Blvd./ Mesa Rd. to Sports Park Ticket Booth)**—12 foot wide bicycle/pedestrian trail to connect to Gavilan College and planned future residential development in Southern Gilroy to the Sports Park.	Gilroy	$4.80	$3.84
B42	**Lions Creek SCVWD service road west of Kern Ave. (Kern Ave. to Day Rd.)**—12 foot wide bicycle/pedestrian trail to follow the existing SCVWD service road elevation and alignment.	Gilroy	$1.90	$1.52
B43	**Lions Creek SCVWD service road west of Santa Teresa Blvd/Day Rd. (east) intersection (Santa Teresa Blvd to Bike/ Ped bridge across Lions Creek)**—12 foot wide bicycle/pedestrian trail segment to connect Christopher High School to surrounding neighborhoods.	Gilroy	$0.60	$0.48
B44	**Northern Uvas Creek SCVWD service road (Santa Teresa Blvd. at Third St. to Burchell Creek Bridge)**—12 foot wide bicycle/pedestrian trail will connect and expand the existing Uvas Creek trail system.	Gilroy	$1.90	$1.52

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
B45	**Lions Creek Service Road West**—12 foot wide bicycle/pedestrian trail to follow the existing SCVWD service road elevation and alignment.	Gilroy	$0.90	$0.72
B47	**Miramonte Ave. Bikeway Improvement Project**—Upgrade the bike route (Class III) on Miramonte Avenue to a bike lane (Class II) between Mountain View City Limits at the northern end of Foothill Expwy. to the southern end.	Los Altos	$1.40	$1.12
B48	**Stevens Creek Link Trail**—Provide a link from the proposed Stevens Creek Trail in the vicinity of San Antonio Rd. and Adobe Creek.	Los Altos	$3.00	$2.40
B49	**Blossom Hill Rd. Sidewalks and Bicycle Lanes**—Widen roadway to install bicycle lanes and sidewalks on both sides of Guadalupe river Trail, Cottle Light Rail Station, Blossom Hill Rd. planned pedes-trian overcrossing and Coyote Creek Trail.	Los Gatos	$0.80	$0.64
B50	**Los Gatos Creek Trail Connector to SR 9**—Installation of pathway and bridge to connect bicyclists and pedestrians to non- motorized Los Gatos Creek trail to SR 9.	Los Gatos	$1.00	$0.80
B51	**Montague Expwy. Pedestrian Overcrossing**—Connect the future Milpitas BART Station to the Great Mall of the Bay Area and future transit-oriented develop- ment from Great Mall Parkway to Piper Ln.	Milpitas	$15.00	$7.50
B52	**US 101 and Cochrane Road**—Install bike lane and pedestrian sidewalk improvements on the south side of Cochrane Rd. between DePaul Dr. and Madrone Pkwy.	Morgan Hill	$0.60	$0.48
B53	**Madrone Recharge Channel Bike Path**—Convert existing service road into a joint use bicycle and pedestrian pathway.	Morgan Hill	$0.50	$0.40

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
B54	**US 101/Permanente Creek Trail Bike/ Ped Crossing**—Construct an overcrossing of US 101 and a grade separated crossing of Old Middlefield Way at Permanente Creek Trail.	Mountain View	$9.50	$2.10
B55	**Stevens Creek Trail/Middlefield Rd. North Side Access**—Construct a new access point to Stevens Creek Trail from the north side of Middlefield Rd.	Mountain View	$0.70	$0.35
B56	**Stevens Creek Trail/Landels School Trailhead Improvements**—Widen the existing pathway between the Landels School Trailhead and Stevens Creek Trail.	Mountain View	$0.60	$0.48
B59	**US 101/Adobe Creek Ped./Bicycle Grade Separation**—Grade separation of US 101 for pedestrians and bicyclists in the vicinity of San Antonio Rd. and Adobe Creek.	Palo Alto	$13.00	$10.40
B61	**Blossom Hill - Calero Bikeways**—Enhanced bikeway connecting Leigh Ave. bikeway with Guadalupe Creek Trail, Guadalupe River Trail, Cottle Light Rail Station, Blossom Hill Rd. planned pedestrian overcrossing and Coyote Creek Trail.	San Jose	$0.30	$0.24
B62	**Brokaw - Coleman - Airport Bikeway**—Enhanced Onstreet bikeway connecting: Santa Clara Caltrain Station/Planned BART Station via pedestrian overcrossing with Guadalupe River Trail and Airport Area. Treatment will include bike lanes (regular and either buffered or colored), sharrows, signs, multi-use path (on north side of Airport Blvd., Coleman Ave. to Guadalupe River Trail), etc.	San Jose	$1.00	$0.80
B63	**Capitol Ave./Capitol Expwy. Bikeway**—Enhanced on-street bikeway connecting Penitencia Creek Trail, Capitol Light rail Station and Thompson Creek Trail. Treatment will include enhanced bikeway (such as phsyically separated bike lane, buffered bike lane, and/or colored bike lane); signs, etc.	San Jose	$0.30	$0.24

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
B64	**Charcot Bikeway**—Enhanced on-street bikeway from Guadalupe river Trail eastward to Coyote Creek Trail and existing Oakland rd. bike lanes, via planned I-880 crossing. Treatment will include bike lanes (regular and either buffered or colored), signs and an enhanced bikeway such as a physically separated bike lane, etc.	San Jose	$0.40	$0.32
B65	**Five Wounds Trail (Watson Park to Williams St. Park)–Alum Rock BART Station Segment**—Conversion a former railway alignment into a pedestrian corridor that traverses the neighborhood from Watson Park to Williams Street Park.	San Jose	$5.00	$4.00
B66	**Hedding St. Bikeway**—Enhanced on- street crosstown bikeway between San Jose/Santa Clara city limit with Guadalupe River Trail, Coyote Creek Trail and Penitencia Creek Trail. Treatment will include bike lanes (regular and either buffered or colored), sharrows, signs, etc.	San Jose	$0.20	$0.16
B67	**Hwy 237 Bikeway**—On-street connections—Enhanced Hwy 237 bikeway connecting to Guadalupe River Trail, Bay Trail, Coyote Creek Trail and cities of Santa Clara and Milpitas. Improve on-street segments with enhancements such as bike lanes (regular, buffered or colored), physically separated bike lanes, signs, etc.	San Jose	$0.40	$0.32
B68	**Monroe Bikeway**—Enhanced on-street bikeway connecting existing city of Santa Clara bike lanes to north, existing San Jose bike lanes William to west, Valley Fair, pedestrian overcrossing over I-280, pedestrian overcrossing over SR 17, Bascom LRT station. Treatment will include enhanced bikeway (such as phsyically separated bike lane, buffered bike lane, and/or colored bike lane); sharrows, signs, etc.	San Jose	$0.10	$0.08
B69	**Newhall St. Bike/Ped Overcrossing over Caltrain**	San Jose	$7.00	$5.60

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
B70	**Park Ave./San Fernando St./San AntonioBikeway**—Enhanced on-street crosstown bikeway between San Jose/ Santa Clara city limits with Diridon Transit Center, Downtown San Jose, San Jose Creek Trails (Los Gatos, Guadalupe, Coyote), SJSU and east San Jose. Treatment will include bike lanes (regular and either buffered or colored), sharrows, signs, etc.	San Jose	$0.10	$0.08
B71	**Penitencia Creek Trail (Coyote Creek - King Rd.)**—Berryessa BART Station Segment.	San Jose	$3.75	$3.00
B72	**Thompson Creek Trail: Eastridge Transit Center to Evergreen College**—A segment from yerba Buena to the Eastridge Transit Center that includes the construction of a 12 foot wide Class I Trail. Where the trail intersects major streets, trail users will follow existing sidewalks to signalized pedestrian street crossings. The project will include trailheads at major locations with possible construction of bridges where feasible.	San Jose	$6.40	$4.25
B73	**Willow Glen Spur Trail**—Provide a trail connection between the Los Gatos Creek Trail to Kelley Park.	San Jose	$2.50	$2.00
B74	**San Tomas Aquino Creek Spur Trail**—Bike/ped spur trail along creek right of way, parklands, private easments and public streets.	Santa Clara	$1.00	$0.80
B75	**Blue Hills School Rail Crossing Safety Project**—Restore at-grade pedestrian crossing between Fredericksburg Dr. and Guava Ct.	Saratoga	$0.38	$0.30
B76	**Mary Ave. Bike Lanes**—Creation of bike Lanes from Evelyn Ave. to Fremont Ave.	Sunnyvale	$0.52	$0.42
B77	**Maude Ave. Bike Lanes**—Creation of bike Lanes from Mathilda Ave. to Wolfe Rd.	Sunnyvale	$0.22	$0.18
B78	**Stevens Creek Trail Connector**—Construct a connector to provide access to the Mountain View reach 4 trail.	Sunnyvale	$1.40	$1.12

VTP ID	PROJECT TITLE	PROJECT SPONSOR/ LOCATION	TOTAL PROJECT COST ('08 $MILLIONS)	VTP ALLOCATION ('08 $MILLIONS)
B79	**Mathilda Ave. Bike Lanes**—Creation of bike lanes from US 101 to El Camino Real.	Sunnyvale	$3.90	$3.12
B80	**Pastoria Ave.Bike Lanes**—Creation of bike lanes from El Camino Real to Evelyn Ave.	Sunnyvale	$0.24	$0.19
B81	**Hendy Ave. Bike Lanes**—Creation of bike lanes from Sunnyvale Ave. to Fair Oaks Ave.	Sunnyvale	$0.67	$0.54
B92	**Santa Teresa Blvd./Hale Ave. Bicycle Delineation**	Santa Clara County Roads	$0.50	$0.40
B93	**Bicycle Detection**—Expressways and Santa Teresa/Hale.	Santa Clara County Roads	$2.10	$1.68
B94	**Los Gatos Creek Trail - Lark Ave. to Blossom Hill Dr.**—Rehabilitate and enhance 1.8 miles of trail along a regionally significant trail alignment within the Vasona County Park.	SCC Parks	$1.50	$1.20
B95	**Coyote Creek Trail - Silicon Valley Blvd. to Metcalf Rd.**—Rehabilitate and enhance 1.37 miles of trail along Coyote Creek Trail within the Coyote Creek Parkway County Park.	SCC Parks	$1.10	$0.88
B96	**Capitol Caltrain Station Crossing**—Eliminate a barrier for passengers deboarding at the Capitol Caltrain station by providing a safe crossing or grade separation of the train tracks to access the west side of the tracks.	VTA	$8.50	$1.00

Appendix B: Community Design and Transportation Program

BACKGROUND

The Community Design and Transportation Program is a collaborative and innovative program developed in partnership with local governments, community and advocacy groups and the business community. Its framework of cores, corridors and station areas has provided a model for emulation throughout the nation, including the recent ABAG and MTC FOCUS Program and Priority Development Areas (PDA) regional blueprint. In 2002, the VTA Board of Directors adopted the CDT Program as its primary program for integrating transportation and land use. In 2003, the 16 city and county governments of Santa Clara County endorsed the CDT program and its cores, corridors and station areas framework through formal council or Board actions.

The CDT program was created to help achieve VTA's land use vision and implement its goal and objectives. It is also intended to unite VTA planning, design, programming and construction activities with common objectives. It is designed to inspire new thinking and actions about the form and function of growth, broaden the range of viable transportation choices and make the most efficient use of transportation and other resources in the county.

Fundamentally, CDT calls for change: across multiple disciplines, from design to finance to engineering, each of which has overlapping importance to the other disciplines. CDT challenges us to critically reexamine our current pattern of outward growth and begin working toward creating places that invite pedestrian activity, support transit and build on the distinct qualities of each community. Through the CDT program, VTA is engaging its partners in a countywide dialogue to develop strategies for changing planning and

development processes to more consistently support alternative travel modes and efficient automobile use.

CDT PROGRAM VISION

The CDT program envisions a new paradigm for reshaping our existing environment and building new environments that better blend urban form and multimodal transportation options such as walking, transit and biking. Our built environments work to protect the climate, become accessible by many modes of travel and are more pedestrian-oriented and energy efficient. There are many elements —and hurdles—to achieving such a vision; however, as we approach our goals the following visions could emerge.

Vision for Station Areas

Transit station areas have become "places to be," and destinations in their own right. Residents and workers located near these stations enjoy many benefits, having access to a wide variety of activities and amenities without needing a car. This mixing of activities brings together the station and surrounding areas and the station area has emerged as a highly valued community asset.

Vision for Smarter Suburbs

A new form of suburbia emerges: these are areas less dominated by automobiles and better designed for walking, biking and transit access. Pockets of mixed-use, higher-density development are strategically placed throughout suburbia, providing neighborhood services and social and recreational activities close to homes. They also contain a variety of housing types that better serve changing demographics and support a range of incomes and age groups. Interconnected streets—some designed specifically to support transit service—support bike paths and attractive sidewalks, offering residents options other than the car for moving around their community. This new suburban form—together with more compact development in core areas—works to complement urban centers and halt the common pattern of sprawling, low-intensity development, separation and decentralization.

Vision for Concentrated Development

Most of the cities in Santa Clara County desire city- or village-style development in strategic locations. Although these places will vary greatly in form and character, the vision for all includes people being able to get around comfortably without a car. This requires developments that are compact and diverse and capable of supplying the whole spectrum of daily activities within easy walking distances.

The qualities that create these places differ in scale and emphasis, but consistently include:

- A mix of land uses that enables residents and workers to complete their errands and obtain services without driving. The mix

includes retail, entertainment, a variety of housing types, offices and civic activities such as libraries and post offices.

- Human-scale urban design that creates a vibrant environment and promotes walking and transit use through appropriate intensity of use, a dynamic mix of land uses, site design conducive to pedestrians and located within walking distance of frequent transit service.
- Building design that creates safe and attractive pedestrian environments through appropriate setbacks, building heights and ground floor uses.
- Street design that balances the use of all modes of transportation rather than maximizing auto capacity, and as a result facilitates amenity-rich compact development, which in turn supports transit, walking and bicycling.
- Concentrations of major community attractions that serve as destinations for people who live in and outside the area. These include education and health care facilities as well as places for cultural activities and entertainment.
- Attractive, safe and efficient transportation facilities for all modes of travel that enhance public spaces, along with appropriate accommodations for autos where they are necessary.
- An urban form that reduces the production of greenhouse gases, is more energy efficient and is less dependent on non-renewable resources.

Transportation Implications of Concentrated Development

A recent Transportation Cooperative Research Program (TCRP) study noted Transit Oriented Development (TOD) households typically own fewer cars because they have smaller households and because they may forgo extra cars due to transit's proximity. TOD households are also almost twice as likely to not own any car and own almost half the number of cars of other households. In addition, over a typical weekday period, the 17 surveyed TOD-housing projects averaged 44 percent fewer vehicle trips than estimated by the Institute of Transportation Engineers manual.

Each of these elements is addressed in VTA's *Community Design and Transportation Program: A Manual of Best Practices for Integrating Transportation and Land Use.*

CDT PROGRAM APPROACH

The approach of the CDT program reflects VTA's role as a multimodal transportation provider. It considers all transportation modes and stresses the importance of a healthy pedestrian environment, concentrated mixed-use development, integrated transit service, innovative street design and the

interrelationships of buildings and sites with transportation facilities and services. It is concerned with how policies shape these pieces and how the pieces can be fitted together to create an attractive, safe and sustainable urban form.

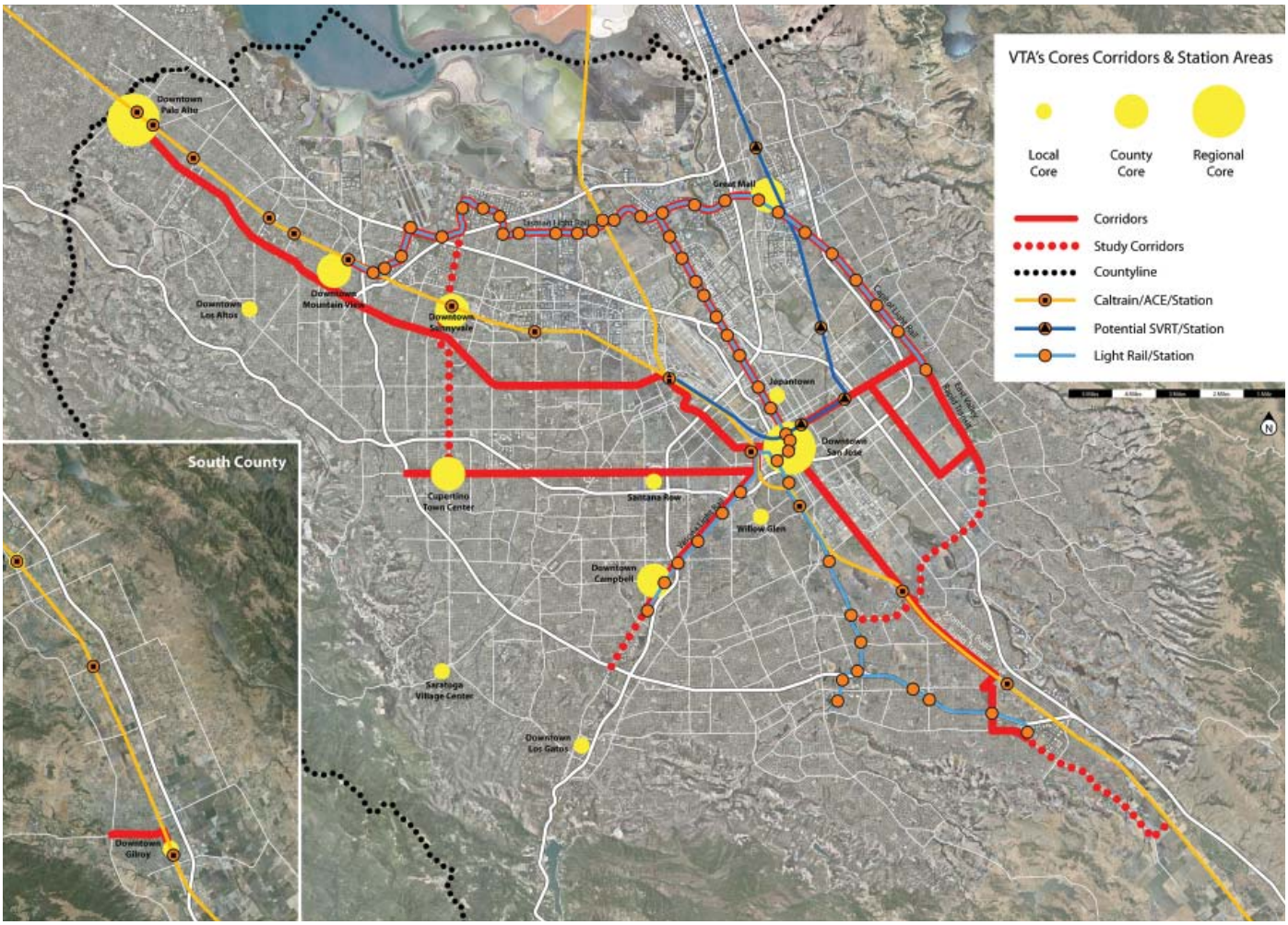
The CDT program is designed around a framework for application in community cores, along the major transportation corridors and surrounding transit station areas. On the following page is a CDT map of cores, corridors and station areas designated by local agencies and VTA for the CDT program. These sites, discussed in more detail below, are structured around a framework of cores, corridors and station areas. They constitute the new frontiers for growth and are a primary focus of the CDT program.

New Frontiers for Growth

Untouched lands at the urban fringe have generally been thought of as leading candidates for growth and development. However, Santa Clara County's mature urban areas are also prime development opportunities. In fact, vacant or underutilized urban sites offer advantages over outlying areas because they are already connected with urban services and infrastructure. Moreover, accommodating growth in urban cores plays a more critical role in protecting valuable open space at the edge.

Cores, Corridors and Station Areas Defined

- **Cores** are districts that contain concentrations of residential areas, employment sites, and other destinations such as retail, entertainment, academic and cultural activities. They are further distinguished as regional cores, such as downtown San Jose, county cores such as downtown Mountain View or Sunnyvale, or local cores such as San Jose's Willow Glen area and downtown Los Gatos.
- **Corridors** are linear in shape, centered on a street or transit line, and often function as a backbone for surrounding communities. Corridors offer opportunities similar to cores for intensified mixed-use development, but usually in a more defined area within a block or so of the corridor. Corridors also present tremendous opportunities for creating urban- or village-like nodes, especially at major intersections where several transit lines cross. With enhanced "boulevard-like" pedestrian environments and other multimodal improvements such as transit preferential treatments and bike lanes, corridors have real potential for becoming cohesive community elements, offering a multitude of activities, a range of pleasant



environments, and several choices of ways to move along their length.

- **Station areas** are locations adjacent to rapid transit stations that already serve, or will serve, as focal points for new infill development and redevelopment. Station areas have opportunities similar to cores and corridors for intensified mixed-use development, and offer unique opportunities for community "place-making." Attractive urban design, multimodal transportation improvements, and a variety of all-day activities at station areas can create vibrant centers of activity. Station areas become destinations in their own right and add value to surrounding communities. If located within a local core area, such as near a downtown or Main Street, the station area design can complement and enhance the overall urban experience of those areas.

These are areas most likely to benefit from land use intensification and implementation of the CDT best practices principles (discussed in following sections) and are key land use opportunity areas for providing multimodal transportation alternatives that can serve the needs of both existing and new residents and workers.

MANUAL OF BEST PRACTICES FOR INTEGRATING TRANSPORTATION AND LAND USE

The CDT Manual of Best Practices for Integrating Transportation and Land Use is a key product of the CDT program and was developed to support the implementation of VTA's land use objective and goals. It documents proven and innovative best practices in urban design and transportation planning that support and enhance both VTA's and its Member Agencies' investments in the community. It provides planning and design guidance for how to develop in the cores, corridors and station areas. It also provides policy guidance and outlines steps that communities and local governments can take to identify and overcome barriers to developing more livable and sustainable communities. Moreover, it articulates VTA's vision for how communities and a multimodal transportation system can grow together, their respective roles and how the actions of each can be mutually supportive and beneficial.

This vision is outlined in four key concepts and ten principles that provide the basis for the CDT program.

KEY CONCEPTS AND PRINCIPLES FOR INTEGRATING TRANSPORTATION AND LAND USE

The *key concepts*, summarized below, underlie all aspects of the CDT Program and form the foundation upon which the principles, practices and actions are built:

- **Interconnection**—focuses on interconnecting street, bicycle and pedestrian networks, transit modes, buildings and activity centers to get more from transportation resources, and to form distinct districts and more livable places
- **Place-making**—focuses on the human-scale elements of the built environment that create uniqueness and identity, and that make places attractive, comfortable, memorable and lasting
- **Access-by-Proximity**—focuses on clustering complementary land uses and compact, well-designed development to make the types of amenity-rich places that allow trips to be combined, reduced or eliminated, and made by transit, walking or biking; and accordingly, this helps achieve

the kind of critical mass that makes vibrant public life possible

- **Choice**—focuses on the notion that one-size-does-not-fit-all, and seeks to expand the range of choices about the design of developments that we live and work in, where activities are located, the character of the community, and the means of getting around

CDT PRINCIPLES FOR INTEGRATING TRANSPORTATION AND LAND USE

These time-proven planning and design principles build upon and expand the big-picture key concepts described previously and create a foundation for more detailed practices and actions covered in the CDT Manual. An overview of each principle is provided below.

1. **Target growth in cores, corridors and station areas.** Focusing growth on established cores, corridors and station areas is about doing more with less. New growth in these areas capitalizes on existing infrastructure and allows cities to avoid the costs of expanding and maintaining new infrastructure. Infill growth thwarts urban fringe development, conserving open space, resources and natural areas. Transit service in these areas is more fully utilized and productive.
2. **Intensify land uses and activities.** Compact, amenity-rich development is essential to developing vibrant and functional places. Higher-intensity land use in cores, corridors and station areas facilitates walkability, creates viable transportation options, promotes thriving businesses and develops a sense of place. High-quality urban design and architecture must accompany intensified development to make communities feel comfortable, attractive and safe.
3. **Provide a diverse mix of uses**. Mixed-use developments offer users various combinations of commercial, office and residential land uses within close proximity. A variety of uses attracts people during all times of the day and creates synergies that help these areas reduce the need for automobile trips; make transit, walking and biking viable options; enhance community livability; and thrive both economically and socially.
4. **Design for pedestrians.** The hallmark of great places is the ability to walk between destinations. This principle, coupled with a diverse mix of uses and high-quality project design, helps to create synergies that encourage walking, enliven public spaces and bring vitality to urban areas. Being able to walk to destinations also takes automobile trips off the roadway network, and reduces energy consumption and pollution.

5. **Design in context.** Designing in context focuses on the materials, design details and architectural styles that establish and reinforce a unique community character. Designing in context is also about sensitivity to the relationships between buildings, streets and public spaces.

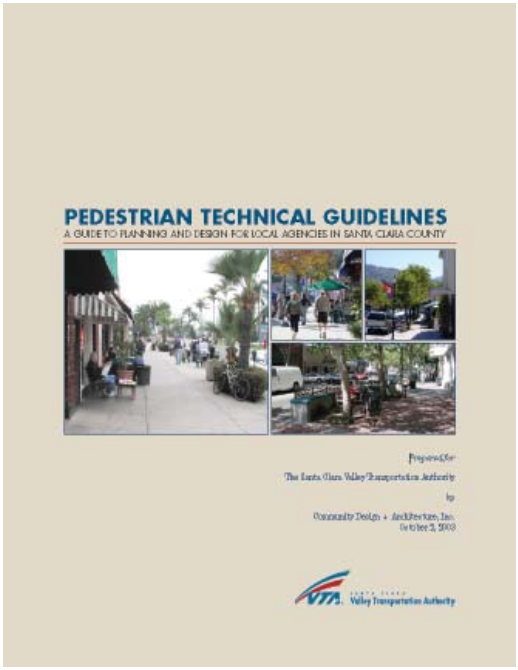
6. **Focus on existing areas.** Before consuming additional land and resources in outlying areas, greater attention should be given to using land already dedicated to the urban fabric more efficiently. This also means that sustaining the community is just as important as improving it—and that after-care and maintenance programs are as vital as good planning and design are in creating a sense of place and community.

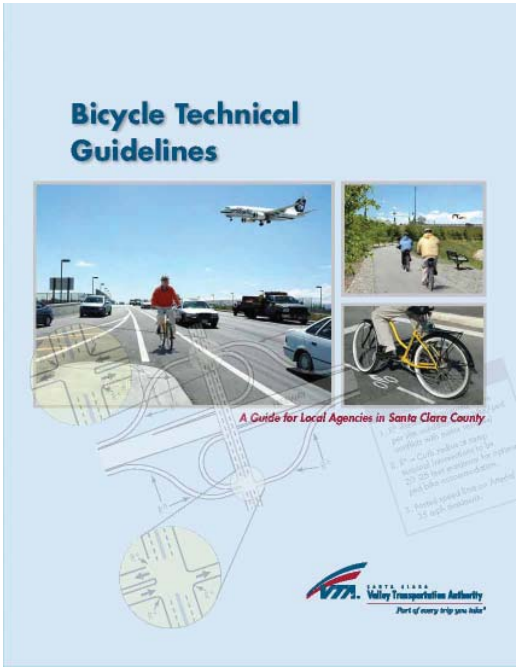
7. **Create a multimodal transportation system.** Great places offer a multitude of ways to get around. Provision of viable transportation alternatives is not about destroying the automobile; rather, it is about balancing the needs of vehicle movement with the needs of transit, walking and biking.

8. **Establish streets as places.** In addition to being part of the multimodal transportation system that moves people and goods, streets are the most abundant public space in cities. Rather than being viewed as just a thoroughfare for cars, street design should also reflect the context of adjacent land uses and the needs of people.

9. **Integrate transit.** Transit service benefits everyone; but transit can only function effectively when it is fully integrated with the community. Integration can be achieved either by extending the community fabric out to connect with transit facilities, or by bringing transit service directly into the heart of the community. Transit stops and stations should be viewed as valuable civic spaces warranting public resources and high-quality design.

10. **Manage parking.** Parking takes up enormous amounts of land and is today perhaps the single most important element influencing the design of urban areas. As such, the design and placement of parking helps dictate the character of a place, determining whether it will feel isolated from adjacent uses or integrated into a continuous urban fabric. These concepts and principles are intended for implementation together in fulfillment of a long range vision for growth and development. Consistent and incremental implementation will create the types of synergy-rich and amenity-rich environments that make urban spaces thrive, and bring wholesale positive results to the transportation system and our communities.





CDT Manual Topics

The CDT Manual addresses critical topics by illustrating best practices and identifying implementation strategies and methods for propagating best practices throughout the county. The manual in intended to be a living document that evolves in response to new information and opportunities.

Best practices topics covered in the CDT Manual include:

- Site and building design
- Street connectivity and multimodal street design
- Innovative and efficient uses of land
- Supporting concentrated development
- Development density recommendations for cores and corridors
- Alternative use of level of service standards
- Rethinking parking requirements
- Model places and visualizing best practices
- The role of local governments in best practices
- Building community support for best practices
- Flexible zoning strategies
- Community planning for bus transit, rail transit and station areas
- Attracting developers to best practices projects
- Transportation demand management

Documents Supporting the CDT Manual

The CDT Manual was conceived as a comprehensive "toolkit," but some areas of planning and design covered in the manual warrant greater detail. So in addition to updates of the manual, the CDT program includes the development of other supporting documents. For example, quality pedestrian and bicycle environments are critical to the vitality and success of communities and to the productivity of transit. To help plan and build better pedestrian and bicycle environments, VTA has developed pedestrian technical guidelines and bicycle technical guidelines.

Future CDT program publications providing additional detail may include but not limited to:

- Parking policies, strategies and design guidelines
- Station area access and design guidelines
- Multimodal street and site design guidelines
- Strategies for community and economic sustainability

Appendix C: Transportation, Energy and Air Quality Program

Public transportation agencies have a significant role in addressing issues related to climate protection and energy. Simply stated, the more things we can do to get people out of their cars and into other transportation modes such as transit, walking and biking, *the greater the cumulative positive impact the transportation sector will have on climate protection and energy usage*. Agencies can support land use changes that make alternative modes more attractive, promote carpooling, encourage people to make fewer and shorter trips, allocate existing and future resources more efficiently and effectively and create, adapt and use technology to assist in the conservation of natural resources, reduction of greenhouse gases, prevention of pollution and use of renewable energy and materials. When future generations reflect on this era, they will realize that it wasn't one action that addressed climate and energy concerns—it was many solutions working in harmony. This is the focus of VTA's Transportation Energy and Air Quality (TEAQ) Program.

The TEAQ Program will provide a framework for VTA to develop initiatives, projects and programs, conduct research and work with partner agencies—such as BAAQMD, MTC and ABAG—to address climate change and energy issues over the coming years and decades. It is envisioned as a dynamic program that will evolve and adapt over time as new information, technologies and programs emerge.

TEAQ PROGRAM GOALS

- Offer options to reduce Vehicle Miles Traveled (VMT) and Average Daily Trips (ADT) by promoting more compact and active development adjacent to high-frequency transit corridors
- Offer options to reduce Single Occupant VMT by offering high-quality high-frequency bus and rail transit in corridors where compact mixed-use development exists or is planned

- Promote land use strategies through the CDT Program that foster changes in development patterns to allow for a reduction in VMT and increases in transit, walk and bike trips
- Promote energy efficiency in transportation through advocacy, education, research and leadership by example
- Ensure that all VTA capital projects utilize construction practices and building materials that follow and/or implement LEED guidelines
- Provide high-efficiency transit services that support compact mixed-use developments in the CDT Cores, Corridors and Station Areas
- Support proven and innovative programs to reduce single-occupant automobile trips and reduce congestion

What Are Greenhouse Gases and Where Do They Come From?

On Earth, the most abundant greenhouse gases are, in order of relative abundance: water vapor, carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), ozone (O2) and chlorofluorocarbons (CFC) compounds. According to research, water vapor causes about 36–70 percent of the greenhouse effect on Earth, carbon dioxide about 9–26 percent; methane roughly 4–9 percent and ozone at about 3–7 percent. These percentages represent a combination of the strength of the greenhouse effect of the gas and its abundance in the environment—the higher end of the ranges quoted are for the gas alone; the lower end, for the gas counting overlaps. For example, methane is a much stronger greenhouse gas than CO2—about 25 times more heat absorptive than CO2—but it is present in much smaller concentrations. Methane also has a large effect for a brief period (a net lifetime of 8.4 years in the atmosphere), whereas CO2 has a small effect for a long period (a net lifetime of over 100 years in the atmosphere).

Greenhouse gases such as carbon dioxide and methane come from a variety of manmade and natural sources. Animals produce CO2 and methane and plants absorb carbon and produce oxygen but release CO2 and methane when burned or when biologically degraded—for example, waste landfills can be sources of methane when the materials biodegrade. The burning of fossils fuels such as coal, natural gas and petroleum products (e.g., gasoline and diesel fuels) since the industrial revolution are thought to account for the majority of additional greenhouse gases in our atmosphere. Fossil fuels are derived from organic sources and have very high levels of stored energy.

In discussions about reducing greenhouse gas emissions from energy use and production, it is important to distinguish between primary and secondary sources. For example, switching cars from gasoline powered to electrically powered engines will only be partially effective if the primary source of electrical energy generation is petroleum-based (i.e., oil, natural gas or coal). We don't want our local actions to simply shift the problem to another area.

Manmade Sources of Greenhouse Gases

The U.S. Environmental Protection Agency (EPA) ranks the major greenhouse gas contributing end-user sectors in the following order: industrial, transportation, residential, commercial and agricultural. Major sources of an individual's greenhouse gas include home heating and cooling, electricity consumption and transportation. Corresponding conservation measures are: improving home building insulation, using compact fluorescent lamps and choosing energy-efficient vehicles. BAAQMD estimates that 50 percent of greenhouse gases generated in the Bay Area are from the transportation sector; however, this estimate does not account for emissions from electricity generated outside of the Bay Area, and since California imports about twenty to thirty percent of its total electricity, the percentage attributed to the transportation sector may be overestimated.

According to the EPA, fossil fuel combustion in the U.S. generates approximately 6 billion tons of CO2 annually. Of this, electrical energy production is responsible for about 2.38 billion tons of CO2/year, or about 40 percent of total emissions. The transportation sector accounts for 1.8 billion tons per year, or roughly 31 percent. Automobiles account for about 634 million tons/year or about 10 percent of the total and 35 percent of the transportation sector. Light, medium and heavy duty trucks account for about 13.5 percent of the total and 46 percent of the transportation sector.

It is apparent that the scope of the subject is large. To be effective in addressing greenhosue gas issues it will take creative and innovative thinking applied to multiple areas and pursued with rigorous long-term commitment to change. The following are initial recommended TEAQ Program action items.

TEAQ ACTION ITEMS

The TEAQ Program will subscribe to these principles:

Embrace technology. Since the early 1970s research and development of new technologies have improved fuel efficiency in the transportation sector, reduced production of harmful emissions and broadened the spectrum of energy sources. In addition, greater efficiencies can be realized from our existing infrastructures. It will be VTA policy to stay current on the development and application of new technologies and evaluate new technologies for application in VTA operations.

Speak through the marketplace. In 2000 there was only one commercially available model of hybrid car sold in the United States—the Honda Insight. In 2001 the Toyota Prius was introduced. In 2009, because the public is demanding them, car manufacturers are expected to offer 20 or more models of hybrid vehicles covering the full range of vehicle model types from ultra-economic sedans to high-end SUVs and trucks—a 900 percent increase in eight years. If large numbers of

consumers demand more fuel-efficient and alternative fuel vehicles the strong market forces will compel manufactures to respond—if they wish to remain competitive. The cumulative, long-term effect of market forces can dwarf what can be prescribed or legislated by government.

Act individually. For climate protection and energy use, many effective immediate and near-term actions can be taken by individuals, private and public organizations such as businesses, schools and public agencies—and many are not transport-related. In addition, many of these individual actions save money as well as the environment. Following is a list of actions individuals could take and the dramatic benefits that result.

- *Take transit*. A recently released report from the American Public Transportation Association (APTA) found that the single most effective way to cut one's personal quotient of carbon dioxide pollution is switching from cars to public transit (http://apta.com/research/info/online/climate_change.cfm). According to APTA, "when compared to other household actions that limit carbon dioxide (CO2), taking public transportation can be more than ten times more effective in reducing this greenhouse gas."
- *Change home appliances to Star Energy Saver appliances.* Can save 3,000 pounds of CO2 emissions per year/household, or approximately 1.5m tons of CO2/year if every home in Santa Clara County converted.
- *Change incandescent lighting in your household to compact fluorescent lighting (CFL)*. Saves money by reducing your electric bill and also reduces CO2 emissions by about 500 pounds annually. If every household in the Santa Clara County switched to CFLs about 250,000 tons/year of CO2 would be prevented from entering the atmosphere. In addition, the emerging Light Emitting Diode (LED) technology portends even greater savings as production costs decrease and lumen output increases—possibly tripling this number.
- *Plant trees*. The average tree removes from the atmosphere about 10 tons of CO2 over its lifetime.
- *Buy or lease a fuel efficient car*. Reduces greenhouse gases.
- *Leave your car at home two days a week.* Can save on average about 1,600 pounds/year of CO2.
- *Insulate your home.* Can save 3,000 pounds of CO2 emissions per year/household.
- *Support local farms, organic produce, and locally produced products*. Reduces energy usage associated with transport and petroleum-based fertilizers.
- *Recycle newspaper, glass, and metal.* Reduce your garbage output by 25 percent; could save an average of about 1,850 pounds of CO2 emissions per year/household.

Develop and support locally produced energy sources such as solar, wind, geothermal, hydro, and tidal and wave energy. This has a threefold benefit: first, it reduces the need to import foreign energy (predominantly oil) and keeps dollars spent on energy in the country to function as an additive to the economy; second, it can develop local primary production jobs which help stimulate and power local economies; and third, it works toward the incremental realization of a green economy whereby an entire new industry can be created. Such actions reach beyond the transportation sector and are inextricably tied to the health, sustenance and long-term stability of our society as a whole.

Pursue New Funding. Some funding can come from existing sources—such as using existing budgets to replace transportation fleets (public and private) with low or zero emission vehicles instead of diesel or gasoline vehicles. However, it is likely that new funds will be needed to accomplish society's climate and energy goals.

The pursuit of new funds to address climate and energy issues has three fundamental roles: first, to continue to maintain, operate and expand transit, walk, bike and shared ride modes of travel; second, to influence personal choices in selecting places to live and transport modes and personal behavior regarding energy consumption; and third,to provide funding for new programs and projects that lead to long-term and sustainable reductions in greenhouse gas emissions and other environmental and economic impacts. Possible sources of new funds for these uses include:

- Gasoline and diesel fuel surcharges
- Countywide vehicle registration fee
- Portion of new sales or property taxes dedicated to climate protection programs
- Portion of future express lane net revenue

Possible Uses of New Funds

- Additional transit service
- First and last mile transit connections including possible shuttle and community bus lines, bike and car sharing programs, and other modal improvements
- Funding assistance for land use and pedestrian-oriented improvements
- Funding assistance for city programs (transportation related)
- Funding assistance for other agency programs (for example, school bus programs)
- Ongoing research, education and advocacy component

VTA TEAQ PROGRAM IMPLEMENTATION

Develop TEAQ Plans

The adage "Think Globally, Act Locally" is good general advice—and bringing the adage closer to home—"Think Regionally, Act Locally" certainly rings true when it comes

to climate and energy issues and is the best way to realize meaningful long-term change. Many, if not most, options to reduce energy use and protect the climate are best implemented at the local and individual level. Accordingly, VTA's TEAQ Program will focus on funding local efforts in coordination with regional, State and national visions and goals. Over the next few years VTA will work with local jurisdictions and regional partners to develop guidelines for preparing TEAQ plans and/or incorporating TEAQ-related elements within the structure of existing plans or programs. These plans may also serve to support legislative mandates; for example the two recently passed State bills summarized below:

AB 32 (Nunez) California Global Warming Solutions Act of 2006. This bill requires the State board to adopt regulations to require the reporting and verification of Statewide greenhouse gas emissions and to monitor and enforce compliance with this program. The bill further establishes Statewide greenhouse gas emissions limit equivalent to the Statewide greenhouse gas emissions levels in 1990 to be achieved by 2020, as specified. The bill would require the State board to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism adopted by the State board, pursuant to specified provisions of existing law. The bill would authorize the State board to adopt a schedule of fees to be paid by regulated sources of greenhouse gas emissions, as specified. Key dates include:

- Approved by the State of a scoping plan no later than January 1, 2009. The plan will outline measures and strategies for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions from sources or categories of sources of greenhouse gases by 2020.
- Adoption by January 1, 2010 of regulations to implement the measures identified on the list to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions from those sources or categories of sources identified.
- To further achieve the Statewide greenhouse gas emissions limit the State board may adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions, applicable from January 1, 2012, to December 31, 2020, inclusive, that the State board determines will achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions, in the aggregate, from those sources or categories of sources.
- After January 1, 2011, the State board may revise regulations adopted pursuant to this section and adopt additional regulations to further the provisions of this division.

Because the bill requires the State board to establish emissions limits and other

requirements that, if violated, constitute a criminal act, it creates a State-mandated local program.

SB 375 (Steinberg), 2008—Transportation Planning: Travel Demand Models: Sustainable Communities Strategy: Environmental Review. This bill would require the California Transportation Commission (CTC) to maintain guidelines, as specified, for travel demand models used in the development of regional transportation plans by metropolitan planning organizations. This bill would also require the regional transportation plan for regions of the State with a metropolitan planning organization to adopt a sustainable communities strategy (SCS), as part of its regional transportation plan, as specified, designed to achieve certain goals for the reduction of greenhouse gas emissions from automobiles and light trucks in a region.

The bill requires the State Air Resources Board, working in consultation with the metropolitan planning organizations, to provide each affected region with greenhouse gas emission reduction targets for the automobile and light truck sector for 2020 and 2035 by September 30, 2010 and to appoint a Regional Targets Advisory Committee to recommend factors and methodologies for setting those targets and to update those targets every eight years. The bill requires certain transportation planning and programming activities by the metropolitan planning organizations to be consistent with the sustainable communities strategy contained in the regional transportation plan, but exempts certain transportation projects programmed for funding on or before December 31, 2011 from the sustainable communities strategy process.

To the extent the SCS is unable to achieve the greenhouse gas emission reduction targets, the bill requires affected metropolitan planning organizations to prepare an alternative planning strategy (APS) showing how the targets would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. The State Air Resources Board is required to review each metropolitan planning organization's sustainable communities strategy and alternative planning strategy to determine whether the strategy, if implemented, would achieve the greenhouse gas emission reduction targets. Any SCS that is found to be insufficient by the State board must be revised by the metropolitan planning organization, with a minimum requirement that the metropolitan planning organization obtain State board acceptance that an alternative planning strategy, if implemented, would achieve the targets. The bill specifically States that the adopted strategies do not regulate the use of land and are not subject to State approval and that city or county land use policies, including the general plan, are not required to be consistent with the regional transportation plan,

which would include the sustainable growth strategy, or the alternative planning strategy.

SB 375 exempts from CEQA a transit priority project, as defined, that meets certain requirements and that is declared by the legislative body of a local jurisdiction to be a sustainable communities project. The transit priority project would need to be consistent with a metropolitan planning organization's SCS or APS that has been determined by the State Air Resources Board to achieve the greenhouse gas emission reductions targets. The bill provides for limited CEQA review of various other transit priority projects.

With respect to other residential or mixed-use residential projects meeting certain requirements, SB 375 exempts the environmental documents for those projects from being required to include certain information regarding growth inducing impacts or impacts from certain vehicle trips. The bill also authorizes the local jurisdictions to adopt traffic mitigation measures for transit priority projects and exempts a transit priority project seeking a land use approval from compliance with additional measures for traffic impacts, if the local jurisdiction has adopted those traffic mitigation measures.

Because the bill imposes additional duties on local governments relative to the housing element of the general plan, it imposes a State-mandated local program.

TEAQ Implementation Strategies

In support of the TEAQ Program VTA will:

- Support TEAQ-related efforts through its Legislative Program
- Support State, regional and local legislative and voluntary climate protection actions
- Proactively implement VTA's Sustainability Program
- Explore support from private sector development though its capital and ongoing operating programs
- Support regional and local advocacy efforts related to land use transportation integration
- Support programs such as the EPA's "SmartWay" Program
- Improve transit; focusing on key corridors where local jurisdictions are committed to land use intensification and on first/last mile connections
- Develop express lanes and advocate for pricing roadways and parking
- Convert to alternative fueled/low- or zero-emissions fleets as technology becomes cost-effective
- Support State and local building codes that require LEED Certified construction —insulation, energy efficient design and passive and active solar design elements
- Explore new technologies through research, test/pilot projects and partnerships with other agencies
- Develop and implement education and awareness

Appendix D: Systemwide Performance Measures

Performance measures provide a common framework to evaluate programs and projects. They also provide an indication of how well Santa Clara County's transportation system serves the traveling public. In 1999, the VTA Board adopted a set of multimodal performance measures as part of the Santa Clara County Congestion Management Program (CMP). These performance measures are used to evaluate the impacts of land use decisions and projections on the county's transportation system. This section estimates how well the transportation system will perform in 2035, given the additional growth in and out of the county and the implementation of the VTP 2035 projects.

The transportation system performance is evaluated using a 2005 base condition, a 2035 No Project scenario and a 2035 Project scenario. The "base" refers to existing conditions. The No Project scenario includes the 2035 land use conditions but not the VTP 2035 projects. The 2035 Project scenario includes all of the base projects, plus the VTP 2035 Investment Program. This analysis scenario includes projects funded with 30 years of State and Federal programming, as well as the 2000 Measure A sales tax revenue and proposed express lane corridors. It also presumes that VTA is able to secure adequate funding to be able to fully implement and operate the 2000 Measure A program of projects.

TRAFFIC LEVEL OF SERVICE

Traffic 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 LOS A representing ideal

TABLE D-1 *Deficient Freeway and Expressway Miles*

	2005 BASE	2035 NO PROJECT	2035 PROJECT	2035 NO PROJECT VS. PROJECT NET CHANGE	2035 PERCENT CHANGE
AM Peak	100.5	302.6	297.2	-5.4	-1.8%
PM Peak	105.5	380.7	371.1	-9.6	-2.5%

conditions and LOS F representing poor conditions or congested flow.

Roadways at LOS F are considered deficient. The Santa Clara County CMP considers freeway segments with a speed less than 35 miles per hour and expressway segments less than 13 miles per hour to be deficient (LOS F). Due to the growth within the county as well as the increase in travelers coming into the county, the number of roadways operating at LOS F will increase between the base year and 2035. Nevertheless, the VTP 2035 Project scenario shows some improvement over a No Project scenario in miles of deficient roadway segments.

By the year 2035, the miles of deficient freeways and expressways are projected to be 302.6 miles in the AM peak and 380.7 miles in the PM peak for No Project conditions. This represents an increase well over 2005 base year conditions for both the AM and PM peak periods. With the VTP 2035 Project scenario, deficient freeway and expressway miles are projected to decrease from the No Project scenario by 5.4 miles in the AM peak and 9.6 miles in the PM peak, a decrease of 1.8 percent and 2.5 percent, respectively.

MODAL SPLIT

Modal split measures the extent to which travelers use the various available transportation modes. It is measured as the proportion of people making a trip using a given mode. Modal split values shown in Tables D-2 and D-3 on the following page are for daily person trips in the base year 2005 and in 2035. The 2035 Project scenario increases the viability of alternatives to driving alone with investments in transit, HOV improvements and express lane conversions. These investments will allow more alternative mode use, as indicated by the tables below. The percentage of drive-alone work trips decreases over 5 percent from 2005 to 2035 Project scenario. The proportion of commute trips for the shared-ride (HOV) mode is expected to increase by about 2 percent for both 2035 No Project and Project scenarios. Transit experiences the largest increase in commute shares, increasing

TABLE D-2 *Mode Split: Home-Based Work Trips*

	2005	2035 NO PROJECT	2035 PROJECT
Drive Alone	79.90%	74.90%	73.90%
Shared Ride	13.30%	15.00%	14.90%
Transit	3.60%	5.60%	6.70%
Bike	1.00%	1.60%	1.60%
Walk	2.20%	2.90%	2.90%

TABLE D-3 *Mode Split: All Trips*

	2000	2035 NO PROJECT	2035 PROJECT
Drive Alone	56.90%	52.60%	52.30%
Shared Ride	32.70%	32.80%	32.70%
Transit	2.10%	3.60%	4.10%
Bike	1.70%	1.60%	1.50%
Walk	11.30%	9.40%	9.40%

from 3.3 percent in 2005 to 6.7 percent in the 2035 Project scenario. While this is not a large percentage increase in transit mode share, this increase over 2005 represents approximately 164,900 more daily transit trips made in Santa Clara County. Trips made by bicycle and walk modes also increase slightly over 2005 shares.

VEHICLE MILES OF TRAVEL AND VEHICLE HOURS OF TRAVEL

A vehicle mile of travel per vehicle trip (VMT) identifies the number of roadway vehicle miles of travel required to satisfy the demand for travel by vehicles, measured in vehicle trips. When monitored over time, it is an indicator of the level of utilization for high-occupancy modes (carpooling, transit, etc.). Vehicle hours of travel per vehicle trip (VHT) are an indicator of the average amount of time travelers spend getting to their destination. A decrease in these measures indicates people are traveling more efficiently and mobility is improving. As shown in Tables D-4 and D-5, vehicle miles and vehicle hours of travel decrease under the 2035 Project scenario, meaning that people will travel more efficiently in the Project scenario than in the No Project scenario. Vehicle miles and vehicle hours per trip also decrease under the Project scenario.

TABLE D-4 *Vehicle Miles of Travel and Vehicle Hours of Travel, AM Peak*

	NO PROJECT	PROJECT	NET CHANGE	PERCENT CHANGE
VMT	10,879,800	10,732,000	-147,800	-1.40%
VHT	362,600	332,900	-29,700	-8.20%
Vehicle Trips	955,900	947,000	-8,900	-0.90%
VMT/Trip	11.38	11.33	-0.05	-0.40%
VHT/Trip	0.38	0.35	-0.03	-7.30%

TABLE D-5 *Vehicle Miles of Travel and Vehicle Hours of Travel, PM Peak*

	NO PROJECT	PROJECT	NET CHANGE	PERCENT CHANGE
VMT	15,353,800	14,744,900	-608,900	-4.00%
VHT	848,800	567,700	-281,100	-33.10%
Vehicle Trips	1,501,800	1,491,500	-10,300	-0.70%
VMT/Trip	10.22	9.89	-0.34	-3.30%
VHT/Trip	0.57	0.38	-0.18	-32.70%

Systemwide VMT decreases about 1.4 percent and 4.0 percent respectively during the AM and PM peak for the Project scenario. VMT per trip decreases from 11.38 to 11.33 miles for the AM peak hour (0.4 percent reduction) and from 10.22 to 9.89 miles during the PM peak hour (3.2 percent reduction), which shows improved travel efficiency for individual travelers. Vehicle hours per trip decrease for both the AM and PM periods. This decrease is particularly significant for the PM peak period, as there is a 32.7 percent drop in VHT/trip, reducing the average trip time from 0.57 hours (34 minutes) to 0.38 hours (23 minutes). Much of this decrease in time spent during the peak periods is due to the time savings offered by the express lane projects.

TRANSIT ACCESSIBILITY

Transit accessibility is an indicator of the ease with which employment opportunities may be reached from a given traffic analysis zone using a transit system. It is measured using a gravity model formulation, which calculates accessibility, on a zonal basis, as a sum of employment opportunities weighted by the households in the origin zone multiplied by the inverse of transit travel time from this zone to those dispersed

opportunities. In the formula, a friction factor parameter is also included to represent how people of different income groups perceive the relationship between transit travel times.

$$A_i = \sum_{j=1}^{n} E_j * \sum_{q=1}^{4} \frac{hh_{iq}}{Tr_{ij} * FF_q(Tr_{ij})}$$

Where,
Ai = Transit Accessibility in Zone i;
Ej = Employments in each destination zone j, j=1 to total number of zones n;
hh_{iq} = Households of income group q in Zone i, q =1 to 4;
Tr_{ij} = Peak hour transit travel time between zone i and j;
$FF_q(TR_{ij})$ = A vector parameter of friction factor for individual income group q, The higher the travel time TR_{ij}, the lower the friction factor.

Accessibility thereby is an abstract measure that can inform planners about the effect of changes in two aspects: travel time to jobs (transit system performance), and the number and location of jobs and households (land use). The higher an area's accessibility, the better the transit system is doing getting residents to large concentrations of employment in minimal time.

The maps on the facing page show the impacts that land use and the VTP slate of projects are projected to have on transit accessibility in Santa Clara County. The upper map compares transit accessibility in 2035 to the 2005 base year, assuming only land use intensification.

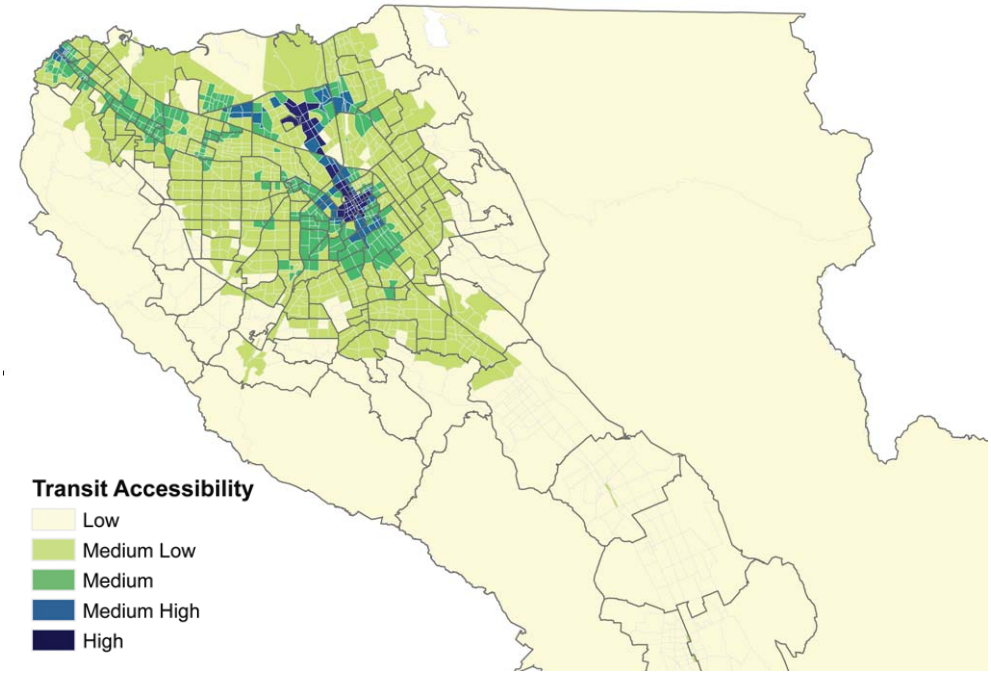
The lower map compares the increase in transit accessibility in 2035 that results from adding the VTP projects to the projected 2035 land use intensification. As shown in the maps, transit accessibility is anticipated to significantly improve over the next 30 years for several reasons:

- Transit improvements, particularly along the BART corridor through Milpitas, San Jose and Santa Clara, as well as around the airport and in the East Valley area
- Improvements along the BRT lines on Steven Creek and from Sunnyvale to Cupertino
- Improvements in the Northwest County area, potentially a result of the Line 522 improvements (one of four future BRT corridors), and Caltrain upgrades and service increases
- Land use pattern changes concentrating greater numbers of households and jobs near transit services, in particular for the North San Jose development corridor focused along the VTA light rail alignment

AIR QUALITY

Air pollutants caused by vehicle emissions are estimated for conformance with State CMP guidelines and are related to several factors, including cold and hot starts and stops, speed changes and idling time.
Air quality results were calculated from California Air Resources Board (CARB) air quality modeling methodologies using

Transit Accessibility: 2035 No Project Scenario versus 2005 Base Year



Transit Accessibility: 2035 Project Scenario versus 2035 No Project Scenario

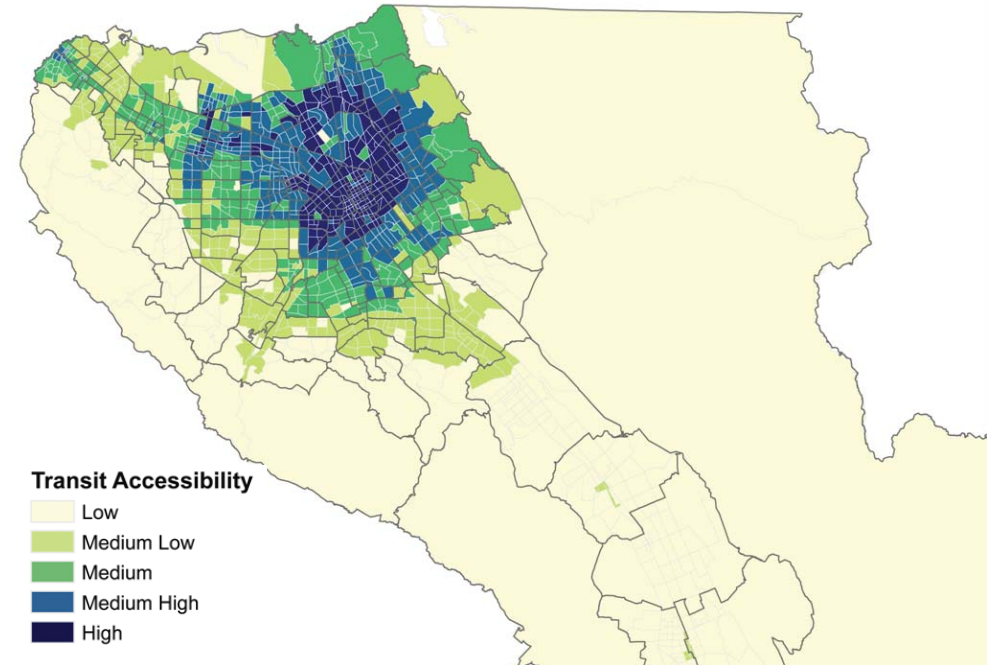


TABLE D-6 *Vehicle Emissions*

TYPE OF EMISSION	TIME PERIOD	2007	NO PROJECT	PROJECT	PERCENT CHANGE NO PROJECT v. 2007	PERCENT CHANGE PROJECT v. NO PROJECT
Organic Gases (tons)	AM	5.19	1.85	1.82	-64.40%	-1.60%
	PM	6.88	2.38	2.33	-65.40%	-2.10%
Carbon Monoxide (tons)	AM	42.38	12.02	11.9	-71.60%	-1.00%
	PM	59.79	17.24	16.73	-71.20%	-3.00%
Oxides of Nitrogen (tons)	AM	8.14	1.78	1.76	-78.10%	-1.10%
	PM	11.32	2.56	2.48	-77.40%	-3.10%
Carbon Dioxide (tons x 1,000)	AM	3.97	4.14	4.10	4.28%	-1.00%
	PM	5.47	5.87	5.68	7.31%	-3.20%
PM10 (particulate matter) (tons)	AM	0.43	0.54	0.54	25.60%	0.00%
	PM	0.59	0.77	0.75	30.50%	-2.60%

EMFAC2007. Improvements in air quality may indicate the benefits of an efficient multimodal transportation system. As shown in Table D-6, air quality for the peak periods is expected to dramatically improve between the base year 2007 (the base year condition provided by CARB) and both the 2035 No Project and Project scenarios. As a result of the introduction of no/low emission vehicles and the retirement of early-year high emission vehicles (as assumed by CARB) organic gases, carbon monoxide and oxides of nitrogen are expected to decrease. However, both carbon dioxide (considered to be a primary agent in global warming) and large (PM10) particulates are expected to rise due to increases in both overall trips and vehicle-miles of travel over 2007 levels. Nevertheless, the 2035 Project shows a decrease in both of those pollutants relative to the No Project. While there is an improvement in most emissions, the fact that carbon dioxide and particulate emissions increase above 2007 base levels indicate that unless there are more substantial shifts from auto modes of travel to transit and non-motorized modes and therefore generating less vehicle-miles traveled, there are limitations as to how much those emissions can be decreased. Achieving substantive greenhouse gas emissions reductions as a goal may place an increasing emphasis on applying changes to land use development patterns in order to increase transit market shares in coordination with pricing policies that would make transit and non-motorized travel more attractive options than automobile modes of travel.

DURATION OF CONGESTION, AM PEAK PERIOD

Duration of congestion measures the length of time that particular links are subject to congested conditions. This measure is calculated from the VTA Countywide model and is summarized for freeway segments with less than one hour of congestion, between one to four hours of congestion and more than four hours of congestion. Duration of congestion is a measure of peak spreading and it provides a way of showing the length of time over which congested traffic conditions persist. Duration of congestion can be affected by changes in travel demand or changes in transportation capacity such as adding highway lanes, improving intersections, transit improvements and ITS strategies. As shown in TableD-7 (pages 238–239), there are marked increases in the duration of congestion for most freeway segments for the 2035 No Project compared to the 2005 base year. There are 27 segments that experience four or more hours of congestion in the AM peak period under the No Project scenario, up from only four segments in the year 2005 base. These locations represent severe roadway bottlenecks. Under the Project scenario, the duration of congestion is expected to improve for eight specific segments, highlighted in bold in Table D-7. Severe bottleneck locations (four+ hours of congestion) are reduced from 27 segments to only 22 segments under the Project scenario, however, 2035 traffic conditions are expected to markedly degrade over 2005 base year conditions under either scenario.

TRAVEL TIME

This measure is an estimate of average travel time across drive-alone auto, carpool and transit modes summarized for ten origin/destination pairs located across Santa Clara County. TableD-8 (page 239) shows travel time changes for the 2035 forecast years, with improvements for most origin/destination pairs for the Project compared to the No Project scenario. For all modes of travel, travel times are reduced for each origin-destination pair from the No Project conditions, although there is considerable variation between corridors in terms of the amount of travel time improvement. While transit travel times in many corridors are not competitive with drive-alone or shared ride auto times, there are a few corridors where transit improvements make transit more competitive with auto users, particularly in the BRT corridors (Downtown San Jose to DeAnza College and Eastridge Mall to San Jose State University) and the BART corridor (Central Fremont to Downtown San Jose).

TABLE D-7 *AM Peak Duration of Congestion*

FREEWAY	DIRECTION	SEGMENT	2005 BASE DURATION	2035 NO PROJECT DURATION	2035 PROJECT DURATION
SR 17	NB	San Tomas to I-280	<1	1 to 4	1 to 4
I-880	NB	I-280 to SR 87	<1	1 to 4	1 to 4
I-880	NB	SR 87 to Brokaw Road	<1	4+	4+
I-880	NB	Brokaw Road to Alameda County Line	<1	1 to 4	1 to 4
I-880	SB	Alameda County Line to Calaveras Road	4+	4+	4+
I-880	SB	Calaveras Road to Montague Expressway	1 to 4	4+	4+
I-880	SB	Montague Expressway to N. First Street	<1	1 to 4	1 to 4
I-880	SB	SR 85 to Lark Street	<1	1 to 4	1 to 4
US 101	NB	Dunn Avenue to Cochrane Rd	1 to 4	4+	4+
US 101	NB	Cochrane Rd to SR 85 S	<1	4+	4+
US 101	NB	SR 85 to Helleyer	<1	1 to 4	1 to 4
US 101	NB	Helleyer to McLaughlin	<1	4+	4+
US 101	NB	McLaughlin to I-280	4+	4+	4+
US 101	NB	I-280 to McKee	<1	4+	4+
US 101	NB	McKee to I-880	4+	4+	4+
US 101	NB	I-880 to San Tomas Expressway	1 to 4	4+	4+
US 101	NB	San Tomas Expressway to SR 237	<1	4+	4+
US 101	NB	SR 237 to SR 85 N	<1	1 to 4	1 to 4
US 101	NB	SR 85 N to Embarcadero	1 to 4	4+	4+
US 101	NB	Embarcadero to San Mateo County Line	1 to 4	4+	1 to 4
US 101	SB	San Mateo County Line to SR 85 N	1 to 4	4+	4+
US 101	SB	I-280 to Capitol Expressway	<1	1 to 4	<1
US 101	SB	Capitol Expressway to Cochrane	<1	1 to 4	1 to 4
SR 85	NB	US 101 S to SR 87	<1	4+	4+
SR 85	NB	SR 87 to Almaden Expressway	<1	1 to 4	1 to 4
SR 85	NB	Almaden Expressway to Camden	<1	4+	1 to 4
SR 85	NB	Camden to I-280	1 to 4	4+	4+
SR 85	NB	I-280 to US 101 N	<1	1 to 4	1 to 4
SR 85	SB	I-280 to Saratoga Rd	<1	1 to 4	<1
SR 85	SB	Saratoga Rd to SR 17	<1	1 to 4	1 to 4
SR 85	SB	Camden to Almaden Expressway	<1	1 to 4	1 to 4
SR 85	SB	SR 87 to US 101 S	<1	1 to 4	1 to 4
SR 87	NB	Capitol Expressway to Almaden Expressway	<1	1 to 4	1 to 4
SR 87	NB	Almaden Expressway to I-280	4+	4+	4+
SR 87	NB	I-280 to US 101	<1	4+	1 to 4

TABLE D-7 (CONT'D) *AM Peak Duration of Congestion*

FREEWAY	DIRECTION	SEGMENT	2005 BASE DURATION	2035 NO PROJECT DURATION	2035 PROJECT DURATION
SR 237	WB	I-880 to Lafayette	<1	4+	4+
SR 237	WB	Lafayette to Lawrence Expressway	1 to 4	4+	1 to 4
SR 237	WB	Lawrence Expressway to US 101	<1	1 to 4	<1
SR 237	EB	US 101 to N. First Street	<1	1 to 4	1 to 4
SR 237	EB	N. First Street to Zanker	<1	1 to 4	<1
I-280	NB	US 101 to 11th Street	<1	4+	4+
I-280	NB	11th Street to SR 87	1 to 4	4+	4+
I-280	NB	SR 87 to I-880	<1	1 to 4	1 to 4
I-280	NB	I-880 to San Tomas	1 to 4	4+	4+
I-280	NB	San Tomas to Lawrence	1 to 4	1 to 4	1 to 4
I-280	NB	Lawrence to SR 85	<1	1 to 4	1 to 4
I-280	NB	SR 85 to Foothill	1 to 4	4+	4+
I-280	NB	Foothill to San Mateo County Line	<1	1 to 4	1 to 4
I-680	SB	Alameda County Line to Calaveras Rd	<1	4+	4+
I-680	SB	Capitol Avenue to I-280	<1	1 to 4	<1
I-680	NB	Capitol Expressway to Calaveras Road	<1	1 to 4	1 to 4
I-680	NB	Calaveras Road to Alameda County Line	<1	4+	1 to 4

TABLE D-8 *AM Peak Average Travel Times by Mode*

ORIGIN/DESTINATION PAIR	DRIVE ALONE AUTO		SHARED RIDE AUTO		TRANSIT	
	NO PROJECT	PROJECT	NO PROJECT	PROJECT	NO PROJECT	PROJECT
Los Gatos Residential Area to Lockheed in Sunnyvale	66	59	29	27	120	120
Morgan Hill Residential Area to Sun/RiverMark in Santa Clara	142	132	43	36	95	95
Los Gatos Residential Area to Sun/RiverMark in Santa Clara	62	52	37	29	107	107
Palo Alto Residential to Apple Computers in Cupertino	25	23	18	17	90	72
Evergreen Residential Area to Downtown San Jose	58	51	39	32	98	83
N. Milpitas to Cisco Site near Tasman/Zanker	38	31	32	25	54	46
N. Milpitas to Lockheed in Sunnyvale	66	53	32	24	115	82
Eastridge Mall to San Jose State University	53	45	38	30	52	39
Downtown San Jose to DeAnza College	53	46	23	18	97	58
Central Fremont to Downtown San Jose	71	57	27	26	85	42

TABLE D-9 *PM Peak Average Travel Times by Mode*

ORIGIN/DESTINATION PAIR	DRIVE ALONE AUTO		SHARED RIDE AUTO		TRANSIT	
	NO PROJECT	PROJECT	NO PROJECT	PROJECT	NO PROJECT	PROJECT
Lockheed in Sunnyvale to Los Gatos Residential Area	85	63	35	27	120	120
Sun/RiverMark in Santa Clara to Morgan Hill Residential Area	142	109	54	43	95	95
Sun/RiverMark in Santa Clara to Los Gatos Residential Area	84	65	46	33	107	107
Apple Computers in Cupertino to Palo Alto Residential Area	34	30	23	21	90	72
Downtown San Jose to Evergreen Residential Area	65	47	37	30	98	83
Cisco Site near Tasman/Zanker to N. Milpitas	44	35	32	29	54	46
Lockheed in Sunnyvale to N. Milpitas	82	60	36	27	115	82
San Jose State University to Eastridge Mall	56	42	35	29	52	39
DeAnza College to Downtown San Jose	56	44	22	15	97	58
Downtown San Jose to Central Fremont	87	63	29	28	85	42

Based on collective results of all system performance measurements (such as congested miles of road, transit mode shares and emissions) travel times are improved in the Project scenario compared to the No Project scenario. But overall these numbers indicate that we cannot build our way out of congested conditions. Instead, a balanced program of improvements beyond typical physical infrastructure—such as changes to land use development policies and pricing policies that discourage reliance on single-occupant vehicles—is needed to address transportation issues in the coming years.

STUDY OF ALTERNATIVE TRANSPORTATION AND LAND USE SCENARIOS

As part of the future planning work and to inform VTP updates, VTA is developing aspects of its Countywide/Bay Area Travel Demand Model to facilitate better testing of alternative land use and transportation scenarios. Subsequent to the adoption of VTP 2035, VTA planning will pursue testing and analysis of alternative land use and transportation scenarios.

These studies will test the various interactions of a range of variables such as roadway and

parking pricing, increased transit service, changes in land use patterns, the cost of transportation modes, the effect of the quality of the pedestrian and built environments and perceived quality of service and passenger amenities. The ultimate purpose is to quantify how land use changes (such as development densification near transit stops, and pricing policies such as toll and parking charges) can increase the performance and efficiency of the transportation system.

Results from these studies will be brought to the VTA committees and Board at various stages for information and discussion. The information will also be available to inform city planning efforts such as General Plan updates.

Appendix E: Summary of VTA Guiding Policies

A wide range of VTA policies and documents, coming from all VTA departments and the Board of Directors, is used to guide the development of the VTP. Those listed in this appendix are intended to illustrate the breadth of policies that influenced the development of VTP 2035 and do not represent an exhaustive list.

TRANSIT SUSTAINABILITY POLICY/SERVICE DESIGN GUIDELINES

The *Transit Sustainability Policy* (TSP), adopted February 2007, is a ridership-based policy that provides a framework for the efficient and effective expenditure of transit funds and for realizing the highest return on investment in terms of public good and ridership productivity. It provides the Board of Directors with a common decision-making process by providing the most complete information available regarding options, cost, benefits and trade-offs of various transit projects and service proposals prior to selection of mode, service plan or funding decisions.

The *Service Design Guidelines* (SDG) are designed for use in conjunction with the TSP evaluation and recommendation process. The SDG are comprised of two parts: Service Performance Standards and Design Guidelines. They provide a framework to evaluate, design, implement and monitor transit services in the region. In accordance with the TSP, all transit projects are subject to an evaluation of the effects the proposed capital project or service improvement will have on transit ridership and operating efficiency. The results will determine if the project meets the ridership criteria established for the proposed mode, if the proposed mode is the most feasible and appropriate for the market and operational environment, and

if the proposed mode is the most cost-effective option. The evaluation may also result in a recommendation to develop a Project Phasing Plan along with an Improvement Plan. The phasing plan would implement a particular service level or mode with the intent of increasing service or changing the mode, as conditions develop to support the service.

The TSP/SDG is available upon request.

COMMUNITY DESIGN AND TRANSPORTATION MANUAL OF BEST PRACTICES FOR INTEGRATING TRANSPORTATION AND LAND USE

The Community Design and Transportation Manual of Best Practices for Integrating Transportation and Land Use is a key product of the CDT program and was developed to support the implementation of VTA's land use objective and goals. It documents proven and innovative best practices in urban design and transportation planning that support and enhance both VTA's and its Member Agencies' investments in the community. It provides planning and design guidance for how to develop in the cores, corridors and station areas. It also provides policy guidance and outlines steps that communities and local governments can take to identify and overcome barriers to developing more livable and sustainable communities. Moreover, it articulates VTA's vision for how communities and a multimodal transportation system can grow together, their respective roles and how the actions of each can be mutually supportive and beneficial. Appendix B provides more background on the CDT Program.

The CDT Manual is available upon request.

PEDESTRIAN TECHNICAL GUIDELINES

The *Pedestrian Technical Guidelines* (PTG) is a companion document to the CDT Manual. It is designed as a guide for the planning and design of pedestrian facilities and environments and as technical resource to those responsible for designing community infrastructure and who are interested in improving the pedestrian environment. The PTG provides planning, design and policy guidance for VTA planning and capital projects.

The PTG is available upon request.

2008 COUNTYWIDE BICYCLE PLAN

The *Countywide Bike Plan* (CBP) provides a policy basis for developing an integrated countywide network of bicycle routes and corridors. The CBP is developed in conjunction with VTA Member Agencies and the Bicycle and Pedestrian Advisory Committee (BPAC). The plan indentifies the bicycle network and the projects and capital needed to develop and

maintain the network. The CBP also provides policies related to developing and maintaining the bike network and provides the planning and policy framework for developing the Bicycle Expenditure Plan (BEP).

The 2008 Countywide Bike Plan is available upon request.

BICYCLE TECHNICAL GUIDELINES

The *Bicycle Technical Guidelines* (BTG) is a companion document to the CBP and the CDT Manual. It is designed as a guide for the planning and design of bicycle facilities and as technical resource to those responsible for designing, engineering and building bicycle facilities. The BTG provides planning, design and policy guidance for VTA planning and capital projects.

The BTG is available upon request.

SHORT-RANGE TRANSPORTATION PLAN

The *Short-Range Transit Plan* (SRTP) is the master plan for the programming of transit service and operations and outlines future transit system development and the capital projects that are necessary for this development. The plan describes VTA's existing transit system, documents the ongoing transit development and planning process, and outlines what is anticipated for VTA for a 10-year period. It also provides a blueprint for VTA's Transit Capital Improvement Program (CIP) development over the 10-year period.

The SRTP is available upon request.

CONGESTION MANAGEMENT PROGRAM

As the Congestion Management Agency for Santa Clara County, VTA is responsible for implementing the *Congestion Management Program* (CMP) for Santa Clara County. State statute requires that a congestion management program be developed, adopted and updated biennially for every county that includes an urbanized area and that it shall include every city and the county government within that county. Since the CMP became effective with the passage of Proposition 111 in 1990, it has forged new ground in linking transportation, land use and air quality decisions for one of the most important urban areas in the country. The CMP addresses the impact of local growth on the regional transportation system. The statutory elements of the CMP include highway and roadway system monitoring, multi-modal system performance analysis, a transportation demand management program, the land use analysis program and local conformance for all the county's jurisdictions. In addition, the CMP requires the development of a Capital Improvement Program (CIP) element which considers both

roadway and transit improvements and provides a basis for securing funding through the State's Transportation Improvement Program (TIP).

The CMP is available upon request.

VTA BIENNIAL BUDGET

VTA policy calls for the development of a biennial (two-year) budget. This process allows VTA to build a more stable near-term financial foundation and to monitor longer-term financial trends and take corrective actions as necessary throughout this two-year cycle. The budget encompasses all of the activities under the jurisdiction of the VTA Board, including Transit Enterprise Operations and Capital, the Measures A and B Capital programs, the Congestion Management Program and related VTP projects and programs.

The VTA Budget is available upon request.

POLICY GUIDANCE FOR MEASURE A REVENUE AND EXPENDITURE PLAN (ADOPTED 06/05/08)

- Maintain financial integrity of organization
- Increase transit usage
- Achieve environmental improvements
- Support transit-oriented land use
- Support countywide economic development
- Strengthen complementary partnerships
- Take advantage of leveraged and new fund sources
- Model various financial conditions
- Achieve a balanced transportation plan
- Implement the intent of Measure A

The full text of Policy Guidance for Measure A Revenue and Expenditure Plan is available upon request.

Appendix F: Glossary of Terms

AB-32—Assembly Bill 32 The Global Warming Solutions Act of 2006 (Assembly Bill 32) caps California's greenhouse gas (GHG) emissions at the 1990 level by 2020. Meeting this target represents an 11 percent reduction from current levels and requires about a 29 percent cut in emissions below projected 2020 levels. AB 32 directed the California Air Resources Board (ARB) to adopt a GHG emissions cap on all major sources to reduce Statewide emissions to 1990 levels by 2020.

ABAG—Association of Bay Area Governments A regional agency responsible for regional planning (excluding transportation). ABAG publishes forecasts of projected growth for the region.

Access The facilities and services that make it possible to get to any destination, measured by the availability of physical connections (roads, sidewalks, etc.), travel options, ease of movement and nearness of destinations.

ABC—Across Barrier Connections

Access-by-Proximity A key concept of the CDT Program. Focuses on clustering complementary land uses and well-designed compact development to combine, reduce or eliminate trips, reduce automobile trips and to help achieve the kind of critical mass that makes vibrant public life possible.

ACCMA—Alameda County Congestion Management Agency The agency responsible for transportation planning and programming of transportation funds in Alameda County.

ACE—Altamont Commuter Express A commuter rail service that runs between the City of Stockton in San Joaquin County and the City of San Jose in Santa Clara County. The service is a partnership involving VTA, the San Joaquin Regional Rail Commission and the Alameda County Congestion Management Agency.

ACTIA—Alameda County Transportation Improvement Authority A special government agency authorized by State law and created by the voters of Alameda County to collect a half-cent sales tax and use the money for a specific list of transportation projects and programs in Alameda County.

ADA—Americans with Disabilities Act On July 26, 1990, ADA was signed into law, requiring public transit systems to make their services fully accessible to persons with disabilities as well as to underwrite a parallel network of paratransit service for those who are unable to use the regular transit system. In addition, VTA must meet the new ADA accessibility design guidelines for all newly constructed transit facilities such as light rail stations, bus stops and transit centers. All procurement of bus and rail vehicles must also meet the ADA accessibility design guidelines.

A & F—Administration and Finance Committee A standing committee of the VTA that reviews policy recommendations pertaining to the general administration of VTA.

APS—Alternative Planning Strategies

APTA—American Public Transportation Agency

ATMS—Advanced Traffic Management System ATMS is a category of intelligent transportation systems that focuses on the management of traffic. It typically includes ramp metering, traffic management centers (TMCs), HOV lanes, integrated corridor management, CCTVs, arterial management and/or incident management.

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

AVL—Automated Vehicle Location AVL is the use of electronic technologies to allow fleet managers to know where vehicles are located at a given time. Several different types of AVL technologies exist. The Department of Defense's Global Positioning System (GPS) is the basis for several recent transit industry AVL projects. In addition to its primary use by transit dispatchers and supervisors, AVL can be linked into other systems and used to provide real-time arrival information for transit customers, to support paratransit services and for a variety of other applications.

BAAQMD—Bay Area Air Quality Management District The regional agency created by the State legislature for the Bay Area air basin (Alameda, Contra Costa, half of Solano, half of Sonoma, Marin, Napa, San Francisco, San Mateo and Santa Clara counties) that develops, in conjunction with MTC and ABAG, the air quality plan for the region. BAAQMD has an active role in approving the TCM plan for the region, as well as in controlling stationary and indirect sources of air pollution.

BPAC—Bicycle/Pedestrian Advisory Committee An advisory committee to the VTA that is responsible for overseeing the work of the VTA staff associated with bicycle and pedestrian plans, guidelines and programs.

BART—Bay Area Rapid Transit The San Francisco Bay Area Rapid Bart Transit District (BART) provides heavy passenger rail service in Alameda, Contra Costa, San Mateo and San Francisco counties, between the cities of Fremont, Pleasanton, Richmond, Pittsburg and San Francisco.

BEP—Bicycle Expenditure Plan The ten-year funding program dedicated for the implementation of bicycle projects in Tier 1 of the Santa Clara Countywide Plan (Bicycle Element of VTP 2030). It includes funding from various local, State and Federal sources. Projects in the Bicycle Expenditure Program are required to provide a minimum 20 percent local match.

Bicycle Technical Guidelines VTA document that provides a uniform set of optimum standards for the planning, design and construction of bicycle projects in Santa Clara County.

BOD—Board of Directors The VTA Board of Directors is composed of 12 elected officials appointed by the member cities and County of Santa Clara. The members of this partnership work together to address the transportation needs of Santa Clara County.

Braided Ramp Type of freeway on-/off-ramp that consists of grade separated ramp(s) that keep two major traffic movements from crossing one another.

BRT—Bus Rapid Transit BRT combines the quality of rail transit and the flexibility of buses. It can operate on exclusive transitways, HOV lanes, expressways, or ordinary streets. A BRT system combines intelligent transportation systems technology, priority for transit, cleaner and quieter vehicles, rapid and convenient fare collection and integration with land use policy.

BSP—Bus Signal Priority

BTG—Bicycle Technical Guidelines

CAC—Citizens Advisory Committee A committee to the VTA Board of Directors that advises on issues of interest to the committee members and the communities they represent and will serve as the oversight body for the 2000 Measure A Transit Sales Tax Program.

Caltrain/Peninsula Corridor Joint Powers Board Commuter rail service running between Gilroy and San Francisco through San Jose. The Peninsula Corridor Joint Powers Board (JPB), made up of representatives from the counties of San Francisco, San Mateo and Santa Clara, oversees this commuter rail service.

Caltrans—California Department of Transportation The responsible owner/operator of the State highway system. Caltrans is responsible for the safe operation and maintenance of roadways.

Capacity The maximum rate of flow that can be accommodated on a facility 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.

Capitol Corridor Intercity Rail Service A 150-mile intercity rail service along the Union Pacific ROW Capitol Corridor, which runs between San Jose and Auburn, through Oakland and Sacramento.

CBO—Community Based Organization

CARB—California Air Resources Board

Carpooling An arrangement in which commuters share driving and the cost of commuting. A carpool is formed with a minimum of two people who commute on a regular basis. The members generally share common residential and employment locations as well as common commuting patterns and schedules.

CBTP—Community-Based Transportation Plan

CCBC—Cross-County Bicycle Corridors

CCEPS—Comprehensive County Expressway Planning Study

CCTV—Closed-Circuit Television This ITS component is used for traffic surveillance, where the signal is transmitted by wire. A CCTV system usually communicates with a centralized facility such as a TMC or OCC.

CDP—Countywide Deficiency Plan A document that will address deficiencies on Santa Clara County's freeways and expressways and include a set of improvements, programs and actions that are designated to both improve service on the overall transportation system and cause a significant improvement in air quality.

CDT Program See Community Design and Transportation Program.

CELR—Capitol Expressway Light Rail

CEQA—California Environmental Quality Act The basic goal of CEQA is to develop and maintain a high-quality environment now and in the future, while the specific goals of CEQA are for California's public agencies to 1) identify the significant environmental effects of their actions; and either 2) avoid those significant environmental effects where feasible or 3) mitigate those significant environmental effects where feasible.

CFL—Compact Fluorescent Lighting

Choice A key concept of the CDT Program Focuses on the notion that one-size-does-not-fit-all. A transportation system that is dominated by a single mode fosters development

patterns and policies that encourage sprawl, decentralization and separation of uses. Choice seeks to expand the range of options about what kind of home to live in, where that home is located, the character of the community and the means of getting around.

CIP—Capital Improvement Program A multiyear program of projects to maintain or improve the traffic level-of-service and transit performance standards developed by the CMP and to mitigate regional transportation impacts identified by the CMP Land Use Analysis Program, which conforms to State and Federal air quality requirements. It is updated every other year as part of the Congestion Management Program update. The CIP is a ten-year program.

Clean Air Act The Federal law that requires urban areas with high pollution to modify transportation policies in order to reduce emissions. This law makes air quality a primary concern in transportation decisions.

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 funding program established by ISTEA and continued in TEA-21 specifically for projects and programs that will contribute to the attainment of a national ambient air quality standard. The funds are available to non-attainment areas for ozone and carbon monoxide based on population and the degree of severity of pollution. Eligible projects will be defined by the approved State Implementation Program (SIP) and the State's air quality plan.

CMIA—Corridor Mobility Improvement Account A State Highway funding program for projects on the California State Highway System that: reduce travel time or delay, improves connectivity of the State Highway System between rural, suburban and urban areas, or improves the operation and safety of a highway or road segment; improve access to jobs, housing, markets and commerce; and begin construction before December 2012.

CMP—Congestion Management Program A comprehensive program designed to reduce traffic congestion, to enhance the effectiveness of land use decisions and to improve air quality. The program must comply with CMP State statutes and with State and Federal Clean Air Acts. Unless otherwise specified, CMP means Santa Clara County's Congestion Management Program.

CMP Roadway Network A network of roadways within a CMA that are of regional significance. The CMP roadway network in Santa Clara County consists of freeways, expressways, urban arterials (six-lane facilities or non-residential arterials with average daily traffic (ADT) of 30,000 vehicles per day) and rural highways.

CMPP—Congestion Management Program and Planning Committee A standing committee of the VTA that reviews policy recommendations pertaining to the Congestion Management Program and Countywide Transportation Plan.

COA—Comprehensive Operations Analysis

Community Design and Transportation (CDT) Program A partnership between the VTA and the 15 cities/towns and the county to develop and promote strategies for improving transportation systems and community livability. This involves creating areas with high-quality planning and design that support walking, biking and local auto trips. It also promotes concentrated development, good access to transit services, multimodal street design and efficient use of land. The CDT program is VTA's primary program for integrating transportation and land use and has been adopted by each of the 16 city, town and county governments in Santa Clara County.

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

Complete Streets Program The concept that all public roadways should be designed and built for safe travel by all potential roadway users. Roads should also not create barriers for any roadway users; bicyclists and pedestrians in particular are harmed when crossings of freeways, waterways and rail lines are not safe and/or frequent and when roadway intersections aren't designed to include other modes.

Comprehensive Operations Analysis (COA) An in-depth effort to analyze VTA's existing transit services, identify underserved markets and ultimately produce a new structure for bus services. A key component of the COA effort was the development of policy standards to continually evaluate and monitor the performance of the bus system against Board-adopted measures of productivity.

Concentrated Development Usually synonymous with higher-density development than is the average for the area. Among land use planners, concentrated development implies a minimum of multistory, attached residential condominiums or apartments, mid- to high-rise office or retail, or some mix of these land uses. Usually, concentrated development connotes an urban setting located around some type of transit

station, downtown commercial center, or other attraction or amenity. Concentrated development generally contrasts with "clustered" development, which may describe a grouping of detached residential units in a rural or suburban setting and intended to preserve open space in a large parcel.

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.

Connectivity Generally defines how well a street network allows pedestrians, bicyclists and non-auto modes to travel in a straight line (i.e., shortest path) between two points. Improvement to connectivity, such as extending dead-end streets or continuing arterials under freeways, encourages walking and bicycling. Planners would contend that a perfect grid or radial street pattern maximizes connectivity while cul-de-sacs, at-grade freeways, rail tracks and other impediments or intimidating structures diminish connectivity. For auto travel, connectivity may apply to extending arterial roadways that will allow autos to avoid using congested freeway segments to make short trips.

Cores District areas that include many streets and blocks characterized by concentrated development features.

Corridors Linear areas, typically centered on a single street, that function as the spine of the surrounding community.

Countywide Bicycle Plan A document that includes policies and implementing actions designed to improve bicycle facilities and inter-agency coordination and which will promote bicycling and bicycle safety in Santa Clara County.

CPB—Countywide Bicycle Plan

Cross-County Bicycle Corridor A system of 24 on-street bicycle routes and 17 trail networks. They are to be the most direct and convenient routes for bike trips to local and regional destinations across city or county boundaries.

CSS—Commute Services Study A VTA study document updated every two to three years to ensure commute services are responsive to changing commute patterns in Santa Clara County. The study is an analysis of commute trips, to assess the viability of existing commute bus services and to identify new commute bus service concepts and routes.

CTA—Committee for Transit Accessibility A committee to the VTA Board of Directors that advises on bus and rail accessibility issues, paratransit services and issues related to the Americans with Disability Act (ADA).

CTC—California Transportation Commission A State agency that sets State

spending priorities for highway and transit and allocates funding. Members are appointed by the governor.

CVO—Commercial Vehicle Operations

Use of ITS technologies to improve travel time and reliability for freight traffic and reduce the cost of shipping goods. CVO applications include satellite tracking of truck traffic, automated weigh-in-motion scales and automatic vehicle identification systems.

Deficiency Deficiencies occur where the transportation facilities provided do not conform to the standards that the area has adopted as minimally acceptable. A deficient roadway in Santa Clara County is one with a Level of Service (LOS) of F.

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

Developer Exaction A contribution or payment required as an authorized precondition for receiving a development permit; usually refers to mandatory dedication (or fee in lieu of dedication) requirements found in many subdivision regulations.

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. California Government Code Section 66000 et seq. specifies that development fees shall not exceed the estimated reasonable cost of providing the service for which the fee is charged. To lawfully impose a development fee, the public agency must verify its method of calculation and document proper restrictions on use of the fund.

Economic Health A term used to describe the fundamental and long-term strength of the economy. The most common measures of a region's economic health include unemployment rate, business output, personal income, the sales growth of indigenous business and the attraction of new business to the area. Short-term indicators of economic health may include congestion, historically high cost of housing, parking shortages, low commercial and retail vacancy rates and a high cost of living. Long-term, however, these indicators could presage economic decline if not addressed. It may also include long-term indicators that measure a region relative to the State or nation in regard to wages, construction of high-end housing, demand for skilled labor, diversity of the industrial mix, and/or the share of economic activity related to new or robust industry sectors (e.g., biotech, telecommunications, etc.).

Eco Pass Partnership between Santa Clara Valley employers and the VTA. Eco Pass is a transit card with unlimited use of VTA bus and light rail services. Employers purchase annual Eco Pass stickers for full-time employees at a

given site, at one low cost. Pricing levels are based on proximity to VTA transit services and the number of employees.

EIR/EIS—Environmental Impact Report/ Environmental Impact Statement. 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.

Electrification To equip rail or bus transit systems for use of electric power.

EPA—Environmental Protection Agency

Evaluation Criteria factors that help to distinguish the relative value of alternative actions.

Express Lanes High-occupancy toll lanes that combine the characteristics of HOV lanes and toll roads by allowing carpools, vanpools and buses free access, while charging for single occupant vehicle (SOV) or drive alone use.

FHWA—Federal Highway Administration A division of the United States Department of Transportation that specializes in highway transportation. The agency's major activities are grouped into two "programs," the Federal-Aid Highway Program and the Federal Lands Highway Program. FHWA's role in the Federal-Aid Highway Program is to oversee Federal funds used for constructing and maintaining the National Highway System. Under the Federal Lands Highway Program, FHWA provides highway design and construction services for various Federal land-management agencies.

Final Engineering Finalizes design drawings and produces construction documents for the preferred alternative.

Fixed-Route Transit Transit service provided on a repetitive, fixed-schedule basis along a specific route, with vehicles stopping to pick up passengers at and deliver passengers to specific locations.

Flexible Work Hours This is a form of alternative work schedule. It is a policy that gives employees the option of varying their start and end times each workday. The intent is to allow employees more flexibility to adjust work hours to meet individual needs and provide incentive to use commute alternatives.

Flyover Ramp A ramp connecting two roadway facilities that provides a direct connection to avoid congestion, merging and/or an intersection.

FPI—Freeway Performance Initiative An effort developed by MTC to improve the circulation on the Bay Area's freeway system. The purpose of the FPI is to develop a com-

prehensive strategic plan to guide the next generation of freeway investment.

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.

FTIP—Federal Transportation Improvement Program All Federally funded projects are required to be included in the FTIP. The FTIP is a document that includes key information regarding all Federally funded and "regionally significant" projects. This document is used as a common reference point for review and approval of processes (such as funding, air quality conformity, etc.) by various State and Federal agencies. The FTIP is actually a composition of select projects from State, regional and local sources. Each "level" also has its own transportation improvement program (TIP). Therefore, in order for a project to be included in the FTIP, it must first be included in a local TIP, then in the RTIP, then in the STIP. Each TIP will require a review and approval process by the agency responsible for administering the TIP.

GP—General Plan

Grade Separation A grade separation is a structure necessary to provide for either the passage of a roadway or bicycle or pedestrian facility under or over a rail line.

HOT—High Occupancy Toll

HOV Lanes—High-Occupancy Vehicle Lanes

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

HSR—High Speed Rail

IIP—Interregional Improvement Program

Program A State funding program created by SB-45. IIP funds may be programmed to projects outside of the urbanized areas and/or interregional projects. All IIP funds are programmed by Caltrans, via the Interregional Transportation Improvement Plan (ITIP) process, with final approval by CTC.

Intensification For residential uses, the increase in the actual number or the range of dwelling units per net or gross acre. For nonresidential uses, an increase in the actual or the maximum permitted floor area ratios (FARs).

Interconnection A key concept of the CDT Program. Focuses on interconnecting streets, pedestrian and bicycle networks, transit modes, buildings and developments to get more from transportation resources and urban infrastructure and to form coherent districts and more livable places.

Intermodal The term "mode" refers to and distinguishes the various forms of transportation, such as automobile, transit, ship, bicycling and walking. Intermodal refers specifically to the connections between modes.

Inter-Agency Indicates cooperation between or among two or more discrete agencies.

Inter-County Existing or occurring between two or more counties.

Inter-Jurisdictional Existing or occurring between two or more jurisdictions.

Intra-County Existing or occurring within the county boundaries.

ISR—Information Service Representative

ISTEA—Intermodal Surface Transportation Efficiency Act Federal legislation passed in 1991 and expired in 1997 which restructured much of the basis for funding highway projections and made some of these funds available to urban areas for transit projects. A key ISTEA component is increased flexibility in the programming of projects.

ITE—Institute of Traffic Engineers

ITIP—Interregional Transportation Improvement Program The ITIP is a four-year planning and expenditure program adopted by the CTC and updated in even numbered years. The ITIP covers rural highway and key interregional improvements, including intercity rail.

ITS—Intelligent Transportation Systems Technologies that improve the management and efficiency of our transportation system, such as electronic fare payment systems, ramp metering, timed traffic signals and on-board navigation systems.

Jobs/Housing Balance; Jobs/Housing Ratio The availability of housing for employees in a particular area. The jobs/housing ratio divides the number of jobs in an area by the number of employed residents. A ratio of 1.0 indicates a balance. A ratio greater than 1.0 indicates a net in-commute; less than 1.0 indicates a net out-commute.

Joint Development Program A program adopted by the VTA Board in 2005. It is designed to secure the most appropriate private and public sector development of VTA-owned property at and adjacent to transit stations and corridors.

JPB—Joint Powers Board

LAN—Local Area Network A computer network that spans a relatively small area. Most LANs are confined to a single building or group of buildings. However, one LAN can be connected to other LANs over any distance via telephone lines and radio waves.

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

LED—Light Emitting Diode

LEED—Leadership in Energy and Environmental Design

Livability While this term may encompass as many different meanings as there are workers and residents in Santa Clara County, it is used in the VTP 2035 as a more broadly defined synonym for "quality of life" to describe the plan's support for four types of transportation investments and services: relief from congestion, better facilities and services for non-work and off-peak trips, attractive travel choices and services for a diverse and changing population. Livability describes a resident's satisfaction with the transportation system in such terms as its ease of use, convenience, reliability, cost, range of travel choices and interference in non–transportation-related activities.

Long-Range Plan A transportation plan covering a time span of 20 or more years. While the VTP 2035 is a living document that will be updated every two to five years, the plan's methodologies are intended to create performance-based processes that will be used to select projects and design programs over the plan's 20-year horizon.

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. The VTA Congestion Management Program has a standard of LOS E; roadways at LOS F are considered deficient.

LRT—Light Rail Transit LRT operates on an electrical system powered from an overhead wire on a dedicated track. The system is capable of operating at high speeds in dedicated rights of way and at lower speeds on arterial streets and downtown environments.

LSCR—Local Streets and County Roads

Measure A (1996) A Santa Clara County advisory ballot measure passed in 1996 that identified a specific program of priority transportation improvement projects in Santa Clara County to be undertaken as funding became available.

Measure A (2000) A 2000 ballot measure in Santa Clara County that provides a 1/2 cent sales tax for 30 years, beginning in April 2006. The proceeds would be used to fund several transit projects throughout the county. The Measure passed in November 2000.

Measure B (1996) A 1996 ballot measure in Santa Clara County that raised the local sales tax by 1/2 cent for a nine-year period, with the proceeds being deposited into the county's General Fund.

Member Agencies Local jurisdictions that are signatories to the CMA's Joint Powers

Agreement. This includes all cities and towns within the county, Santa Clara County and the Santa Clara Valley Transportation Authority.

MIS—Major Investment Study A study required for major Federally funded transportation projects (highway and transit) before a project can be included in the RTP. The study must include all reasonable alternatives to address defined transportation problems and the study process must include all affected agencies, local governments, MTC and the public.

Mitigation An action to reduce or eliminate the impacts of another action.

Mixed Use Refers to a variety of land uses and activities with a mixture of different types of development, in contrast to separating uses, such as job sites, retail and housing; multiple land uses in the same structure or same general area of a community; used to describe buildings with different types of use on different floors, particularly commercial uses (such as shops or banks) on the ground floor with flats above.

Mobility The movement of people or goods throughout our communities and across the region. Mobility is measured in terms of travel time, comfort, convenience, safety and cost.

Modal Split or Mode Share Modal split measures the extent to which travelers use the various available transportation modes. It is measured as the proportion of people making a trip using a given mode.

MPO—Metropolitan Planning Organization A Federally required transportation planning body responsible for the Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP) in its region; the governor designates an MPO in every urbanized area with a population of over 50,000.

MOU—Memorandum of Understanding

MTC—Metropolitan Transportation Commission The metropolitan planning organization (MPO) for the nine-county San Francisco Bay Area.

Multimodal Of or relating to more than one mode of transportation.

NBSSR—Noise Barrier Summary Scope Report

NOP—Notice of Preparation

OCC—Operations Control Center Centralized location where transportation operations (traffic and/or transit) are monitored and conducted.

PA/ED—Project Approval/Environmental Document

PAB—Policy Advisory Board An advisory group that ensures that the local jurisdictions most affected by major transportation

improvement projects are involved in guiding the planning, design and construction of these projects.

PAC—Policy Advisory Committee A committee to the VTA Board of Directors that advises on issues related to the development of VTA's policies.

Paratransit Paratransit services are specialized systems of transportation operated for people who are unable to use conventional fixed-route transit. Paratransit services provide trips between a rider's origin and destination, usually door-to-door. ADA requires that the service be comparable to the fixed-route service available.

PDA—Priority Development Area

Peak Hour The peak hour of traffic volumes in an area.

Peak Spreading A lengthening of the peak period of traffic congestion, usually accompanied by a flattening of the peak.

Performance Measure A means to measure whether an objective has been achieved or whether investments or strategies improve over time or across alternatives.

Person Trip A trip made by one person irrespective of mode.

Place-Making A key concept of the CDT Program. Focuses on the human-scale elements of the built environment that create uniqueness and identity and make places attractive, comfortable and memorable.

PMP—Pavement Management Program Funding program intended to repair or replace the existing roadway pavement. Funds are distributed using a population-based and lane mile formula. The cities and county must use a Pavement Management System certified by the MTC to identify and prioritize pavement needs.

Preliminary Engineering A study that identifies alternatives for attaining a specified goal. For each alternative, the document describes benefits and contains engineering drawings with enough detail to perform environmental analysis and gauge construction feasibility.

PR—Project Report Refers to the report used by Caltrans to recommend approval of a project. The term "Draft Project Report" (Draft PR) refers to a draft version of this report that must be prepared for projects with environmental documents.

PSR—Project Study Report A PSR is an engineering report, the purpose of which is to document agreement on the scope, schedule and estimated cost of a project so that the project can be included in a future State Transportation Improvement Program (STIP). Chapter 878 of the 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.

PTA—Public Transportation Account These revenues are derived from the sales tax on gasoline and diesel fuel. Under the provisions of SB-45, 50 percent of PTA revenues are distributed to the State Assistance Program (STA) with the other 50 percent used for funding planning activities of Caltrans, the CTC, intercity rail purposes and for the operations of the new California High-Speed Rail Authority. Part of the revenues are for uses formerly covered by the Transit Capital Improvement (TCI) Program (TCI has been eliminated as a separate program and folded into the PTA), which include transit vehicle purchases.

PTAP—Paratransit Technical Assistance Program A regional effort to focus training in the areas of paratransit operations.

PTG—Pedestrian Technical Guidelines

Redevelopment Tax Increment This source of local revenues comes from property taxes within a defined redevelopment area. The county assessor freezes the assessed value of all real property within the redevelopment area as of a base year. As property values appreciate over the life of the redevelopment area (usually about 20 years), the same proportion of the increment of tax revenues above the base year value is paid into the redevelopment agency special fund and used for designated projects. In theory, these specific projects help the area's property to increase in value beyond the appreciation rate of what would have occurred without these projects. Proposition 13 restricts the appreciation of property values to 2 percent per year (or less if the market appreciates at a lower rate). Other agencies that normally receive property taxes may negotiate "pass-through" agreements with the redevelopment agency to avoid losing their share of the increment to the agency. Tax increments are bondable revenue streams that have leveraged large amounts of local bonds for all types of public improvements.

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.

RIP—Regional Improvement Program

RM2—Regional Measure 2

Roadway Pricing "Road pricing" is an umbrella phrase that covers all charges imposed on those who use roadways. The term includes such traditional revenue sources as fuel taxes and license fees as well as

charges that vary with time of day, the specific road used and vehicle size and weight.

RTC—Regional Transportation Card

RTI—Real-Time Transit Information

RTIP—Regional Transportation Improvement Program A list of proposed transportation projects submitted to the CTC by the regional transportation planning agency (for the Bay Area—MTC), as a request for State funding. The individual projects are first proposed by local jurisdictions, then submitted by the CMA to the regional agency and then submitted by the regional agency for submission to the CTC. The RTIP has a four-year planning horizon and is updated every two years.

RTP—Regional Transportation Plan A multimodal blueprint to guide the region's transportation development for a 20-year period. Updated every two to three years, it is based on projections of growth and travel demand coupled with financial assumptions. Required by State and Federal law.

RTPA—Regional Transportation Planning Agency

Santa Clara Countywide Bicycle Plan Plan developed by the VTA to guide the development of bicycle facilities in order to promote safe and convenient bicycling throughout the county. It also provides coordination of facilities that cross jurisdictional boundaries.

SAFETEA-LU—Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users SAFETEA-LU represents the largest surface transportation investment in the nation's history. SAFETEA-LU builds on the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21). SAFETEA-LU addresses the many challenges facing our transportation system today—challenges such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity and protecting the environment—as well as laying the groundwork for addressing future challenges.

SB-375—Senate Bill 375 A very important yet fairly modest measure, because it requires the 18 metropolitan planning organizations across the State of California to show that their future planning scenarios will result in a reduction in carbon. The requirement will engage regions in a process similar to a process pioneered in Sacramento, known as "the blueprint," which essentially says that there needs to be a plan as a region, not just as individual cities and counties. The bill provides incentives for regions to consider the impact of land use on climate change. Under

the provisions of the bill, regions must engage in a process to develop scenarios that show a contribution to climate change and if they do so but are unable to actually achieve the goal, the State is going to require the region to submit reports demonstrating the strategies they may need to meet the goals.

SB-45—Senate Bill 45 Governor Wilson signed SB-45 into law at the end of the 1997 legislative session. This legislation consolidated several State transportation funding programs into three funding programs and devolved State transportation programming responsibility to the county and MPO level. Funds consolidated by SB-45 include the Flexible Congestion Relief (FCR), Transit Capital Improvement (TCI), Transportation Systems Management (TSM) and Regional Traffic Signalization and Operations Program (RTSOP) funds25.

SCS—Sustainable Communities Strategies

SDG—Service Design Guidelines

Section 5307 Funds provided through FTA through a complex formula. These funds are not available for operating assistance in Urbanized Areas (UZAs) with a population over 200,000; however, they can be used for preventive maintenance purposes. Additionally, in UZAs with populations greater than 200,000, one percent of the UZA formula funds are to be spent on transit enhancements, which include rehabilitation, connections to parks, signage, pedestrian and bicycle access and enhanced access for those persons with disabilities, and one percent must be spent on security.

Section 5309 This includes both discretionary and formula transit capital funds provided through the FTA. New rail starts and extensions are funded through this program, which operates through earmarking at the congressional level. Other categories are fixed guideway modernization (formula-based) and bus and bus facilities (discretionary).

Section 5311 FTA funds available for rural/intercity bus projects including purchases of buses and related equipment and bus operations in rural areas.

SHA—State Highway Account

SHOPP—State Highway Operations and Protection Plan A program created by State legislation that includes State highway safety and rehabilitation projects, seismic retrofit projects, landscaping, some operational improvements and bridge replacement. SHOPP is a four-year program of projects adopted separately from the STIP cycle. Both new (Prop. 111) and old State gas tax revenues and Federal funds are the basis for funding this program. The legislature and governor have made seismic retrofit the State's highest priority and in practice have used other STIP monies for these projects.

SJC—Mineta San Jose International Airport (sometimes referred to as SJIA). The airport serving the Santa Clara Valley area. It is a self-supporting enterprise, owned and operated by the City of San Jose.

SLPP—State Local Partnership Program A State matching program for entities that enact local transportation taxes and uniform developer fees.

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.

SOV—Single Occupant Vehicles

SR—State Route

SRTP—Short Range Transit Plan This documents the VTA's on-going transit development and planning process for a ten-year planning horizon. It is used to support projects in the RTP and VTP.

STA—State Transit Assistance Provides funding for mass transit, transit coordination projection and transportation planning. Half of the revenues budgeted for the PTA are appropriated to STA. STA apportionments to regional transportation planning agencies (MTC in the Bay Area region) are determined by two formulas: 1) 50 percent of funds are distributed according to population and 2) 50 percent are distributed on a basis proportional to operator revenues in the region for the prior year. The Bay Area region usually receives about 38 percent of State STA funds.

Station Areas Locations immediately proximate to rapid transit stations that already serve or will serve as central elements in a transit-oriented development (TOD).

STIP—State Transportation Improvement Program The STIP is a multi-year planning and expenditure plan adopted by the CTC for the State Transportation System and is updated in even-numbered years. The STIP is composed of the approved RTIPs and the Caltrans ITIP. The 2000 STIP is a four-year program. New State legislation passed in 2000 will extend the STIP timeframe to a five-year program.

STP—Surface Transportation Program A flexible funding program established by ISTEA. Many mass transit and highway projects are eligible for funding under this program. Ten percent of the projects in this program must be transportation enhancement projects and ten percent must be safety projects.

SVBC—Silicon Valley Bike Coalition

SVITS—Silicon Valley ITS Program Expanded partnership formed to implement

the Silicon Valley Smart Corridor project to work toward implementing three additional ITS projects in VTP 2030 Santa Clara and southern Alameda County. The original Smart Corridor was focused on the I-880 and SR 17 corridor.

SVRT—Silicon Valley Rapid Transit The BART to Santa Clara County project.

SWOT Analysis A strategic planning method used to evaluate the Strengths, Weaknesses, Opportunities and Threats involved in a project or in a business venture. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieving that objective.

TAC—Technical Advisory Committee An advisory committee to the VTA that is responsible for overseeing the technical work of the VTA staff and developing recommendations to the Board of Directors on projects and programs.

TCM—Transportation Control Measure A measure intended to reduce pollutant emissions from motor vehicles. Examples of TCMs include programs to encourage ridesharing or public transit usage, city or county trip reduction ordinances and the use of cleaner-burning fuels in motor vehicles. MTC has adopted specific TCMs, in compliance with the Federal and State Clean Air Acts.

TCRP—California Governor's 2000 Traffic Congestion Relief Program A program established in 2000 to provide $2 billion in funding for traffic relief and local street and road maintenance projects throughout California.

TCRP (alternate definition)—Transportation Cooperative Research Program

TDA—Transportation Development Account Created 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 allocated by MTC to the county's eligible applicants. In Santa Clara County, the transit agency is the only eligible applicant for Article 4 allocations. In addition to Article 4, allocations from TDA are also made under Article 4.5 for community and paratransit services. This provision allows MTC to allocate up to five percent of the total TDA allocation for Santa Clara County for these types of services, which the Santa Clara Valley Transportation Authority claims for ADA paratransit services. Additionally, Article 3 funds (four percent of the total) are allocated annually for bicycle/pedestrian projects, which are nominated by the VTA.

TDM—Transportation Demand Management The purpose of TDM is to

increase the efficiency of existing roadway systems by reducing the demand for vehicular travel. TDM strategies and initiatives are multimodal and aimed at reducing peak-hour travel demands. Example TDM strategies include carpooling or vanpooling, flexible work hours, telecommuting, parking controls and use of alternative transportation modes such as transit.

TE—Transportation Enhancements Program VTA established the TE with the Santa Clara TEA funds. Approximately 37 percent of the TEA funds from TEA-21 will be dedicated to Countywide Bicycle Expenditure Program projects and the remainder will be available for projects in all TEA funding categories.

TEA—Transportation Enhancement Activities ISTEA provided for a ten percent set-aside of each State's STP allocation to be used for TEA projects above and beyond normal capital improvements. Enhancement funds must be used for elements of a project that have a direct relationship to the inter-modal transportation system and fit one or more of 12 activities categories described in TEA-21.

TEA-21—Transportation Equity Act for the 21st Century TEA-21 is the successor legislation to ISTEA. Congress enacted TEA-21 in mid-1997. The legislation covers the six-year period 1997/98 to 2002/03 and extends and expands many of the funding programs developed under ISTEA.

TEAQ—Transportation Energy and Air Quality A new program in VTP 2035 through private and public partnerships that aims to conserve natural resources, reduce greenhouse gases, prevent pollution and use renewable energy and materials.

Telecommuting A system of working at home or at an off-site workstation with computer facilities that link to the worksite.

TFCA—Transportation Fund for Clean Air TFCA funds are generated by a $4.00 surcharge on vehicle registrations. The funds generated by the fee are used to implement projects and programs to reduce air pollution from motor vehicles. Health and Safety Code Section 44241 limits expenditure of these funds to specified eligible transportation control measures (TCMs) that are included in BAAQMD's 1991 Clean Air Plan, developed and adopted pursuant to the requirements of the California Clean Air Act of 1988. BAAQMD manages 60 percent of the funds via a regional discretionary program. The remaining 40 percent are returned to each county based on annual vehicle registrations.

TIP—Transportation Improvement Program A Federally required document produced by a regional transportation plan-

ning agency (MTC in the Bay Area) that states investment priorities for transit and transit-related improvements, mass transit guideways, general aviation and highways. The TIP is the MTC's principal means of implementing long-term planning objectives through specific projects.

TLC—Transportation Livable Communities Program MTC created a new regional discretionary funding program called TLC with some of the TEA funds. Sponsors of projects must apply directly to MTC for these funds. Funds are to be used for cities to help them develop transportation-related projects aimed at improving quality of life.

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. They perform these functions with advanced ITS technology such as sophisticated sensors; data fusion, information processing and communications equipment; and technology to automate routine decision-making and other activities.

TOC—Traffic Operations Center

TOD—Transit-Oriented Development

TOS—Traffic Operations System A system made up of various ITS components that improve and monitor 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.

TP & O—Transit Planning and Operations Committee A standing committee of the VTA that reviews policy recommendations pertaining to transit planning, its projects and operations.

Transient Occupancy Taxes These taxes are also known as hotel taxes and are charged for any overnight stay at a commercial lodging. They typically run between 8 and 15 percent but may be higher. Some proportion of the transient occupancy tax revenues is sometimes dedicated for convention and visitor promotions or special projects. The balance is usually paid into the county's General Fund. The revenue stream from these taxes is bondable and has often been used to subsidize the construction of convention centers and downtown improvements.

Transit Passenger service provided to the public along established routes. Paratransit is a variety of smaller, often flexibly scheduled and routed transit services serving the needs of persons that standard transit would serve with difficulty or not at all.

Transit-Oriented Development Transit-oriented development (TOD) is characterized

by a compact layout that encourages use of public transit service and walking or bicycling instead of automobile use for many trip purposes. Typically, it places higher-density development within an easy walking distance of 1/4 to 1/2 mile of a public transit station or stop and is accessible by all other modes. It is compact, typically mixed-use, pedestrian-friendly and has a transit stop or station as an activity center.

TransLink The Bay Area's regional electronic fare payment collection system.

TravInfo The Bay Area's advanced traveler information system.

TSD—Transit Special District

TSOM—Transportation Systems Operations and Management The use of low-cost capital and operational improvements to increase the efficiency of road transportation and transit services. Sometimes the term is also applied to techniques used to reduce the demand for travel in an area. Other TSOM measures are engineering-oriented, such as timing traffic signals to smooth the flow of traffic and ramp metering, which regulates the entrance of vehicles onto a freeway, thus increasing the efficiency of the freeway.

TSP—Transit Sustainability Policy A policy framework for evaluating new and existing transit services. The TSP shifts the historic focus of transit investment for Santa Clara County from providing transit service to all parts of the county regardless of demand to a market-based network intended to attract the greatest number of riders.

Universe of Projects The compilation of projects in the VTP 2030 which were proposed by interested agencies and the general public. The projects proposed by individual cities and the county required city council or board approval prior to submittal to the VTA for inclusion in the plan.

Urban Design The attempt to give form, in terms of both beauty and function, to selected urban areas or to whole cities. Urban design is concerned with the location, mass and design of various urban components and combines elements of urban planning, architecture and landscape architecture.

UA (or UZA)—Urbanized Area An area defined by the United States Census Bureau that includes one or more incorporated cities, villages and towns (or "central place") and the adjacent densely settled surrounding territories (or "urban fringe") that together have a minimum of 50,000 persons. The urban fringe generally consists of contiguous territory having a density of at least 1,000 persons per square mile. UZAs do not conform to congressional districts or any other political boundaries, but are set by the Census Bureau

on demographics, numbers and definitions. Non-urbanized areas are demographically rural in population.

USC—United States Code

VA/E—Value Analysis/Engineering

Vanpooling Commuting in a 7- to 15-passenger van, with driving undertaken by commuters. Some portion of the van's ownership and operating cost is usually paid by the riders on a monthly basis. The van may be privately owned, employer-sponsored with the company owning and maintaining the vehicle, or it may be provided through a private company that leases vehicles.

VHT/P-T—Vehicle Hours of Travel per Person Trip A measure of the average amount of time travelers spend getting to their destination.

Vision A brief description of what we want the region to be for the next generation.

VMT—Vehicle Miles of Travel A standard area-wide measure of travel activity, calculated by multiplying average trip length by the total number of trips.

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.

VTP—Santa Clara Valley Transportation Plan A 25-year plan developed by 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 to four years to coincide with the update of the Regional Transportation Plan (RTP).

WAN—Wide Area Network

ZEB—Zero Emission Bus The VTA's plan to purchase and deploy a zero emission bus fleet. ZEB is defined as an urban bus certified to zero exhaust emission of any pollutant under any and all conditions and operations. This includes hydrogen-powered fuel cell buses, electric trolley buses and battery electric buses.

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