Santa Clara Valley Transportation Authority

Solutions that move you

Strategic Capital Investment Plan

FY 2022 – 2041

Adopted by the VTA Board of Directors on: June 2, 2022


7504
7504
Valley
Transportation
Authority

Welcome Letter

Carolyn M. Gonot | VTA GM/CEO

June 2, 2022

On behalf of the VTA Board of Directors, I am pleased to provide VTA's Strategic Capital Investment Plan (SCIP) for Fiscal Year (FY) 2022 through FY 2041. Completion of this effort was guided, and significant input provided, by the Capital Program Committee.

VTA, as a growing and evolving multimodal transportation agency, has a large and expanding mix of capital assets. In the past, these were primarily transit-focused (bus, light rail, paratransit, etc.) but the breadth continues to expand to include other multimodal transportation solutions including VTA's BART Silicon Valley Extension (BSV), specific highway and Complete Streets projects, transit-oriented development, and the Silicon Valley Express Lanes Program.

The purpose of the SCIP effort is to envision, chart, and prioritize within projected funding constraints the organization's comprehensive long-term capital needs to ensure assets are available and functional when needed to provide critical service. The SCIP is a framework and methodology to provide the VTA Board and administration with critical information needed to make informed policy decisions on VTA's capital assets, thus more effectively aligning Board priorities into VTA's capital planning process. The SCIP utilizes a 20-year horizon to allow for evaluation and forecasting far beyond the next few biennial budget cycles to provide a window on major upcoming needs. It includes the assets for all VTA modes and programs, including transit, highway/roadway, the BSV Extension, and others.

It should be emphasized that the SCIP does not establish funding for projects. Rather, it provides the information necessary to prioritize and fund projects through current and future biennial budget processes. Given this, the SCIP is reviewed every two years and updated as needed to reflect changed conditions, funding imperatives, and Board priorities.

The need for strategic long-term capital planning for capital assets is critical given that all assets degrade over time. This can result in dramatically reduced reliability and increased maintenance costs. The SCIP is intended to educate and enhance knowledge of VTA's capital program factors and challenges by illuminating the short- and long-term implications of capital decisions. It provides insights on the capital planning process and supports VTA's mission of "providing solutions that move you".

I want to extend my thanks to all VTA and consultant staff that contributed to the development of this inaugural SCIP. I also want to especially thank the members of the Capital Program Committee for their vision and guidance in this process.

Respectfully provided,

Carolyn M Gonot

Carolyn M. Gonot
VTA GM/CEO

In dedication to the memory of our colleagues who fell victim to the Guadalupe Division attack on May 26, 2021

Abdolvahab Alaghmandan

Adrian Balleza

Alex Fritch

Henry Gonzales

Jose de Jesus Hernandez III

Lars Kepler Lane

Paul Delacruz Megia

Timothy Michael Romo

Michael Joseph Rudometkin

Taptejdeep Singh

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1. Executive Summary

VTA's **Strategic Capital Investment Plan (SCIP)** is the organization's comprehensive capital planning process driven by and reflecting the VTA Board of Director's (Board) priorities during a defined 20-year period. The SCIP is developed under the guidance, direction, and with significant input by the Capital Program Committee and is ultimately adopted by the Board of Directors.

The purpose of the SCIP is to proactively evaluate, chart and prioritize within projected funding constraints the organization's capital needs to ensure proper assets are available and in good shape when needed to provide critical service. Concurrently, it seeks to optimize the use of scarce funding to provide the best and highest use while maximizing asset service life and minimizing lifecycle costs. Another key benefit of the Board approving a long-term strategic capital plan is that it better positions VTA to compete for scarce grant funding. However, the SCIP does **not** fund, commit VTA to projects, or preclude changes to existing projects.

The SCIP is an ongoing and dynamic planning effort that is renewed every two years to address any changed conditions and/or priorities. The first six years (CAP 6), which are prioritized and financially constrained, correspond to and form the foundation for three VTA biennial budget cycles. The outer 14 years (CAP 7-20) provides a listing of projected needs during that period.

This SCIP, adopted by the VTA Board of Directors on June 2, 2022, covers the 20-year period from FY 2022 through FY 2041. It presents three full budget cycles for planned capital expenditures: FY 2022 & FY 2023 (the current budget, which was adopted by the VTA Board on June 3, 2021) and the two subsequent budgets periods: FY 2024 & FY 2025 and FY 2026 & FY 2027.

Key sections in this report include:

- Introduction
- Funding Factors
- CAP 6 Needs
- State of Good Repair Backlog
- 20-Year Capital Needs Projections

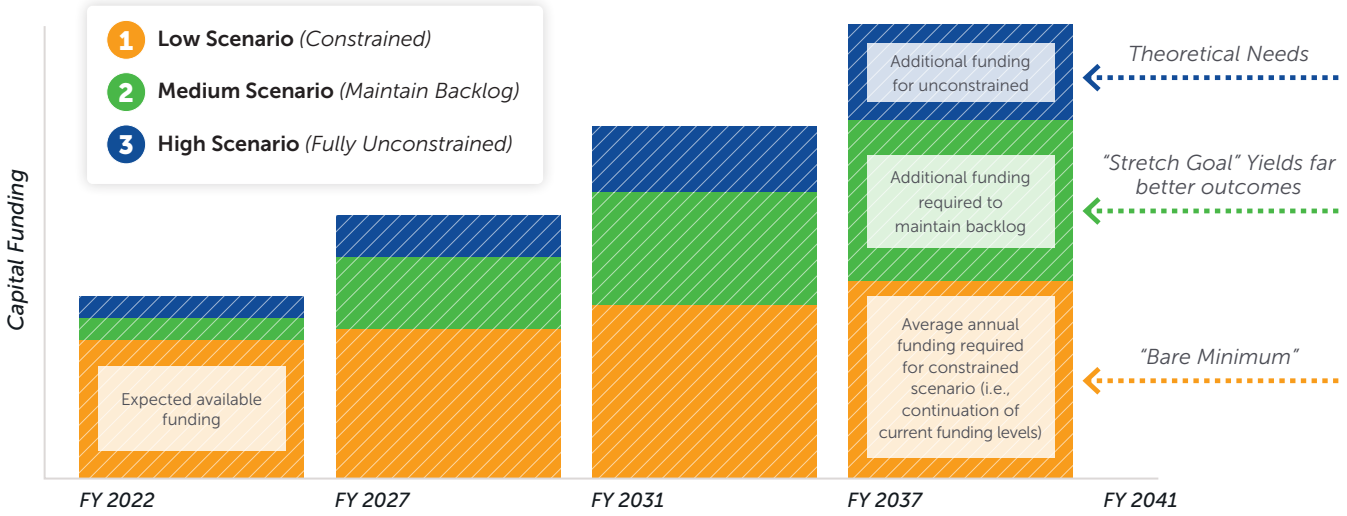
Like all transit or transportation agencies, VTA's capital needs ebb and flow according to the planned normal retirement and rehabilitation needs driven by lifecycle parameters and service requirements, as well as interventions prompted by staff in response to asset performance and wear and tear observed in the field.

During the 20-year horizon of this SCIP, significant capital needs are expected for renewal (i.e., capital replacement or rehabilitation) such as:

- Bus replacements including with zero-emission technologies (e.g., hydrogen and battery-electric)
- Supporting zero-emission infrastructure (e.g., chargers, tanks)
- Light Rail Vehicle (LRV) replacement or major rehabilitation during FY 2031 – FY 2036
- Traction power and substation replacements
- BART Extension "midlife" rehabilitation for rail cars and systems replacements

Maintaining assets in a State of Good Repair (SGR) has been a key Federal Transit Administration (FTA) focus as a result of recent legislation[1]. For VTA, maintaining assets in a SGR goes far beyond simple compliance. It is about providing its customers and staff an environment supportive of our mission: "Providing solutions that move you". In addition, keeping assets in a SGR supports many of our core values, including Safety, Integrity, Quality, Sustainability and Accountability.

Backlog is deferred reinvestment in asset rehabilitation, replacement, and annual capital maintenance. Completely eliminating all backlog is theoretically possible but not necessarily desirable. Virtually all transit/transportation agencies carry some backlog from year to year. VTA's current backlog for Transit Enterprise assets (bus, light rail, paratransit, and facilities/equipment) is about $315 million on a base of $4.3 billion ($2021). VTA has several potential pathways over the next twenty years with respect to its approach to Transit Enterprise capital replacement and/or rehabilitation, as shown below:



The SCIP analysis shows that each of these pathways can be qualitatively assessed and each has its own set of State of Good Repair implications:

- The **Low (Constrained) Scenario** shown in orange represents a continuation of current funding levels. This is considered the bare minimum but exhibits severe negative longer-term implications such as a ballooning backlog and significantly degraded asset conditions over twenty years.
- The **Medium (Maintain Backlog) Scenario** shown in green represents a stretch goal. It carries the benefit of far better outcomes – the backlog stays the same proportionally; assets in the worst condition would be replaced over five years and VTA would maintain all asset classes in fair to good condition during the full twenty years.
- The **High (Fully Unconstrained) Scenario** shown in blue is highly unlikely due to its funding requirements. It is also is undesirable due to decreased pressure on project prioritization and effective program management. The levels of funding under this scenario are useful, however, for planning and advocacy purposes because they represent the true complete SGR.

1 Moving Ahead for the 21st Century (MAP-21) and Fixing America's Surface Transportation (FAST)

In addition to Transit Enterprise assets, VTA is developing a growing asset base resulting from gradual expansion and buildout of its system including the BART to Silicon Valley (BSV) program, a growing network of Express Lanes, and others. During the 20-year SCIP period, depending on the program, the focus is on capital expansion/improvement, capital renewal, or both.

Program	Focus
Transit Enterprise	Capital Renewal
VTA BSV Phase 1	Capital Renewal
VTA BSV Phase 2	Capital Expansion *(some Capital Renewal)*
Eastridge to BART Regional Connector (EBRC)	Capital Expansion *(some Capital Renewal)*
Express Lanes	Capital Expansion *(some Capital Renewal)*
Transit-Oriented Development	Capital Expansion

VTA capital needs for Transit Enterprise assets in the SCIP are primarily focused on renewal, whereas the other programs are primarily focused on capital expansion with the VTA BSV Phase 2, EBRC, and Express Lane Program buildout. These are all considered megaprojects and thus in the SCIP the focus for these projects is primarily on expansion, with minimal capital renewal needs.

In contrast, BSV Phase 1 assets already in revenue service have a book value of $1.3 billion. Capital needs are modest for the first 10 years of the SCIP because the assets are new or near new. Major renewal costs are expected in FY 2030 and FY 2032 for systems and in FY 2035 – FY 2036 for rail cars.

Executive Summary - Key Takeaways

VTA has a large and growing mix of assets. Historically these have been transit-focused, supporting bus, paratransit, and light rail services. This roughly $4.3 billion in transit assets has grown to $5.6 billion with the recently opened VTA BSV Phase 1 extension. This asset base will continue to grow and diversify over the next 20 years as new megaprojects are delivered such as BSV Phase 2, EBRC, and the Express Lanes buildout. As new assets enter operations, capital renewal requirements will likewise grow over time.

VTA has a $315 million State of Good repair backlog on its Transit Enterprise assets. Current capital renewal spending levels – both in absolute and in percentage terms – are insufficient and will result in poor outcomes in terms of ballooning backlog and increasing percent of assets in poor and marginal condition. The SCIP strongly advocates that VTA take a lifecycle approach to asset management and set the goal for the Medium Scenario (Maintain Backlog) for all assets. This requires increased future allocation of capital renewal resources to match needed expenditure levels.

Current Transit Enterprise project requests for FY 2024 & FY 2025 exceed historical levels of spending. Future capital budgets need to be right-sized and re-examined every budget cycle to achieve the goal of maintaining asset renewal backlog at current levels or less (e.g., for FY 2024 & FY 2025, increase the Transit Enterprise capital budget local share to $85 million, a $10 million increase from the current budget cycle).

2. Introduction

VTA - Who We Are

VTA Organization, Mission/Vision/Goals

Santa Clara Valley Transportation Authority (VTA) is a multimodal independent special district that provides bus, rail, and paratransit services. VTA is also a funding partner for many rail services critical to the Bay Area: Caltrain, Capitol Corridor, and the Altamont Corridor Express regional rail services. VTA is also responsible for construction and funding operation of the VTA BSV extension that has brought BART service into Santa Clara County and, when fully completed, will result in a 16-mile, six-station extension of the prior BART system.

VTA is also the Congestion Management Agency (CMA) for Santa Clara County. As the CMA, VTA is responsible for countywide transportation planning including the Congestion Management Program (CMP), design and construction of specific highway transportation improvements, technology solutions, pedestrian and bicycle improvement projects, as well as promotion of transit-oriented development. VTA is also responsible for the delivery of the Silicon Valley Express Lanes program and for implementation of local transportation sales tax measures, including 2000 Measure A and 2016 Measure B. Implementation responsibilities include construction of facilities.

As such, VTA is both an accessible transit provider and a multimodal transportation planning and implementation organization involved with transit, roadways, bikeways, and pedestrian facilities.

VTA provides these services throughout South Bay municipalities as well as in unincorporated areas of Santa Clara County. VTA continually builds partnerships to deliver transportation solutions that meet the evolving mobility needs of Santa Clara County.

VTA's mission and vision are the beacons that serve as our guiding principles for everyday.

Our Mission:
To provide solutions that move you

Our Vision:
To innovate the way Silicon Valley moves

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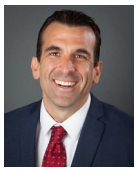

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Board Member
(San Jose)

Darcy Paul
Board Member
(Cupertino)

Raul Peralez
Board Member
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Alternate Member
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Lynette Lee Eng
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(Los Altos)

Carmen Montano
Alternate Member
(Milpitas)

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(Los Gatos)

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Pat Burt, *Vice Chairperson*
Cindy Chavez, *Member*
Chappie Jones, *Member*
Sam Liccardo, *Member*
Raul Peralez, *Member*

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Auditor General
(contracted function)

Carolyn Gonot
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CEO

Evelynn Tran
General Counsel

Deborah Dagang
Chief Planning & Programming Officer

David Hill
Chief Operating Officer

Casey Emoto
Chief Engineering & Program Delivery Officer

Takis Salpeas
Chief BART Delivery Officer (contracted function)

Jaye Bailey
Interim Chief People Operations

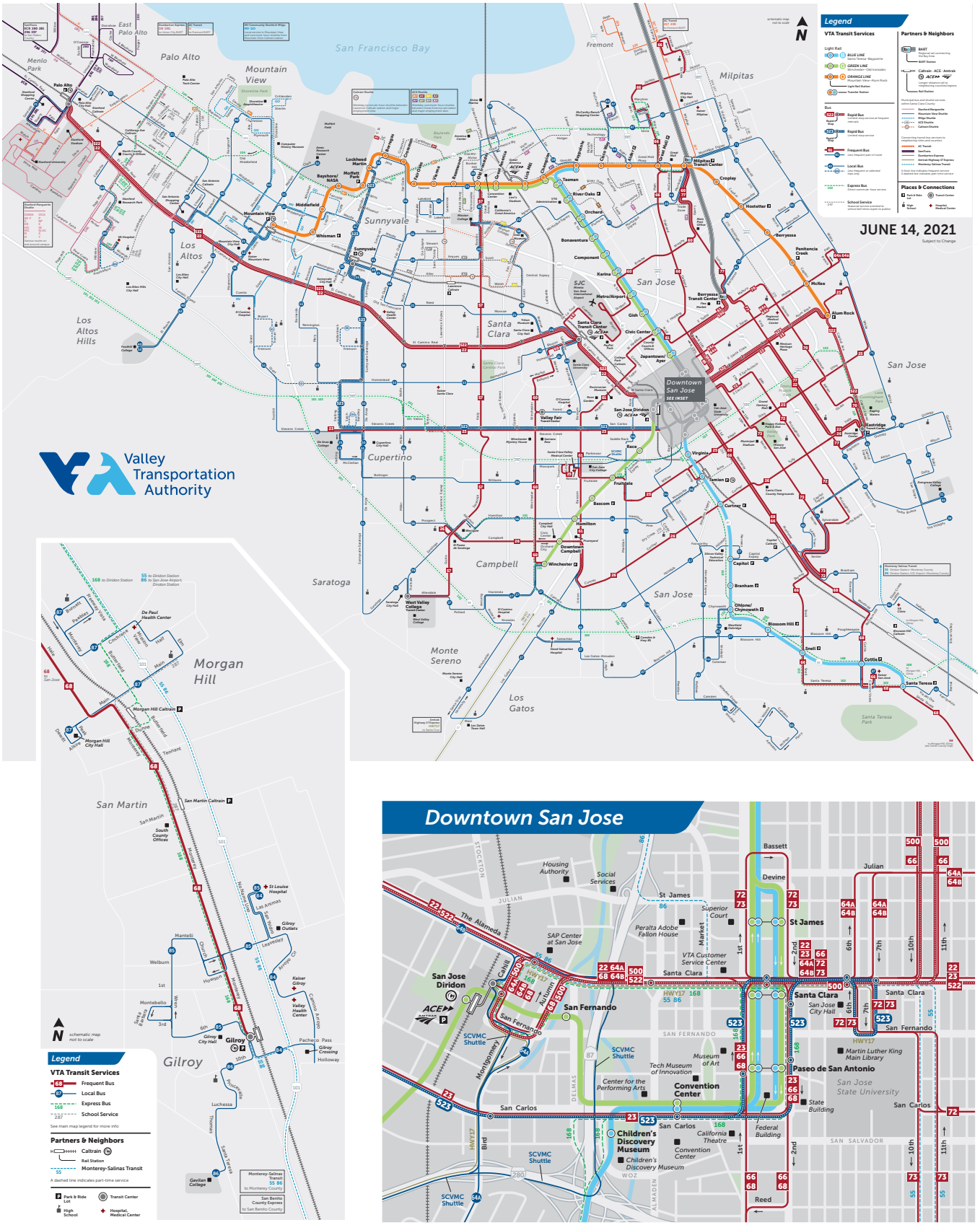
Vacant
Chief of System Safety & Security

Jim Lawson
Chief External Affairs Officer

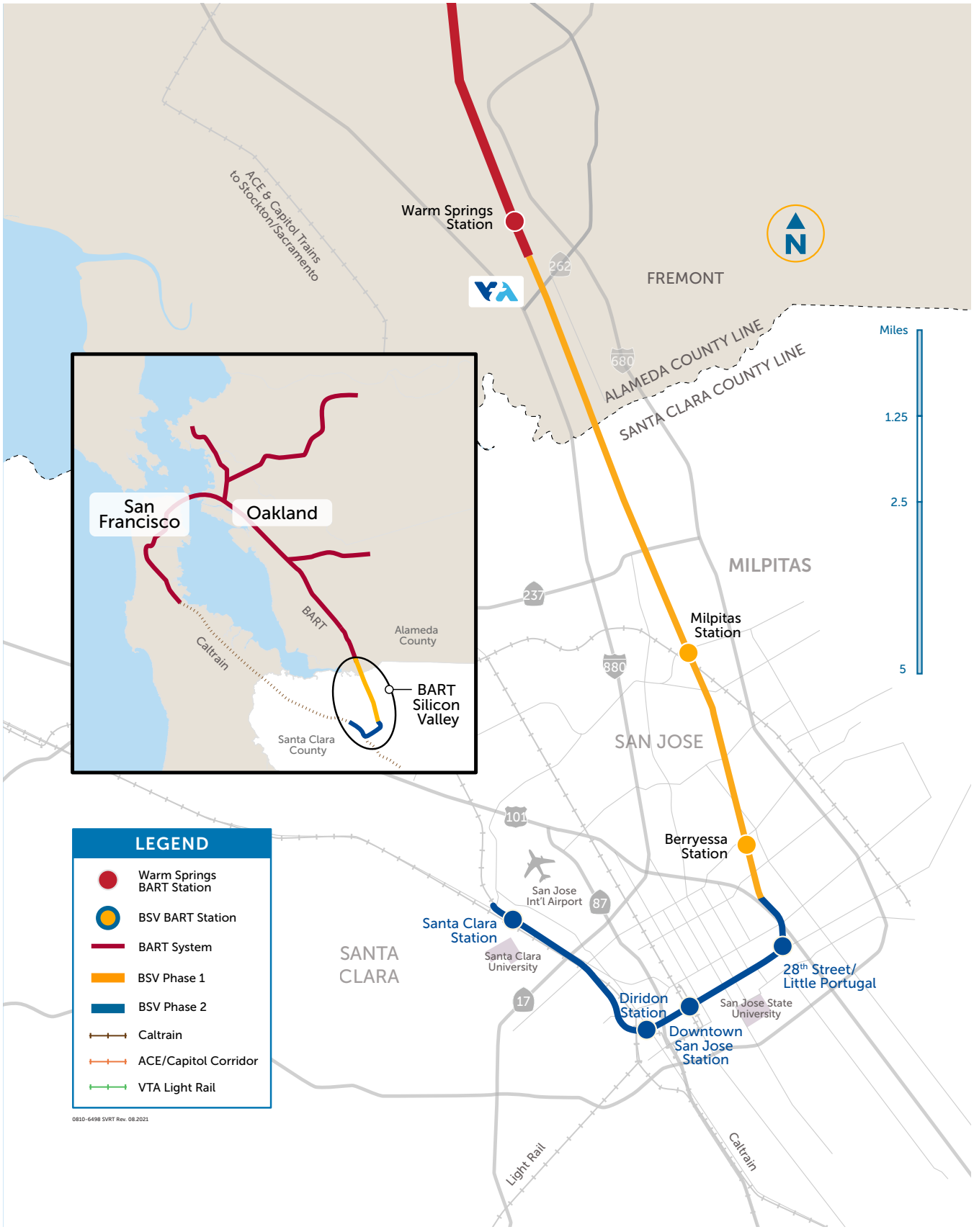
Greg Richardson
Chief Financial Officer

Note: All information as of May 2022

VTA System Map

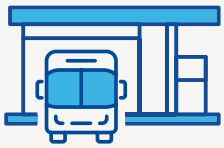


VTA's BART Silicon Valley Program (BSV)



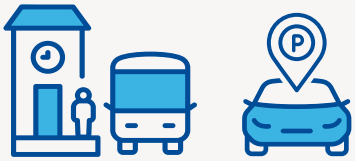
VTA Capital Assets*

VTA Transit Enterprise

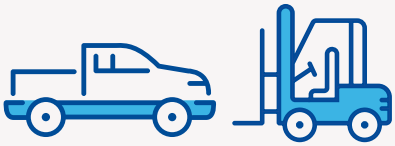


1 - Administration Building
4 - Maintenance Facilities

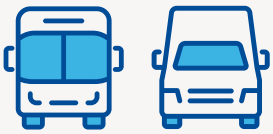
81 - Guideway Revenue Service Track Miles
33 - Substations



61 - Light Rail Platforms
29 - Transit Centers
37 - Park and Ride Lots



347 - Non-Revenue Vehicles



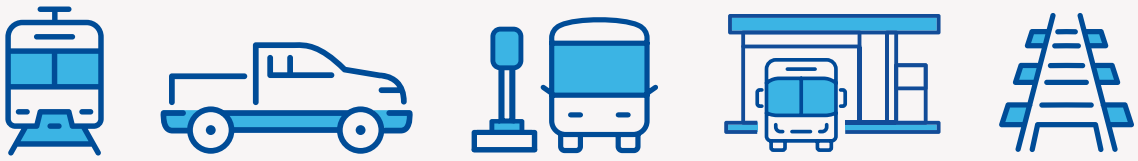
439 - Revenue Buses
199 - Paratransit Vehicles

98 - Light Rail Cars

VTA Highway/Express Lanes

20 - Vehicle Sensors and Vehicle Detectors
336 - Network and Electrical Assets (CCTVs, Variable Message Signs)

VTA BART Silicon Valley (BSV) Phase 1



50 - BART Cars
15 - Non-Revenue Vehicles
2 - Stations

1 - Administration Building
20 - Guideway Revenue Service Track Miles
9 - Substations

**Reflects inventory data as of June 30, 2021*

SCIP Purpose and Goals

General Manager initiative

20 year capital planning process methodology:

- First six years (CAP 6) financially constrained, prioritized list of projects
- Years 7-20 (CAP 7-20) "unconstrained" and not prioritized

Precedes/informs biennial budget

Renewed every two years

Capital Program Committee (CPC) guides the entire process

Overarching Objectives

- Enhance Board member understanding of capital program factors and challenges
- More directly and efficiently align Board priorities into capital planning process
- Increase Board understanding and ownership of long-term capital decisions and implications
- Help integrate different planning horizons (short-medium-long) for capital priorities
- Better inform budget process

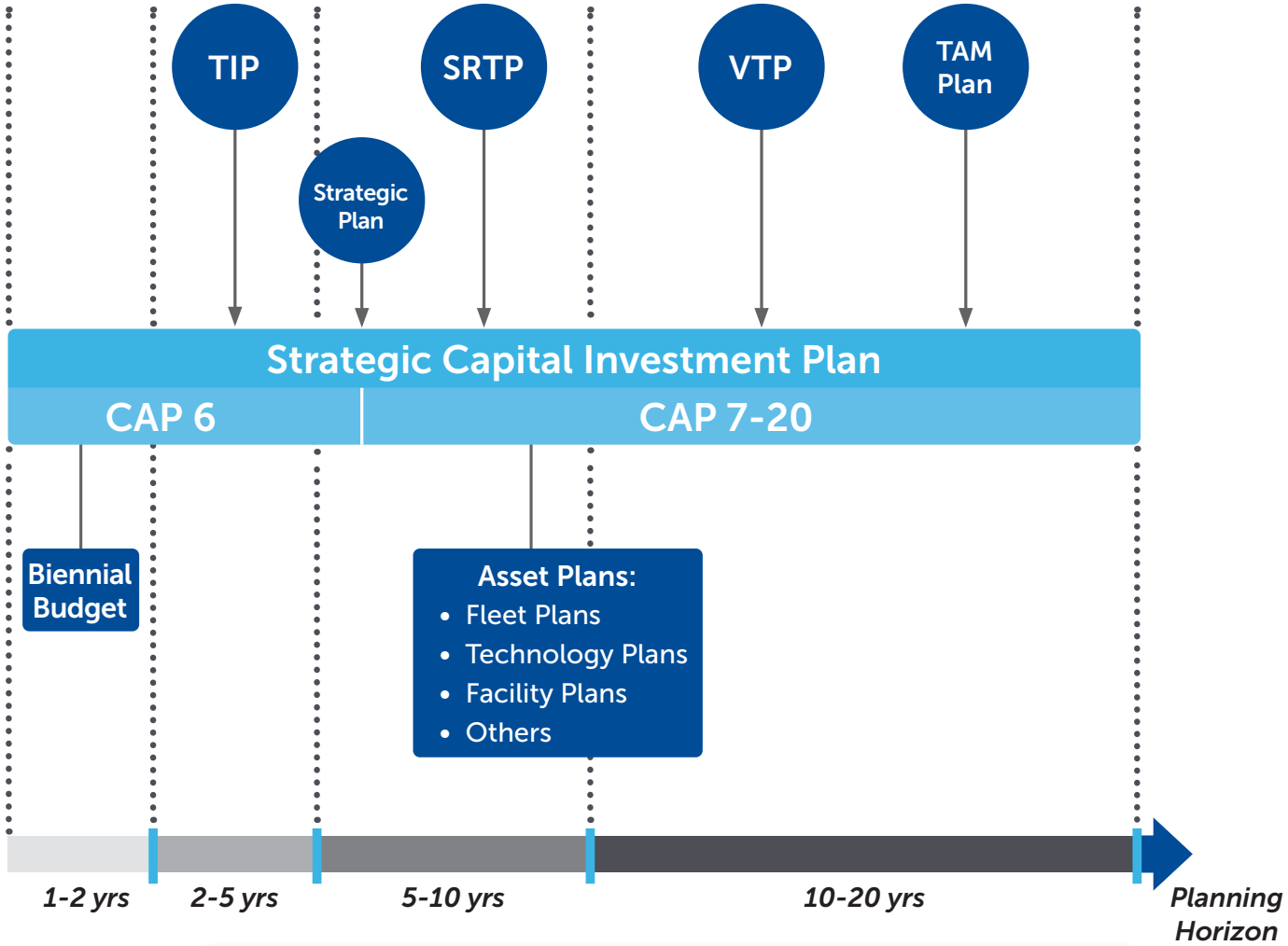
The SCIP does NOT fund, commit VTA to projects, or preclude change to existing projects.

SCIP Overview

Integrated Process/One Comprehensive Document with Two Elements

Elements	CAP 6	14-Year Capital Needs Projection
Years	1-6 *(First 2 inform capital element of Biennial Budget)*	7-20
Prioritized	Yes	No
Fiscally Constrained	Yes	No
Board Approves	Yes	Information/Input

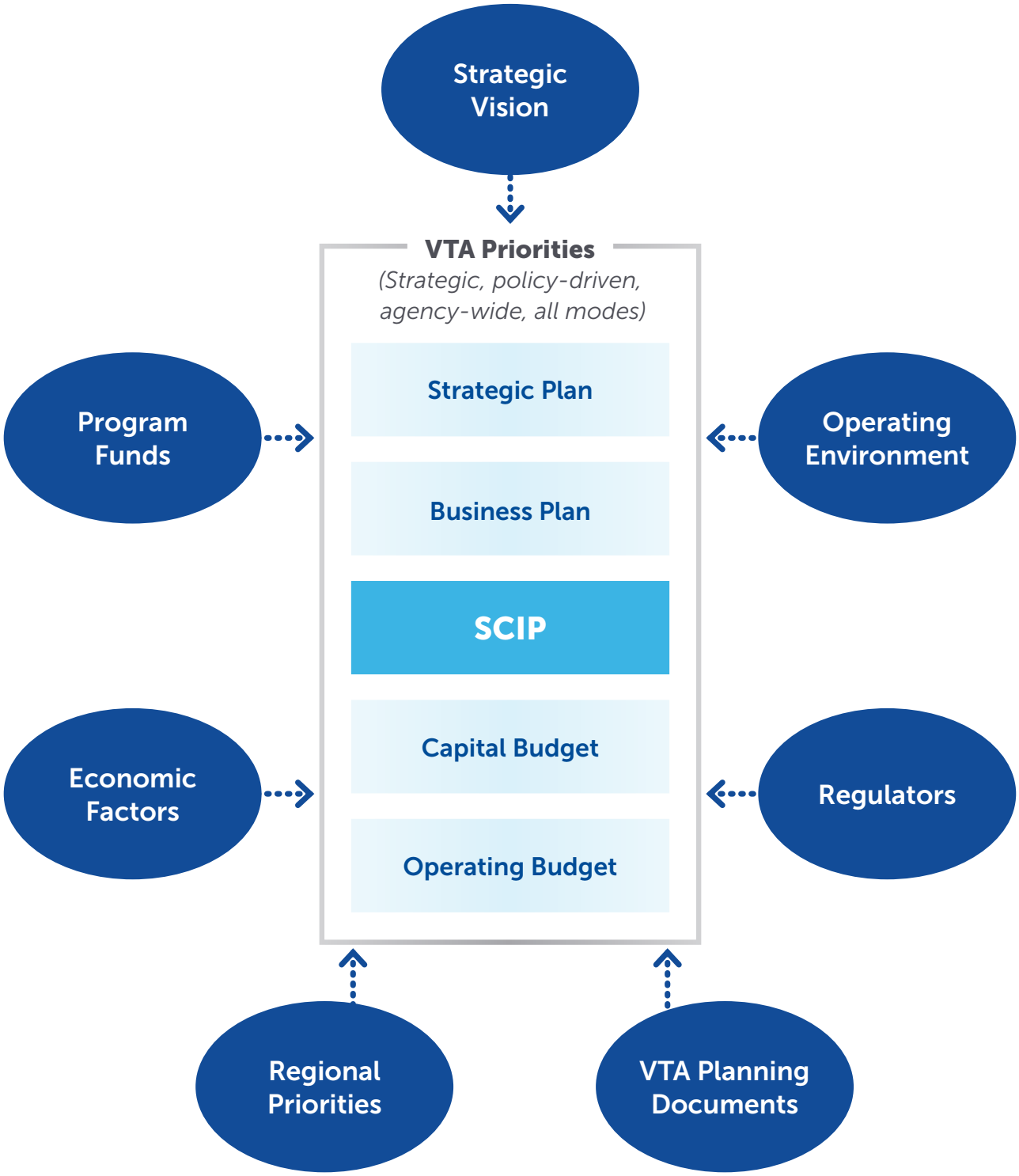
The SCIP is a 20 year projection that integrates information from many VTA planning processes into one comprehensive document.



LEGEND:

TIP - *Transportation Improvement Program*
SRTP - *Short-Range Transit Plan*
VTP - *Valley Transportation Plan*
TAM PLAN - *Transit Asset Management Plan*

The SCIP reflects VTA priorities in line with the funding environment. It includes all modes - bus, paratransit, light rail, heavy rail, and roadways/Express Lanes.



Assumptions

FY 2022 & FY 2023 Budgets:

- Utilizes VTA funding projections and assumptions
- Budget is appropriations based, not cash-flow based
- Budget assumptions:
  - » Increase service to pre-pandemic level during FY 2022
  - » Maintain current staffing level
  - » No proposed change to fare structure

Capital Needs:

- VTA Call for Projects results scored using Board-adopted criteria – April 2021
- Capital needs include both capital asset renewal and capital expansion / improvements (e.g., VTA's BSV Phase 2, bus fleet electrification, Silicon Valley Express Lanes Program delivery).
- Transit Economics Requirements Model (TERM) Lite output results – July and August 2021
- VTA Asset Inventory – as of June 30, 2021
- Assumes continued operation of Light Rail at similar service level
- Guadalupe yard reconstruction

Year of Expenditure Needs and Funding:

- Capital outlays shown in year of expenditure dollars (i.e., includes inflation)
- Producer Price Index used for escalation assumptions
- Long term inflation rate of 2.2%, the same rate used in Plan Bay Area 2050. This is consistent with inflation forecasts for the Bay Area from the California Department of Finance, the U.S. Federal Reserve, and the federal Office of Management and Budget (OMB)

Other:

The following are helpful hints to aid understanding of the SCIP:

- Assets are divided into four (4) major programmatic categories: Transit Enterprise; BART Silicon Valley (BSV) Phase 1; Megaprojects; and Other
- Each category has specific funding sources, requirements, and limitations. Funds generally cannot be moved between categories.
- Cost estimates, project durations, and growth assumptions change constantly. The SCIP represents a snapshot in time and is informed by the latest available information. Assumptions and references are provided throughout the document.
- A Board-approved long-term strategic captial plan better positions VTA to compete for scarce grant funding.

3. Funding Factors

VTA's biennial budget includes funding for fixed route transit (bus and rail), paratransit, congestion management program activities, highway improvement projects, and other countywide transportation activities.

From a programmatic standpoint, VTA has seven program funds contributing to capital expenditures:

	SCIP Focus	
Program Funds	**Capital**	**Operating**
A. VTA Transit Enterprise	✓	✓
B. 2000 Measure A Transit Improvement Program	✓	✓
C. 2008 Measure B – BART Operating Sales Tax Program	✓	✓
D. 2016 Measure B Program	✓	✓
Congestion Management Program		✓
E. Valley Transportation Plan Transportation Program	✓	
F. Transit-Oriented Development Program	✓	✓
G. Silicon Valley Express Lanes Program	✓	✓

The seven program funds that are covered in the SCIP are:

A	VTA Transit Enterprise	Agency's fundamental capital improvement program (mostly Federal and local VTA sources including the permanent 1976, 0.5 cent sales tax and fare revenues)
B	2000 Measure A Transit Improvement Program	Voter approved countywide 0.5 cent sales tax for specific projects, e.g., VTA BSV, Eastridge to BART Regional Connector (sunsets in 2036)
C	2008 Measure B Program BART Operating Sales Tax	Voter approved 0.125 cent sales and use tax for operating, maintenance, and capital needs of the VTA BSV (sunsets in 2039)
D	2016 Measure B Program	Voter approved countrywide 0.5 cent sales tax for transit, highways, expressways, and active transportation (sunsets in 2047)
E	Valley Transportation Plan Transportation Program	Regional countywide capital program with State and other sources (e.g., Senate Bill 1) devoted to enhancing transit, highways, expressways, and active transportation (bicycles, pedestrians, and Complete Streets)
F	Transit-Oriented Development Program	VTA-managed program on VTA-owned sites, based on current and anticipated lease revenues
G	Silicon Valley Express Lanes Program	Funding sources include toll revenues, state and federal grants, and financing

A **VTA Transit (VTA Transit Enterprise Program)** is VTA's oldest and primary program fund for both capital and operations of the transit system. The operating side relies heavily on the permanent 1976 one-half sales tax and passenger fare revenues. On the capital side, the funding sources that contribute to VTA Transit include:

- Grants, both formula and competitive:
  - » Federal (e.g., Section 5307 Large Urban Areas Urbanized Area Formula Grants, Section 5307 State of Good Repair)
  - » State (e.g., SB 1 Local Partnership Program)
  - » Local
- Other funding sources

B **2000 Measure A Transit Improvement Program** is the 30-year, half-cent sales tax dedicated to enhancing the public transit system in the county. The ballot both listed specific projects and VTA as the implementing agency. Key projects are VTA's BSV and the Eastridge to BART Regional Connector (EBRC). Collection of the tax began in 2006 and the Measure sunsets in 2036. 2000 Measure A is expected to grow at the same rate as other countywide sales taxes in Santa Clara County.

C **2008 Measure B – BART Operating Sales Tax Program** is a tiny contributor to capital cost in comparison to 2000 Measure A and 2016 Measure B. 2008 Measure B, approved by the voters in November 2008, is a one-eighth cent, 30-year sales tax dedicated to operating and maintenance of VTA's BSV. It does not fund construction but the funding may be used for maintenance and for the renewal of capital assets. Growth of 2008 Measure B is also proportional to the growth in countywide sales tax.

D **2016 Measure B Program** is another significant program fund. It is a voter-approved 30-year, one-half cent sales tax which began in 2017 and sunsets in 2046. There are nine program categories covering all modes from local streets and roads, to transit operations and projects like BSV and highway interchanges. It has two different methodologies for allocating funds: (A) formula-based; and (B) needs/capacity-based. Growth of 2016 Measure B revenue through the SCIP period also mirrors the other countywide sales taxes.

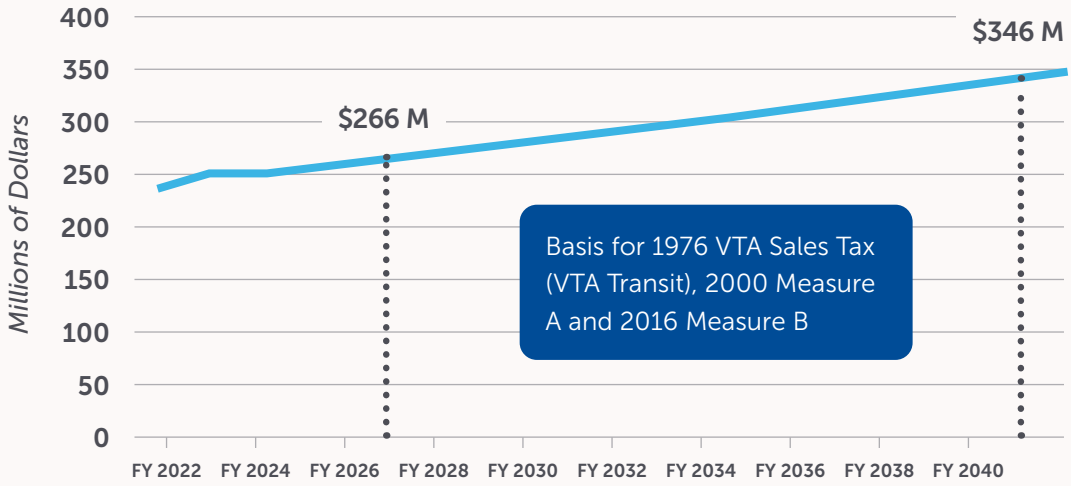
E **Valley Transportation Plan (VTP)** is the comprehensive multimodal long-range transportation plan for Santa Clara County. The VTP Program implements the projects contained therein that VTA is responsible for, which include highway, Express Lanes, bicycle/pedestrian, and Complete Streets projects. (Complete Streets is an approach to planning, designing, and building streets that enables safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities.) There are multiple funding sources including 2016 Measure B (formula funds), Senate Bill 1 (SB1), local jurisdictions and other partners, etc. SB1, known as the gas tax, was passed in 2017 and will last 10 years until 2027.

F **Transit-Oriented Development (TOD) Program** is a smaller program, whose purpose is development of VTA-owned properties aimed at increasing ridership, catalyzing private TOD on sites around VTA transit centers, and generating long-term revenues to support transit operations. The capital budget captures costs for site analysis, entitlement processing, developer solicitation, and TOD agreements for individual properties. Funding for the future is expected to come from current and anticipated lease revenues.

G **Silicon Valley Express Lanes Program** is funded by toll revenues, state and federal grants, and financing. VTA, as the Congestion Management Agency for Santa Clara County, is statutorily responsible for Express Lanes projects within the county. Currently, this concerns primarily two facilities within the county – the State Route 237 (SR 237) and the US 101/SR 85 corridors. Revenues from tolls are expected to grow significantly over the SCIP period as the full network of Express Lanes is implemented. It is important to consider future toll revenues as an integral part of the SCIP and as part of VTA's overall revenues.

Sales tax-related revenues are an enormous driver of VTA funding, both capital and operating. The program funds that support VTA capital projects that are the most affected are 2000 Measure A and 2016 Measure B. Sales tax proceeds are driven by the economy and as such, are subject to variations in spending patterns in Santa Clara County. Because VTA is so reliant on these tax proceeds, the organization is vulnerable to cyclical downturns in the economy outside of VTA's control. It should be noted that 2000 Measure A and 2016 Measure B have a 30-year life. Although the 1976 VTA Sales Tax is permanent, the revenue received is not dedicated to transit capital projects and instead is shared between providing transit service (operations) and transit capital funding.

Sales Tax Revenue Forecast *(UCLA, January 2021)*



A special note about BART Funding

2008 Measure B, a one eighth sales tax for 30 years, was passed in November 2008 with 66.37% of the vote. The money can only be used in Santa Clara County, and is intended to subsidize the operations, maintenance, and capital needs of VTA's BSV program.

The VTA BSV Phase 2 extension also receives funding from the 2016 Measure B Program, under the Need/Capacity-based program category.

Funding Factors – Key Takeaways

Capital funding at VTA derives from a multiplicity of funding programs and funding sources. The SCIP identifies seven current funding programs for capital funding. Each program has strict requirements on how the funds may be allocated (e.g., by mode, expense type, and/or geography).

VTA is extremely dependent on sales tax proceeds as they fund four of the seven funding programs, and two of the largest. Tax revenues are, by their nature volatile, being highly dependent on the larger economy. VTA also relies heavily on a wide variety of grants for capital projects – both discretionary- and formula-based, and these are typically a mix of Federal and State programs.

4. State of Good Repair Backlog

Definition:

Deferred reinvestment in asset rehabilitation, replacement, and/or capital maintenance.

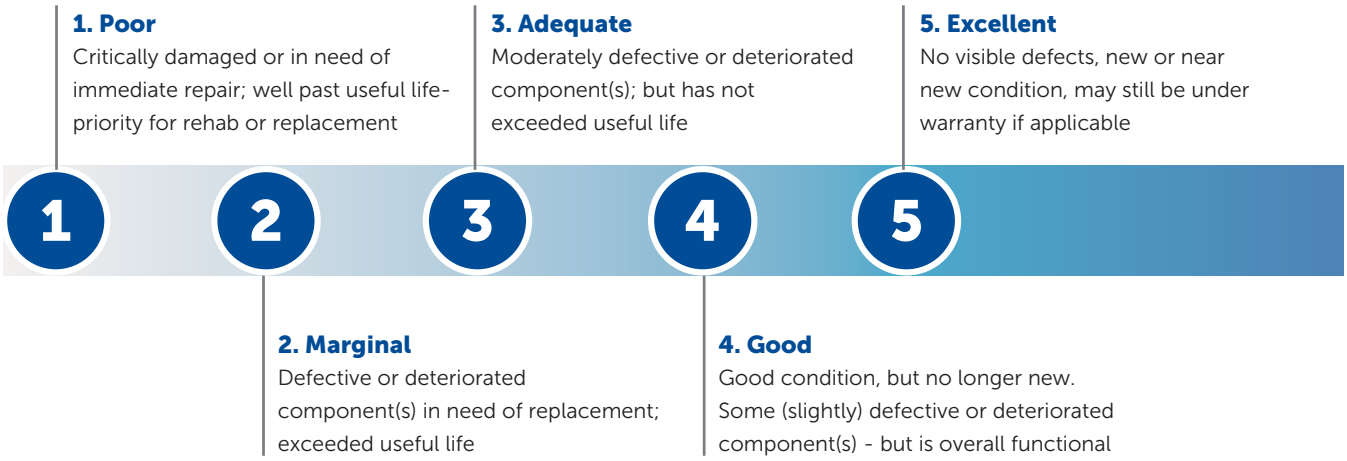
The State of Good Repair (SGR) backlog is one measure of the health of VTA's physical assets.

A significant backlog has the potential to impact service reliability and increase maintenance costs. It is not unusual for transit operators to have a significant amount of backlog, into the billions of dollars, especially for older legacy transit systems.

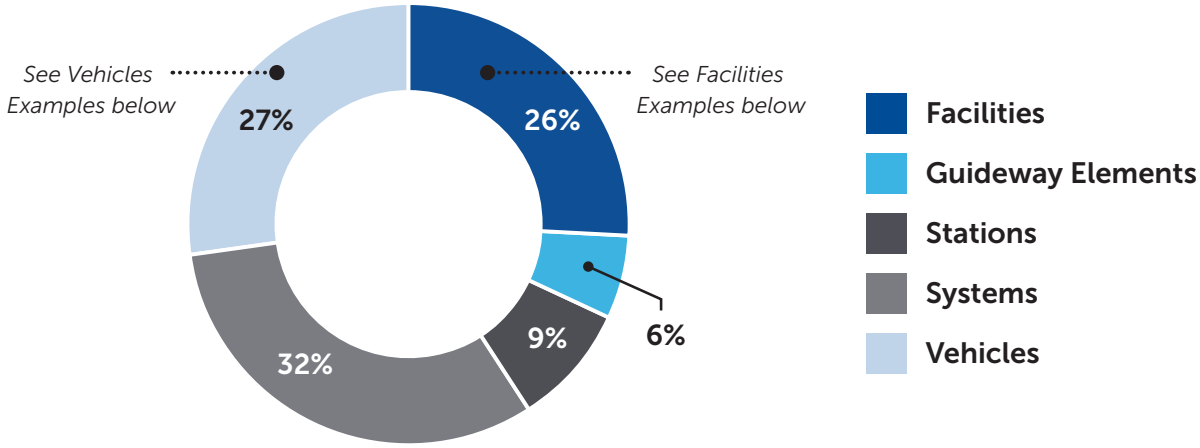
VTA's level of backlog for transit assets, at $315 million of FY 2021 dollars, is not unusual for a system of its size and age.

Asset Category	Sum of Current Backlog FY 2021 *($ in Millions and Billions)*	Condition Score *(1-5)*	Sum of Valuation *($ in Millions and Billions)*
Facilities	$82 M	3.51	$594 M
Guideway Elements	$17 M	3.82	$1.641 B
Stations	$29 M	3.34	$726 M
Systems	$101 M	3.05	$590 M
Vehicles	$85 M	3.29	$770 M
Grand Total	$315 M	3.50	$4.322 B

Asset Condition Ratings



FY 2021 Backlog by Asset Category



Backlog Vehicles Examples

Replacement of 35' and 40' buses (1000, 2000, 2100 series) – ($71M)

Backlog Facilities Examples

Roof-mounted HVAC; train wash

State of Good Repair Backlog - Key Takeaways

VTA's backlog for transit assets represents about 7% of asset valuation (6% if including VTA BSV Phase 1 assets). This backlog, while not optimal, can be managed through rehabilitation campaigns, regular procurements and through pro-active asset management planning.

5. CAP 6

Overview

CAP 6 is one of two distinct components of the SCIP, the other being the CAP 7-20. Key factors of the CAP 6 are:

- It is the first six-year period of the 20-year SCIP horizon.
- Projects in the CAP 6 are prioritized and fiscally constrained, whereas those in the CAP 7-20 are not.
- Scoring process utilizes Board-approved priorities and weighting factors to better align Board priorities into capital planning process.
- CAP 6 represents three VTA biennial budget cycles, with the first two years of each SCIP forming the basis for VTA's biennial capital budget.

General VTA capital budget provisions:

- Represents planned spending to be incurred or committed in the next two fiscal years.
- Appropriation carries forward and does not expire.
- All capital projects in approved biennial budget are appropriated at the start of the first fiscal year to facilitate administration of the projects and/or programs.

5.1 Biennial Capital Budget CAP 1-2 (FY 2022 & FY 2023)

- Scoring criteria adopted by VTA Board in October 2020 *(see Appendix A)*.
- Due to development of this inaugural SCIP (for FY 2022 – FY 2041) being underway but not yet fully completed, the first two years of the CAP 6 (CAP 1 -2) were separately reviewed and evaluated by the CPC.
- Based on the CPC's recommendation, those projects were included in VTA's FY 2022 & FY 2023 Biennial Budget approved by the Board in June 2021 and subsequently amended in December 2021, as follows:

Program Funds	Fund Share	Externally Funded	Total 2 Years	FY 2022 [2]	Per FY
VTA Transit	$75.4M	$136.6M	$212.0M	$212M	$106M
2000 Measure A Transit Improvement Program	$411.0M	$1,689M	$2.1B	$2,141M	$1,070M
2016 Measure B Program			$172M	$172M	$86M
Valley Transportation Plan Transportation Program			$228.3M	$228M	$114M
Transit-Oriented Development Program - Capital			$17M	$17M	$9M

2 Total appropriation for FY 2022 and FY 2023 is reflected in FY 2022

Highlights from Capital Budget

Total Projects - 71 ***Continuing Projects - 16***

- Major step towards bus fleet electrification (including maintenance facility modifications)
- Paratransit fleet procurement
- Overhead catenary system and rail rehabilitation and replacement
- Increase cyber security and harden technology systems
- Continued implementation of Board-approved Silicon Valley Express Lanes program

Revenue Vehicles & Equipment
- Major advancement towards bus fleet electrification
- Safety and security enhancements
- Improvements to paratransit fleet to enhance operations

Operating Facilities & Equipment
- Modifications to support bus fleet electrification
- Major rehabilitations/replacements to extend useful life and ensure reliability
- Complete regulatorily required projects
- Safety and security enhancements

Light Rail Way, Power & Signal
- Extend useful life and ensure reliability
- Safety, security, and operational speed enhancements

Passenger Facilities
- Replacement and rehabilitation of bus stops to enhance passenger experience and extend useful life
- Safety and security enhancements

Information Systems & Technology
- Increase cyber security and harden technology systems
- Replace network equipment to ensure reliability/performance

Studies, Plans, and Pilot Projects
- Planning process to reduce VTA's contribution to climate change
- Multiple focus studies to envision and evaluate potential multimodal mobility solutions

Non-Revenue Vehicles and Equipment
- Scheduled replacement

Highways
- Major enhancements to travel safety and traffic operations with features favoring access for non-motorized modes while addressing climate and congestion

Express Lanes
- Continued implementation of Board-approved Silicon Valley Express Lanes program

Bicycle & Pedestrian
- Advances countywide bicycle and pedestrian network

Complete Streets
- Upgrades traffic signal network and modeling capacity

5.2 CAP 3-6 (FY 2024 through FY 2027)

There are a total of 122 projects in the CAP 6, many of which are continuation of the FY 2022 & FY 2023 budget cycle. These are comprised of 88 Transit Enterprise projects, and 34 VTP projects.
These are intended to:

- Maintain capital infrastructure
- Keep VTA assets in a State of Good Repair
- **Invest in targeted improvements to improve safety, security, efficiency, and/or transportation mobility options throughout Santa Clara County.**

The projects reflect the Board's approved priorities (see Appendix A) and assist VTA in fulfilling its mission of providing mobility solutions throughout Santa Clara County.

Highlights from CAP 3-6

- Continued advancement of bus fleet electrification (including maintenance facility modifications)
- LRV safety and reliability improvements
- Paratransit fleet procurement
- Light rail system major component renewal
- Further increase cyber security and harden technology systems
- Continued implementation of Board-approved Silicon Valley Express Lanes program
- Continued advancement of Complete Streets and bicycle/pedestrian improvement projects

Revenue Vehicles & Equipment

- Further advancement toward full bus fleet electrification
- Paratransit fleet improvements to enhance operations and reliability
- LRV fleet electronics modernization to enhance safety and reliability
- Safety and security enhancements

Operating Facilities & Equipment

- Major modifications to support bus fleet electrification
- Operational improvements at Guadalupe Light Rail facility to enhance service reliability
- Safety, security, and/or reliability enhancements

Light Rail Way, Power & Signal

- Renew major systems to extend useful life and ensure reliability
- Replace train control and communication systems
- Safety, security, and operational speed enhancements

Passenger Facilities

- Replacement or rehabilitation of bus stops to enhance passenger experience and extend useful life
- Rehabilitation of Transit Centers and Park & Ride lots
- Safety and security enhancements

Information Systems & Technology
- Enhance cyber security and harden systems
- Renew major systems to ensure reliability, performance, and security
- Implement new applications to enhance performance and efficiency

Studies, Plans, and Pilot Projects
- Multiple focus studies to envision and evaluate multimodal mobility solutions
- Development of tools and users guides to implement and maximize multimodal solutions

Non-Revenue Vehicles and Equipment
- Scheduled replacement to ensure reliability and minimize costs

Highways
- Major enhancements to travel safety and traffic operations with features favoring access for non-motorized modes while addressing climate and congestion issues

Express Lanes
- Continued implementation of Board-approved Silicon Valley Express Lanes program

Bicycle & Pedestrian
- Continued advancement of countywide bicycle and pedestrian projects to increase mobility, connectivity, and safety

Complete Streets
- Implement upgrades designed to enable safe use and support mobility for users of all ages, abilities, and transportation modes.

Total project requests for FY 2024 & FY 2025 Transit Enterprise needs shows a 133% increase in capital needs compared to FY 2022 & FY 2023 budget levels for VTA's net cost and a 75% increase in total request compared for FY 2022 & FY 2023 budget levels. The implications are threefold: (1) Increase the net VTA net cost commitment, or (2) Prioritize, postpone, revise scope, or eliminate projects that fall below the available budget; or (3) a combination of both.

As placeholders, the SCIP recommends VTA target increasing the Transit Enterprise biennial net cost capital commitment by $10 million every budget cycle, as follows:

Budget Cycle	FY 2022 & FY 2023	FY 2024 & FY 2025	FY 2026 & FY 2027
VTA Net Cost Commitment ($ Millions)	75.4	85.0	95.0

CAP 6 - Key Takeaways

For Transit Enterprise needs, VTA has a solid documentation of asset backlog and updates sources and uses of funds to track spending on a rolling 10-year basis for six project categories:

- Vehicle and equipment
- Operations, facilities and equipment
- Light rail, power and signal
- Passenger facilities
- Information systems and technology
- Miscellaneous

The current total project requests for the next budget cycle (FY 2024 & FY2025) and beyond exceed historical capital spending. Factors to consider include the six Board-adopted prioritization criteria, and long-term business decisions (e.g., bus electrification, light rail system).

For all asset types, to get the most service from its asset, VTA needs to maximize planning and maintenance programs including lifecycle management.

VTA also needs to aggressively pursue state and federal grant opportunities, and leverage local dollars to attract federal support to the extent possible.

Finally, there needs to be a balance between State of Good Repair and expansion; State of Good Repair investments can sometimes take away from expansion.

6. 20-Year Capital Needs Projection

This section presents capital need projections for the next 20 years, covering the period of fiscal years 2022-2041. Depending upon the type of program, the capital needs estimates are focused on capital renewal, expansion, and sometimes both. For example, upcoming capital investments for the traditional VTA Transit Enterprise assets overwhelmingly concern capital renewal (i.e., capital replacement or rehabilitation). In contrast, the new BSV Phase 2 program is mainly a system expansion. But the upcoming 20 years will also include significant capital renewal of the BSV Phase 1 program which entered revenue service in June 2020.

The VTA capital program is divided into five subsections as follows:

- **Transit Enterprise** – "traditional" VTA assets for bus, paratransit, and light rail – capital renewal-focused
- **BSV Phase 1** – capital renewal
- **Megaprojects** (BSV Phase 2, EBRC, Express Lanes) – capital expansion
- **Other programs** (TOD, Complete Streets, Bike/Ped) – capital expansion and renewal
- **Synthesis** – key takeaways across the entire capital program

6.1 Transit Enterprise

Introduction to Projection Scenarios

The SCIP includes three capital needs scenarios for VTA Transit Enterprise assets:

Low Scenario (Constrained)

Projection scenario that assumes capital funding is capped at FY 2022 budget levels (plus inflation).

Medium Scenario (Maintain Backlog)

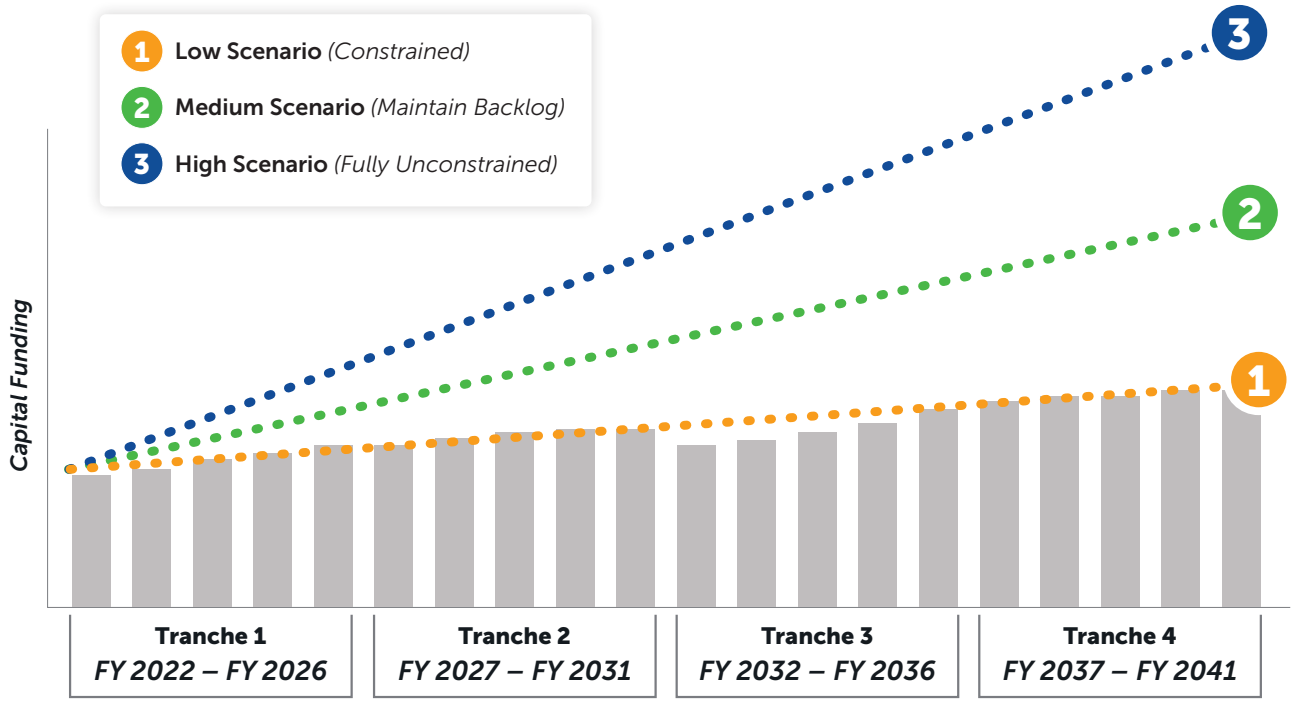
Projection scenario that sets budget required to maintain current *State of Good Repair (SGR)* backlog into the future.

High Scenario (Unconstrained)

Projection scenario that assumes there are no constraints to:

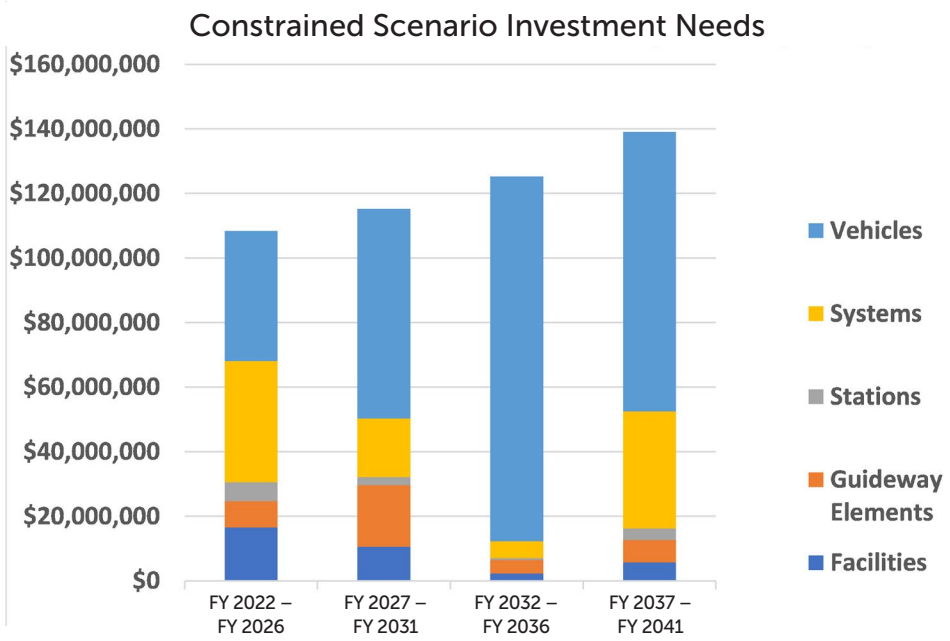
- Capital funding
- Ability to delivery capital projects (equipment, manpower, etc.)

Under the high scenario, the backlog is entirely addressed in Year 1 of the projection.



Low Scenario and Implications

Capital Needs – In the Constrained Scenario, assuming continuation of current funding levels, the SCIP estimates a gradual increase in expenditures from $108 million per year during the first five-year tranche to $139 million per year during the fourth five-year period. The SCIP prioritizes vehicle replacement over other types of asset renewal, especially between FY 2032 and FY 2036.



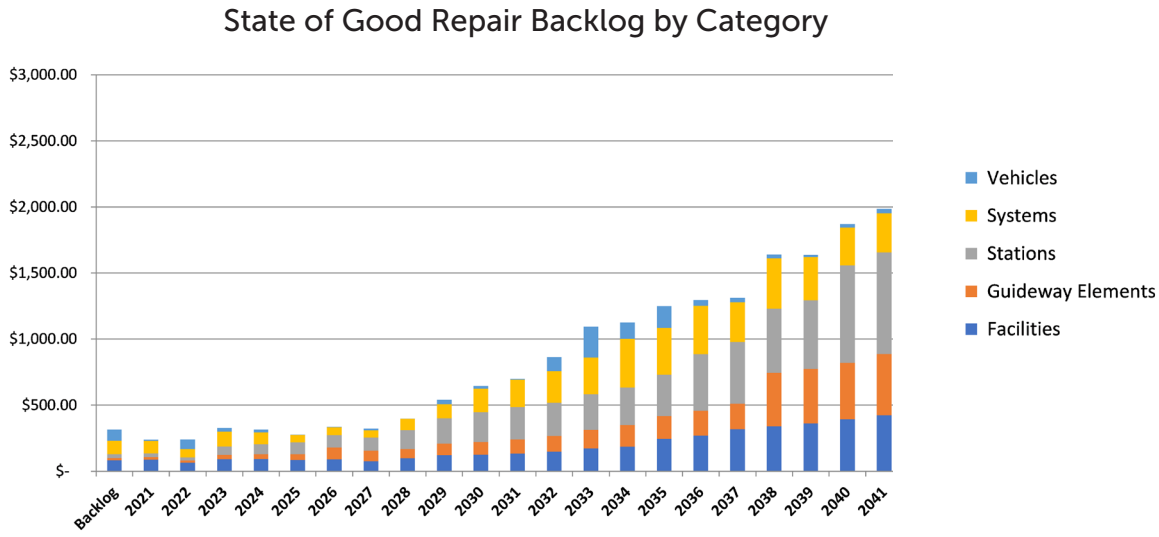
Note 1 – Each bar represent five-year averages. For example, the $117 million for FY 2027 – FY 2031 represents the average annual capital expenditure over that five year tranche.

Note 2 – All expenses in year of expenditure dollars

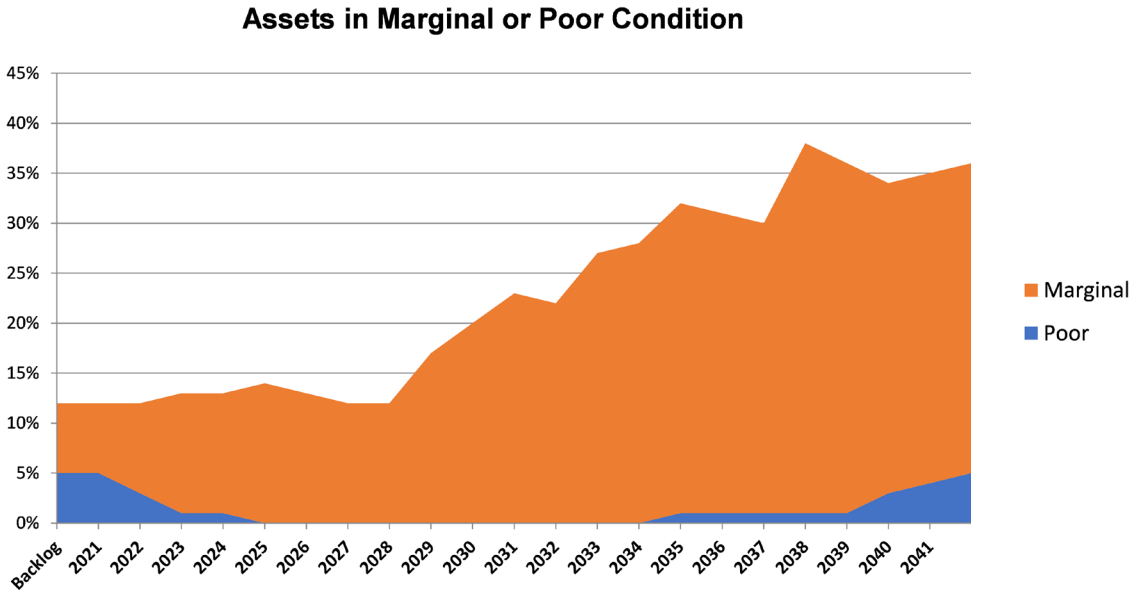
Example Expenditures

Five Year Period	Example Projects
FY 2022 – FY 2026	Replacement of 35' and 40' buses (100, 1000, 2000, 2100 and 2200 series) Electrification - Replacement of traction power substation and wayside train control
FY 2027 – FY 2031	Replacement of 40' and 60' articulated buses (4300, etc.) Guideway trackwork – embedded sections rehabilitation
FY 2032 – FY 2036	Replacement of LRVs (2001-2005 vintage having reached end of useful life) Bus replacements
FY 2037 – FY 2041	Replacement of communications systems – SCADA, CCTV, and radio

Backlog – The Constrained Scenario would result in a very significant growth in VTA's SGR backlog, reaching almost $2 billion at the end of the 20 years (year of expenditure dollars). This means a large increase over the $319 million backlog from FY 2021.



Asset Condition – Another consequence of the Constrained Scenario would be a significant increase in the assets in "marginal" or "poor" condition, going from 12% currently to over 35% in 20 years.



The value-weighted average condition score fluctuates between asset types and timeframes. It degrades significantly for Facilities and Stations in the out-years (i.e., below a condition rating of 3.0).

[3]	FY 2022 – FY 2026	FY 2027 – FY 2031	FY 2032 – FY 2036	FY 2037 – FY 2041
Facilities	3.6	3.3	3.0	2.8
Guideway	3.7	3.6	3.4	3.3
Stations	3.1	2.9	2.6	2.4
Systems	3.4	3.3	3.1	3.4
Vehicles	3.5	3.3	3.2	3.1

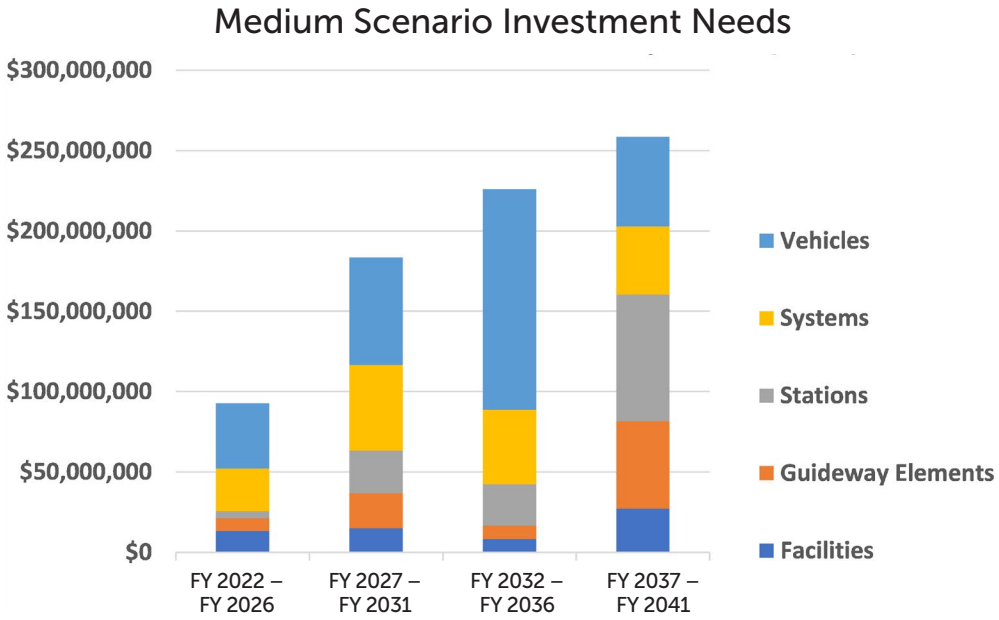
Transit Enterprise Low Scenario (Constrained) - Key Takeaways

- The Low (Constrained) Scenario is potentially the most likely since it assumes continuation of expected continued funding levels.
- Unfortunately, the Low Scenario results in several negative implications:
  - » With limited funding, prioritization is required. This means that some years, vehicle and guideway replacements tend to receive priority treatment compared to other important needs like stations, facilities, and systems.
  - » SGR backlog is catapulted to over $2 billion in 20 years, up from $319 million today ($YOE)
  - » Assets in marginal or poor condition would increase substantially, from 12% currently to 35% in 20 years. Especially affected would be passenger stations and maintenance facilities.

3 See page 17 for description of rating scale

Medium Scenario and Implications

Capital Needs – In the Medium Scenario, assuming that VTA maintains the level of State of Good Repair backlog over 20 years, the SCIP estimates a gradual increase from $92 million per year during the first five-year period to $258 million per year during the fourth five-year period.



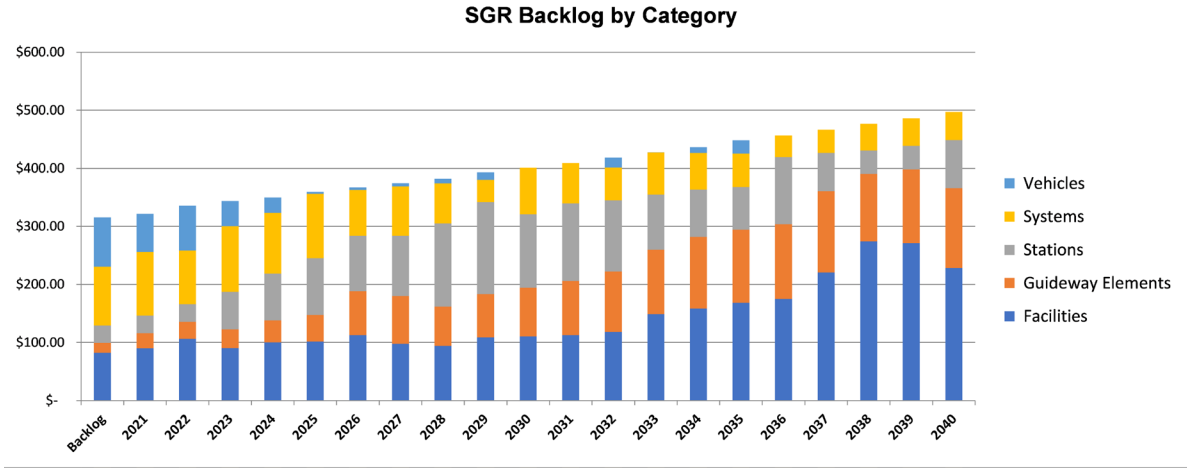
Note 1 – Each bar represents the average for the five-year period.

Note 2 – All expenses in year of expenditure dollars

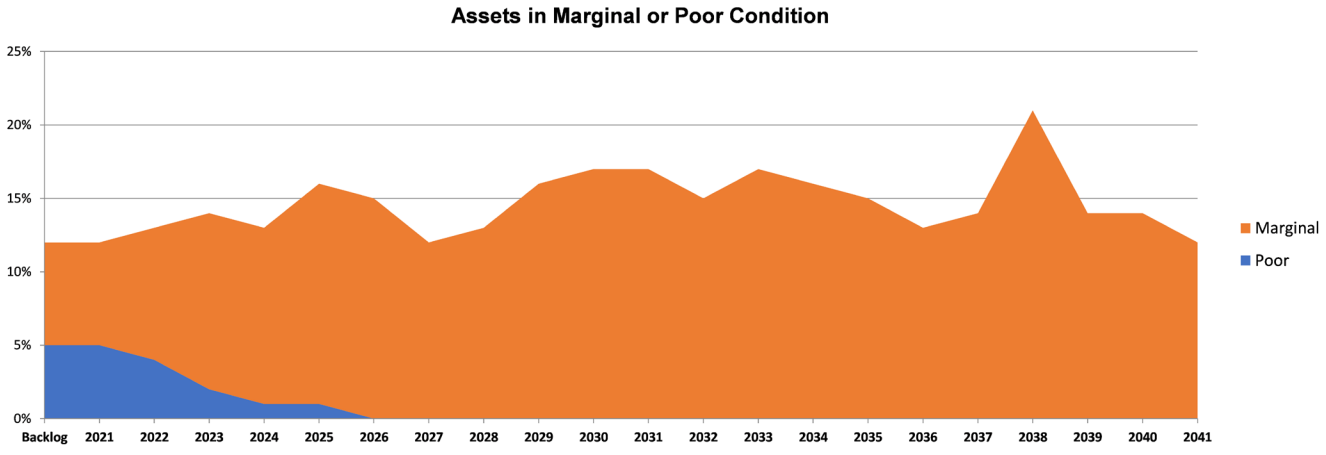
Example Expenditures

Five Year Period	Example Projects
FY 2022-FY 2026	Replacement of 40' buses, paratransit vehicles, and communication assets
FY 2027-FY 2031	Replacement of 60' articulated buses, 40' buses, and LR corridor electrification assets (substations and catenary)
FY 2032-FY 2036	Replacement of LRVs, and replacement of older buses with zero emissions ones
FY 2037-FY 2041	Bus replacement, and renewal of LR platforms

Backlog – The Medium Scenario would result in a stable SGR backlog over time, adjusted for inflation. The backlog would reach almost $500 million at the end of the 20 years (year of expenditure dollars).



Asset Condition – Another consequence of the Constrained Scenario would be a minor increase in the assets in "marginal" condition, and a gradual elimination of the "poor" condition assets.



The value-weighted average condition score fluctuates between asset types and timeframes, generally holding their own. Facilities and guideways are expected to degrade a small amount, while stations, systems, and vehicles are expected to exhibit a slightly improved condition.

[4]	FY 2022 – FY 2026	FY 2027 – FY 2031	FY 2032 – FY 2036	FY 2037 – FY 2041
Facilities	3.5	3.4	3.1	3.2
Guideway	3.7	3.6	3.5	3.5
Stations	3.1	3.2	3.2	3.7
Systems	3.2	3.7	3.8	3.8
Vehicles	3.2	3.4	4.0	3.7

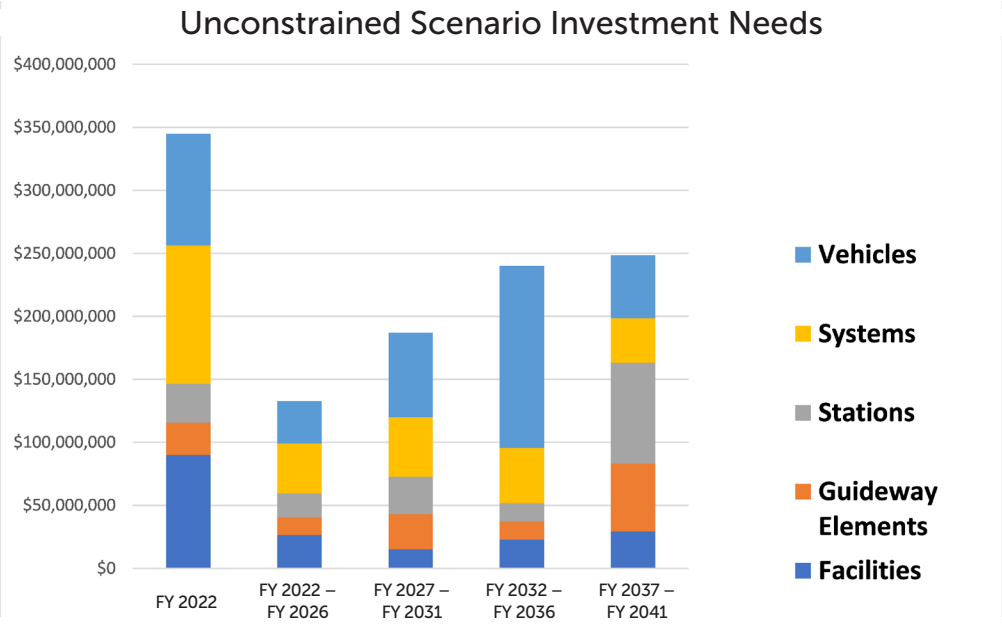
4 See page 17 for description of rating scale

Transit Enterprise Medium Scenario (Maintain Backlog) - Key Takeaways

- The Medium (Maintain Backlog) Scenario assumes an inflation-controlled continuation of the current SGR backlog. The backlog increases in Year-of-Expenditure levels year over year, due to inflation, but the backlog level proportionally remains the same.
- This scenario results in far better outcomes than the Constrained Scenario, the result being that over 20 years:
  - The backlog levels remain the same
  - Assets in marginal condition stay roughly at the same level
  - Assets in poor condition are fully addressed in five years
  - All asset classes, on average, are between "adequate" and "good"

High (Unconstrained) Scenario and Implications

Capital Needs – The High (Unconstrained) Scenario assumes, by definition, that all SGR backlog is addressed immediately. This means the FY 2021 backlog of $315 million plus FY 2022 backlog of $30 million must be addressed upfront. From this point, the Unconstrained Scenario assumes that all recommended capital replacement and rehabilitation be addressed every year and no backlog remains year over year. The remaining unconstrained need given the mix of age and VTA assets results in the first five-year average capital need of $133 million per year (in addition to the $345 million backlog expenditure). The unconstrained five-year average capital needs per year grows from there until reaching $248 million per year for the fourth five-year period. The Unconstrained Scenario does not privilege any asset type – it treats them all the same. All replacement and rehabilitation needs occur when the asset reaches the end of its predicted service life or a major service interval.

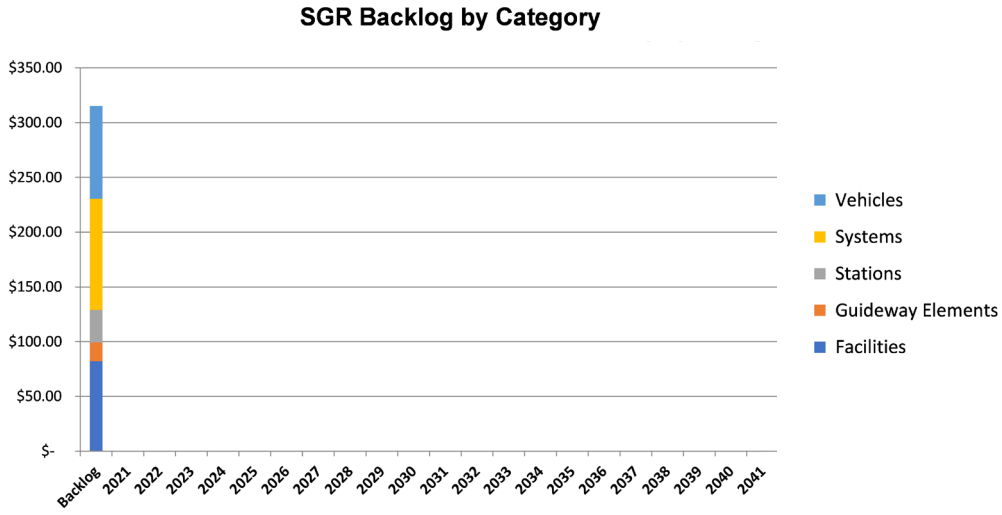


Note 1 – The first bar represents SGR backlog to date plus FY 2022 backlog. Each of the four other capital need bars show capital need and no backlog remains.

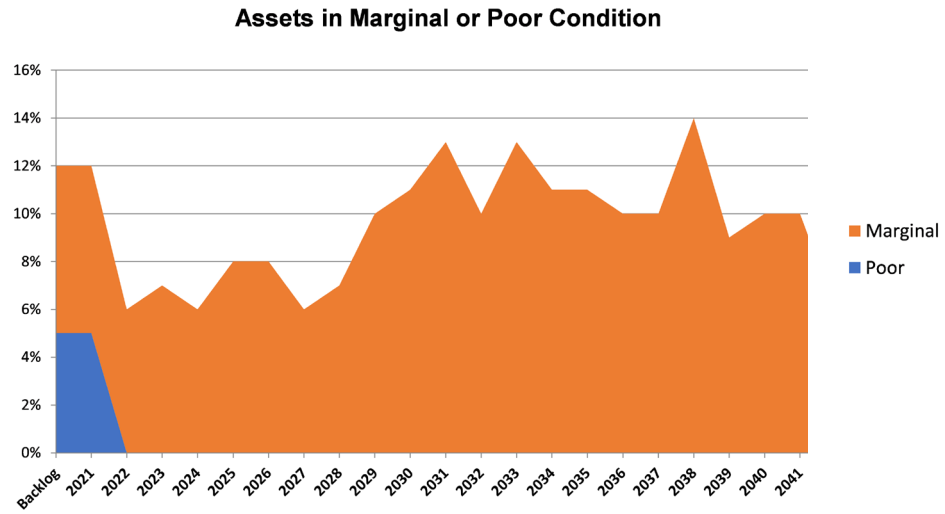
Note 2 – All expenses in year of expenditure dollars

Example Expenditures – In the Unconstrained Scenario, VTA would replace/rehabilitate ALL assets upon reaching the end of their useful life. Therefore, all the examples in the Low and Medium Scenario apply, and then some, especially with Facilities ($90 million addressed in FY 2022) and Stations ($31 million addressed in FY 2022).

Backlog – The Unconstrained Scenario would result in the complete elimination of the VTA SGR backlog by FY 2022). This presumes a large front-end investment focused on SGR.



Asset Condition – Another consequence of the Unconstrained Scenario would be elimination of assets in poor condition (because assets in "poor" condition are automatically renewed in this scenario) and a continuing evolution of "marginal" assets.



The value-weighted average condition score for all assets fluctuates, but is between adequate, good and excellent – above condition score of 3. The large purchase of light rail vehicles between FY 2032 and FY 2036 is enough to push Vehicles above 4.0 on the condition score.

[5]	FY 2022 – FY 2026	FY 2027 – FY 2031	FY 2032 – FY 2036	FY 2037 – FY 2041
Facilities	3.7	3.5	3.4	3.3
Guideway	3.7	3.6	3.4	3.5
Stations	3.5	3.6	3.4	3.9
Systems	3.5	3.7	3.7	3.6
Vehicles	3.2	3.3	4.2	3.8

Transit Enterprise High (Unconstrained) Scenario - Key Takeaways

- The High (Unconstrained) Scenario is a theoretical scenario that assumes that all capital maintenance and replacement activity occur like clockwork, as scheduled in the useful life assumptions. This means that all backlog is eliminated up-front and no backlog is allowed to grow year over year.
- The High Scenario is highly unrealistic given the massive funding required to achieve this (e.g., more than four times the current capital budget required for FY 2022, for example)
- The High Scenario results in best outcomes for asset condition.
- The High Scenario, in addition to being unrealistic, is also undesirable due to the decreased pressure for project prioritization and effective program management. The vast majority of transit agencies carry some level of backlog year over year.
- Nevertheless, the High Scenario is a useful theoretical measure to communicate total capital needs over time.

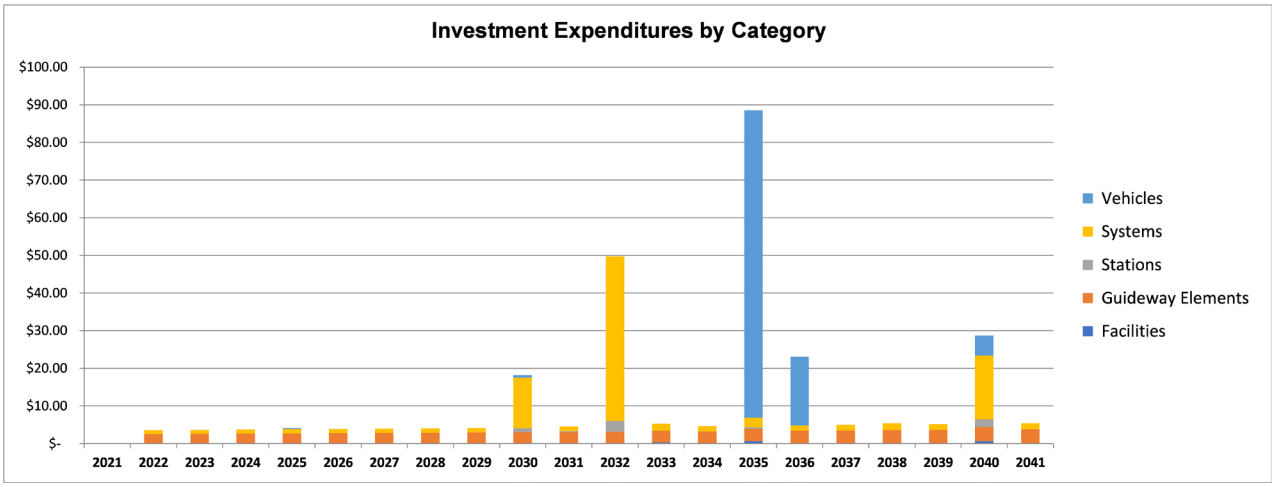
5 See page 17 for description of rating scale

6.2 VTA BSV Phase 1

VTA's BART Silicon Valley-Berryessa Extension (VTA BSV Phase 1) that opened for revenue service in 2020 has a total asset valuation of approximately $1.3 billion[6].

Asset Category	Sum of Valuation *($ in Millions)*
Facilities	$14.6 M
Guideway Elements	$611.0 M
Stations	$212.7 M
Systems	$359.7 M
Vehicles	$149.9 M
Grand Total	$1,348.0 M

As the assets are near new, normal annual capital maintenance will be required in the years ahead. Major capital needs are not expected until FY 2030 – FY 2032 (systems) and FY 2035 – FY 2036 (rail car mid-life overhauls)[7]. The chart below shows unconstrained capital needs over 20 years, to FY 2041.



6 Total asset valuation of approximately $1.3 billion does not equal to project costs

7 Capital needs shown do not include anticipated Phase 1 Communications-based train control (CBTC) program costs nor do they include VTA's capital obligation for BART core capital costs. CBTC costs will be captured once they are negotiated. Core capital costs will be included once BART updates it's 10-year capital improvement program.

VTA BSV Phase 1 - Key Takeaways

Over the next 20 years:

- Barring new regulatory/technology/policy changes, major VTA BSV Phase 1 capital needs are not anticipated until FY 2030 and FY 2032 (for systems) and not until FY 2035 – FY 2036 (for rail car mid-life overhauls)

6.3 Megaprojects

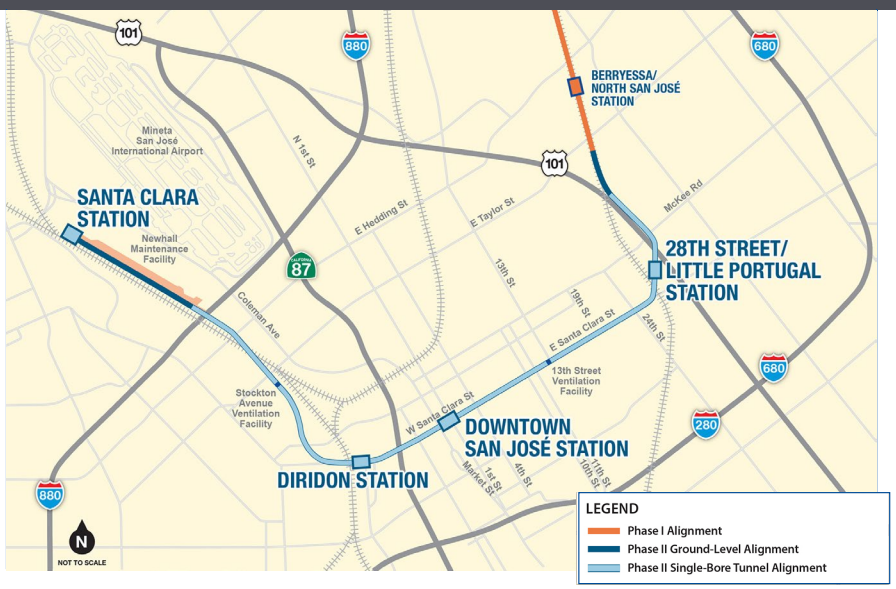
VTA BSV Phase 2

Program Overview

VTA's BART Silicon Valley Program has expanded BART service into Santa Clara County, bringing frequent and reliable regional rail service to over 1.9 million county residents.

Funded and managed by VTA in cooperation with BART, VTA's BART Silicon Valley Program is a 16-mile, six station extension. The Program is being constructed in two phases. Phase 1 (the Berryessa Extension, which opened for passenger service in 2020, extends 10 miles south from the Warm Springs/South Fremont station and added two new stations: Milpitas and Berryessa/North San José.

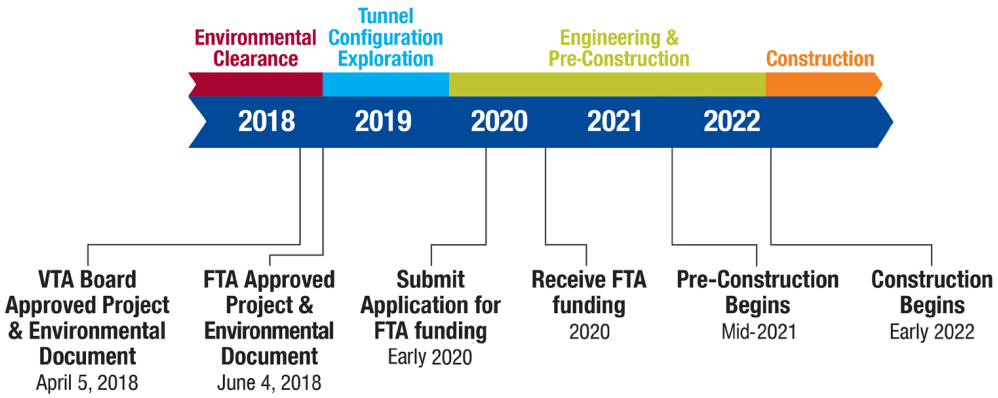
Phase II Alignment Map



Phase II

VTA's BART Silicon Valley Phase II Project is a six-mile, four-station extension that will bring BART train service from Berryessa/North San José through downtown San José to the City of Santa Clara. Phase II is planned to include an approximately five-mile tunnel, three underground stations (28th Street/ Little Portugal, Downtown San José, and Diridon), one ground-level station (Santa Clara), and a maintenance facility.

Phase II Timeline



Current planning schedule is based on securing funds through FTA's Expedited Project Delivery Pilot Program

Stations at a Glance				
Features	**28th Street/Little Portugal Station**	**Downtown San José Station**	**Diridon Station**	**Santa Clara Station**
Daily Ridership 2035 Projection	10,300	24,300	9,600	7,800
Underground Station	X	X	X	
Passenger Drop-off Areas	X	X	X	X
Shuttle Drop-off Area	X		X	X
Bicycle Storage Facility	X	X	X	X
Parking Facility	X			X
Transit-Oriented Development	X	X	X	X
Transit Connections				

Benefits

VTA's BART Phase II Project will:

- Improve and preserve transportation options and accessibility for all people
- Support a vibrant economy
- Foster livable and healthy communities and promote social equity
- Reduce vehicles on the roadway network as well as greenhouse gases
- Provide high frequency transit service from the South Bay to the rest of the Bay Area

Identified Funding To Date

Local & State Funds: $5.206 Billion

1. *2000 Measure A Sales Tax*
2. *2016 Measure B Sales Tax*
3. *Transit & Intercity Rail Capital Program (TIRCP) Grant*
4. *Regional Measure 3*
5. *Transit Oriented Development / P3*

Anticipated Federal Funds (25% of project costs): $1.735 Billion

- *FTA's Expedited Project Delivery Grant*

Projected Funding: $6.941 Billion*

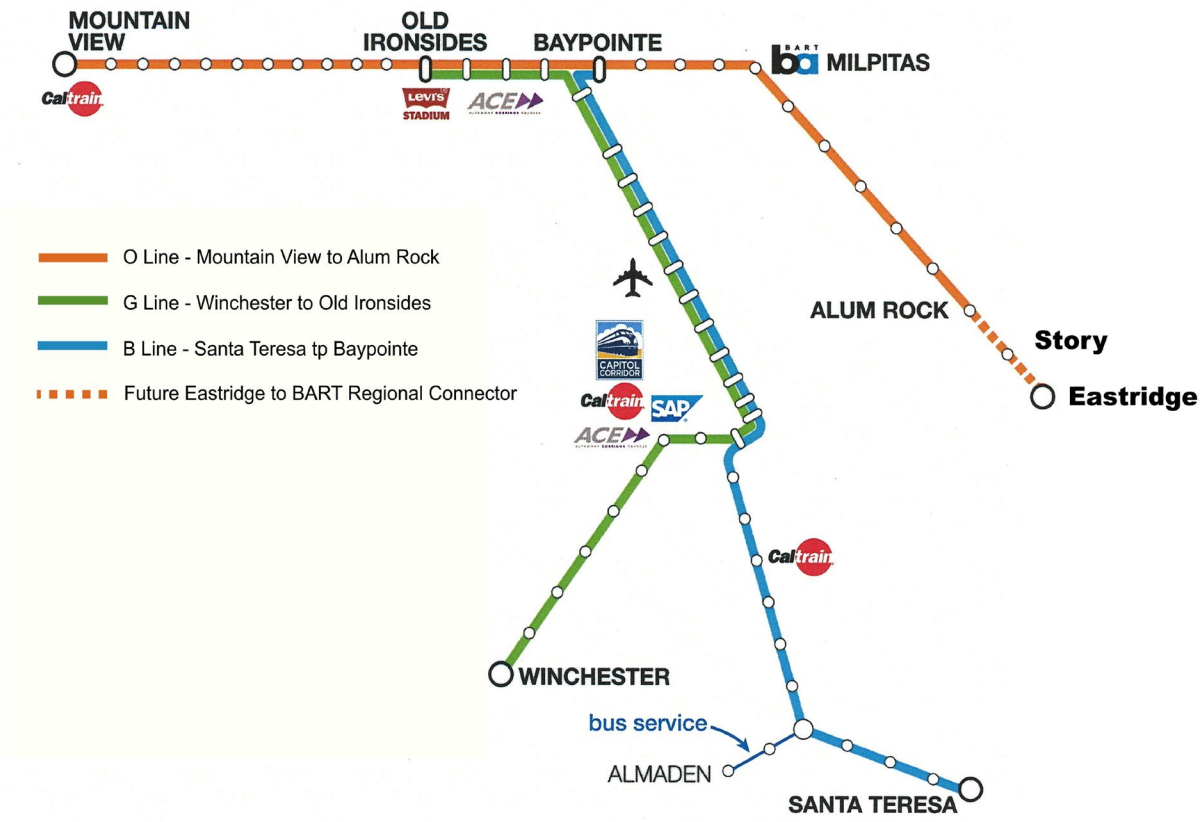
** Funding strategy will be updated as project advances and after further coordination with FTA on assessment of project risks.*

EBRC

VTA's Eastridge to BART Regional Connector project (EBRC) is a 2.4 mile light rail connection that extends VTA's existing Orange Line at Alum Rock by two stations, Story and Eastridge.

The project scope includes an elevated structure for most of the alignment (median and side running), one elevated station (Story), and an at-grade second station at the end of the line (Eastridge). Design is substantially complete with final engineering ready in early 2022. Utility relocations are underway, and property acquisitions are substantially complete.

The total project cost is estimated at $529 million with the main funding sources anticipated from 2000 Measure A and $130 million in Regional Measure 3 (RM3). Over $328 million has already been secured, with the balance of funding for construction being requested with potential identified grants. The schedule for construction is based on the availability of the $130M programmed with RM3 funding that is held up pending a California Supreme Court decision. Provided that the RM3 funding is approved by the end of 2022, advertisement can be made and construction can begin in mid 2023. This would result in construction completion in mid 2028.



Express Lanes

The primary objectives of VTA's Silicon Valley Express Lanes (SVEL) Program are to provide congestion relief through more effective use of existing roadways; provide commuters with a new mobility option; and provide a new funding stream for transportation improvements including public transit. Currently, due to limited funding availability, VTA is delivering the SVEL network in phases and on the State highway system administered by the California Department of Transportation (Caltrans).

Ultimately, the SVEL Program could be one of the primary sources of revenue to support transit operations to help address long-term sustainability and equity concerns related to travel options in Santa Clara County.

In line with these objectives, combining VTA's role as a transit service provider and a Congestion Management Agency, the Express Lanes projects implement a roadway pricing system to allow for the use of unused capacity in the carpool lanes to provide congestion relief and a new mobility option for some commuters. The roadway pricing system allows solo commuters to use the available capacity in the carpool lanes for a fee. The fee changes dynamically in response to existing congestion levels and available capacity in the carpool lanes. When solo commuters choose to use Express Lanes, this in turn also provides for traffic congestion relief in the general-purpose lanes.

Typically, Express Lanes create revenue streams that pay for capital replacement and rehabilitation projects of the built asset. VTA assumes that the entirety of these costs would be covered by the revenue collected. It should be noted that Caltrans is responsible for maintenance of the roadway while VTA is responsible for the specialized Express Lanes equipment (for example, electronic readers) in Santa Clara County.

VTA has maintenance and operations agreements with Caltrans. Through the accumulation of annual set-asides (a portion of toll revenue), VTA contributes its share of the Caltrans asset preservation cost. An example is pavement overlay for the SR 237 Express Lanes. This set up is expected to continue into the future.

Building out the Silicon Valley Express Lanes Program is expected to take decades and require significant capital outlays. Timing will depend on recovery from the COVID-19 pandemic, ability to raise bond funding against future toll revenues, state and federal grants, and other factors.

Corridor	Project	Project Type	Construction Start	Toll Start	Lane Miles	Capital Cost
SR-85/ US-101	SCL 85/101 Phase 4 Express Lanes: SR 87 to SR-85/US 101 Connectors	HOV Conversion	2023	2025	12.5	55M
US-101	SCL 101 Phase 5 Express Lanes: SR 237 to near I-880	Dual lanes	2024	2026	30.4	171M
I-880	I-880 Express Lanes: SR 237 to US-101	HOV Conversion	2025	2027	8.7	60M
I-880	I-880 Express Lanes: US-101 to I-280	Widening 1 Lane	2038	2040	8.1	207M
US-101	SCL US 101 Future Phases: I-880 to East Dunne Ave (dual lanes from I-880 to Blossom Hill & from SR 85 to Dunne Ave.)	Dual lanes	2028	2035	73.1	320M

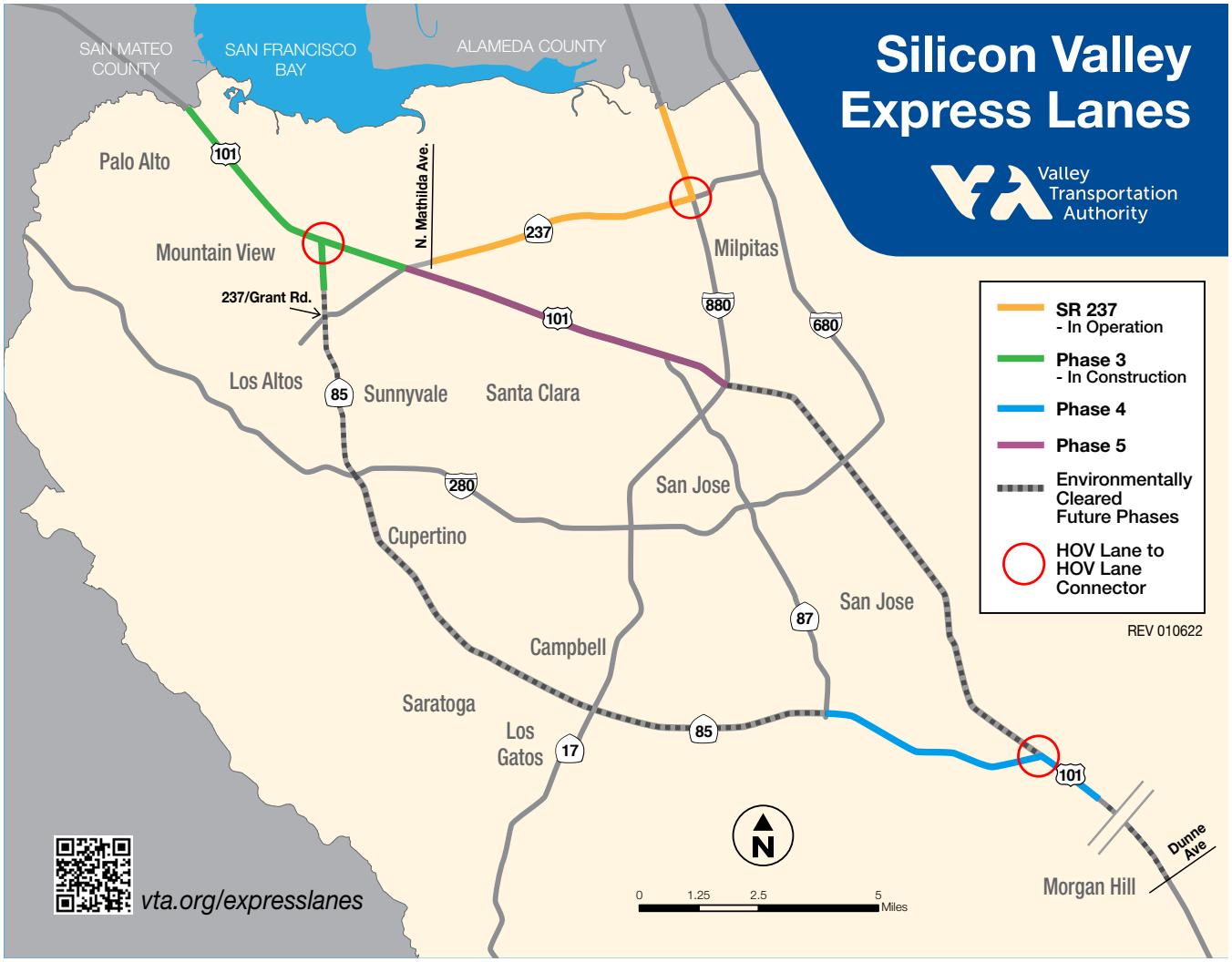
Corridor	Project	Project Type	Construction Start	Toll Start	Lane Miles	Capital Cost
SR-85	SCL SR 85 Future Phases: SR 237 to SR 87 (HOV conversion from I-280 to SR 237, dual lanes (SR 87 to I-280)	Dual lanes (87 to 280), HOV Conversion (280 to 101)	2029	2031	56.4	183M
I-280	I-280 Express Lanes: US 101 to Leland Ave	Lane Conversion	2034	2038	9.2	28M
I-280	I-280 Express Lanes: Magdalena Ave to SanMateo Countyline	Widening 1 Lane	2040	2042	13.0	98M
I-680	I-680 Express Lanes: Calaveras Blvd to US 101	Lane Conversion	2030	2033	15.2	41M
SR-17	SR 17 Express Lanes: I-280 to SR 85	Widening 1 Lane	2040	2043	9.2	33M
SR-87	SR 87 Express Lanes: SR 85 to US 101	HOV Conversion	2028	2030	18.2	39M
US-101	Dunne Avenue (Morgan Hill) to Gilroy	Widening 1 Lane	2038	2040	20.0	110M

Once built, the set of built assets for which VTA has a capital replacement responsibility will also grow over time. As one example, replacement of the bulk of electronic systems operated by VTA, today is expected to occur between FY 2026 and FY 2029.

Express Lanes Capital Needs - Key Takeaways

- VTA Express Lanes capital needs for renewal will grow over time and the first major capital expenditure is expected during the FY 2026 – FY 2029 timeframe.
- On-going VTA Express Lanes capital needs are expected to be covered by toll revenues through well-established Caltrans agreements.
- VTA's Express Lanes program is expected to take about 20 years for full buildout.

VTA's Silicon Valley Express Lanes



6.4 Other Programs

Transit-Oriented Development (TOD)

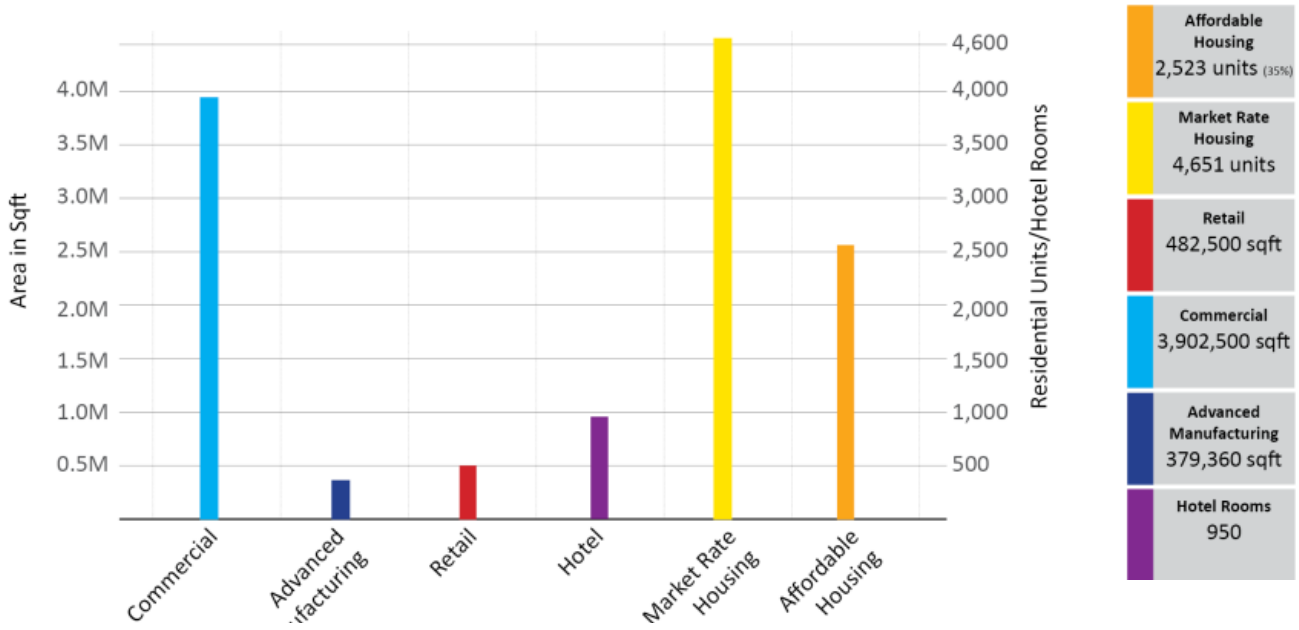
VTA's TOD program seeks to create mixed-use and mixed-income equitable housing through public-private and public-public partnerships on VTA-owned sites that will generate revenues, increase ridership, and create transit-oriented communities. VTA's TOD policy also seeks to create extensive new affordable housing, workforce opportunities, and create other benefits for communities and the region.

There are currently 26 VTA TOD sites that total slightly more than 200 acres and mostly consist of underused light rail station parking lots or undeveloped land. It includes the River Oaks headquarters site, TOD sites at VTA's BART Silicon Valley Extension Milpitas and Berryessa/North San José Transit Centers, and the closed Great Mall Transit Center.

Potential TOD Development Program 2020 - 2040

Projected total buildout of TOD at VTA sites (excluding BART Phase 2 sites) includes 4 million square feet of commercial space by 2040, based on evaluation of market conditions, development feasibility, and site evaluation.

Complete Buildout



The Joint Development (JD) Fund is a discrete funding source reserved exclusively for program-wide TOD planning and analysis as well as the costs for site analysis, entitlement processing, developer solicitation, and TOD agreements for individual properties.

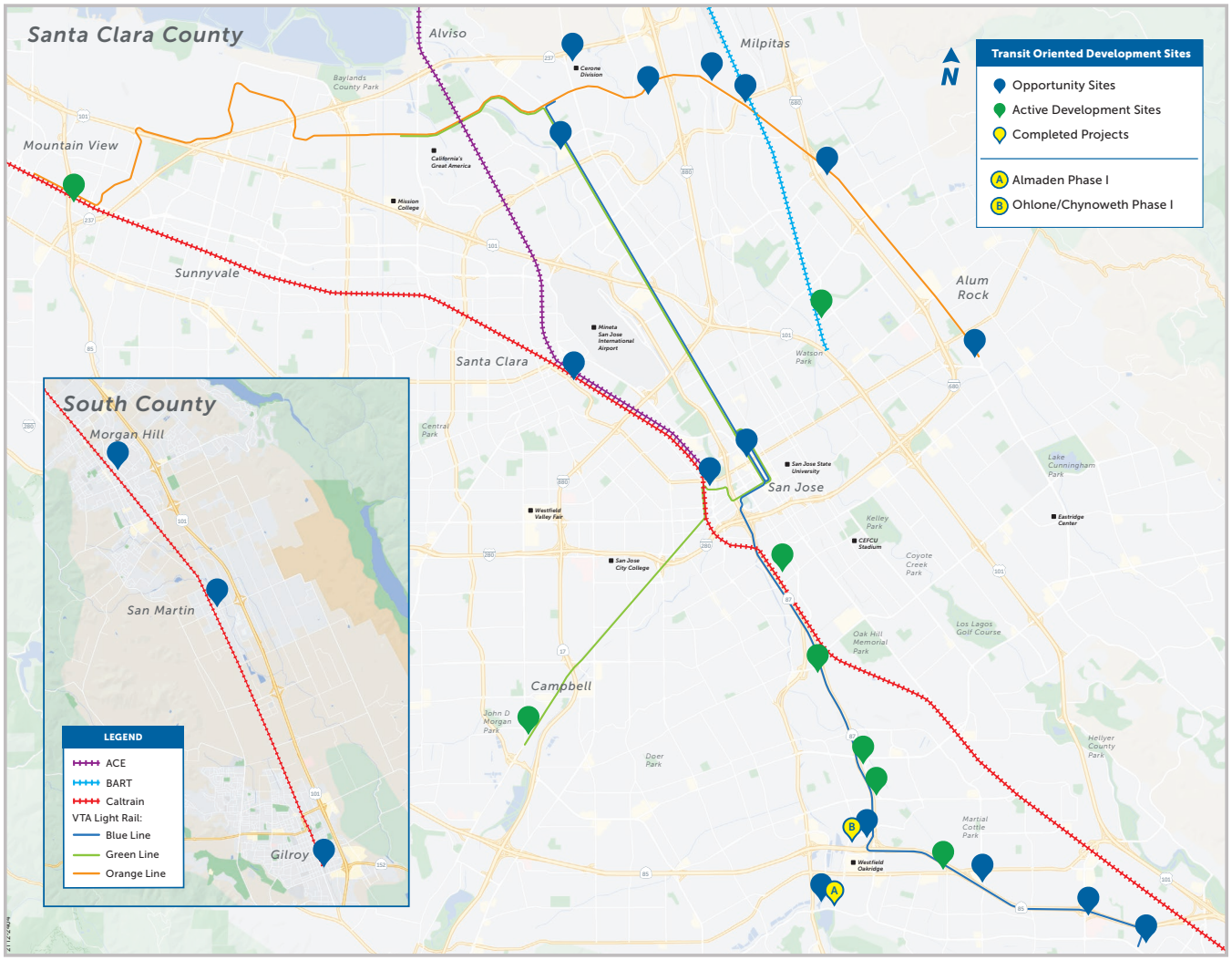
The Joint Development Fund, ***assuming no distributions and after TOD Program costs are deducted***, **could** total approximately $30 million per year by 2040:

Cumulative New Ground Lease Revenues from TOD by 2040, All Sites

Year	Ground Lease Revenues
2025	1,510,500
2030	11,702,000
2035	25,481,500
2040	30,221,000

Cumulative Balance in Joint Development Fund by 2040

Year	JD Fund Balance
2025	19,453,500
2030	41,080,500
2035	108,970,500
2040	253,321,000



Project Name: Tamien Station TOD
City: San Jose
Program: 113 Affordable + 456 Market Rate Units 3,000 Square Feet Retail
Project Phase: VTA and City Approvals
Web Page: www.vta.org/tamiendevelopment

Project Name: Blossom Hill Station TOD
City: San Jose
Program: 89 Affordable + 239 Market Rate Units Commercial/Retail Space
Project Phase: VTA and City Approvals
Web Page: www.vta.org/blossomhilldevelopment

Project Name: Curtner Station TOD
City: San Jose
Program: 65 Affordable Units 118 Senior Living Units 240,000 Square Feet Medical Office Day Care/Retail Space
Project Phase: Contract Negotiations/Developer Refines Project with Community Collaboration
Web Page: www.vta.org/curtnerdevelopment

Project Name: Berryessa/North San Jose Transit Center TOD*
City: San Jose
Program: 125 Affordable Units
Project Phase:
Community Outreach and Visioning
Web Page: www.vta.org/berryessadevelopment

Project Name: Capitol Station TOD*
(First of 3 Development Opportunities/Phases)
City: San Jose
Program: 125 Affordable Units
Commercial/Retail Space
Project Phase: VTA Board Reviews and Approves the Project/Solicitation
Web Page: www.vta.org/capitoldevelopment

6.5 Synthesis

Like all transit agencies, VTA's capital needs ebb and flow according to the planned normal retirement and rehabilitation needs driven by life-cycle parameters, as well as interventions prompted by staff in response to asset performance and wear and tear observed in the field.

The SCIP process integrates key information from numerous detailed VTA planning studies and evaluations. Chief among them is the Transit Asset Management (TAM) Plan previously referenced, which is a foundational element of the SCIP process, especially for Transit Enterprise. The TAM Plan, which is updated every four years, is an extensive effort that provides a deep dive into overall asset management strategy, and specifics about useful life assumptions, asset rehabilitation and renewal. It also contains a prioritized set of investments to maintain VTA's assets in a State of Good Repair. The SCIP integrates and overall is consistent with the elements and strategy of the TAM Plan.

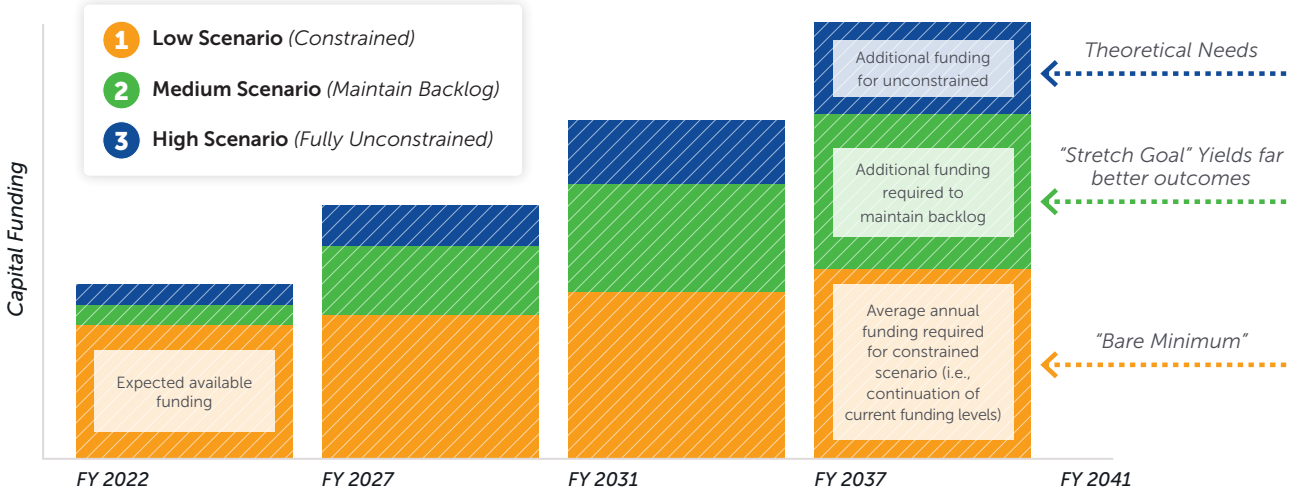
The SCIP period is 20 years, from FY 2022 to FY 2041. During this time, significant capital needs are expected for its traditional "Transit Enterprise" assets, such as for:

- Bus replacements including with zero emission technologies (e.g., hydrogen and/or battery-electric)
- Supporting zero-emission infrastructure (chargers, tanks, etc.)
- Light Rail Vehicle fleet replacement/renewal during FY 2031 – FY 2036
- Traction power and substation replacements
- Fare collection system renewal.

Maintaining assets in a State of Good Repair has been a key Federal Transportation Agency focus as a result of recent legislation[8]. For VTA, maintaining assets in a State of Good Repair goes way beyond simple compliance. It is about providing its customer and staff an environment supportive of our mission, which is "Providing solutions that move you". In addition, keeping assets in a State of Good Repair support many of our core values, including Safety, Integrity, Quality, Sustainability and Accountability.

8 Moving Ahead for the 21st Century (MAP-21) and Fixing America's Surface Transportation (FAST)

Completely eliminating all backlog is theoretically possible but not feasible nor necessarily desirable. Virtually all transit agencies carry some backlog from year to year. For Transit Enterprise assets, VTA's current backlog is about $319 million ($2021). VTA has several potential pathways over the next twenty years with respect to its approach to capital replacement and rehabilitation as shown below for transit enterprise assets:



In addition to Transit Enterprise assets, VTA faces a growing asset base resulting from gradual expansion and buildout of its system including the BSV program, a growing network of Express Lanes, as well as others. During the 20-year SCIP period, depending on the program the focus is on capital expansion/improvements, capital renewal, or a combination of both.

Program	Focus
Transit Enterprise	Capital Renewal
VTA BSV Phase 1	Capital Renewal
VTA BSV Phase 2	Capital Expansion *(some Capital Renewal)*
Eastridge to BART Regional Connector (EBRC)	Capital Expansion *(some Capital Renewal)*
Express Lanes	Capital Expansion *(some Capital Renewal)*
Transit-Oriented Development	Capital Expansion

- The BSV Phase 1 capital needs are modest for the first 10 years of the SCIP because the assets are new or near new. Major renewal costs are expected in FY 2030 and FY 2032 for systems and in FY 2035 – FY 2036 for rail cars. Beyond these renewal costs, VTA needs to factor in communications-based train control (CBTC) and core system capital costs, consistent with the BART/VTA Comprehensive Agreement.
- Megaprojects such as BSV Phase 2 and EBRC are considered expansion projects during the 20-year SCIP period, with huge capital outlays for construction and minimal capital renewal needs.
- VTA Express Lanes capital needs for renewal will grow over time and the first major capital expenditure is expected during the FY 2026 – FY 2029 timeframe. The majority of expenditures are for Express Lanes construction. Express Lanes renewal capital needs are modest compared to Transit Enterprise or BSV Phase 1.
- Transit-Oriented Development is largely based on public-public and public-private partnerships to leverage existing VTA real estate to create new affordable housing, workforce opportunities, and other benefits. TOD has the potential to generate $250 million per year by 2040.

Transit Enterprise Synthesis - Key Takeaways

The SCIP analysis shows that each of these pathways can be qualitatively assessed and each has its own set of State of Good Repair implications:

- The **Low (Constrained) Scenario** shown in orange is probably the most likely given it represents a continuation of current funding levels. This is considered the bare minimum and exhibits negative longer-term implications such as a ballooning backlog and degrading asset conditions.
- The **Medium (Maintain Backlog) Scenario** shown in green represents a "stretch goal". It carries the benefit of far better outcomes – the backlog stays the same proportionally; assets in the worst condition would be replaced over five years and VTA would maintain all asset classes in fair to good condition during the full twenty years
- The **High (Unconstrained) Scenario** shown in blue is unlikely due to its gargantuan funding requirements but also is not desirable due to decreased pressure on project prioritization and effective program management. The levels of funding under this scenario is useful, however, for planning and advocacy purposes.

The two primary types of scenario implications involve the growth of the backlog over time, and asset conditions. Scenario implications can be seen on the following pages.

The SCIP advocates VTA aggressively moving towards the **Medium (Maintain Backlog) Scenario**. By adopting this position, VTA positions itself as a prudent and responsible steward of its assets.

Other Assets Synthesis - Key Takeaways

- For other assets, VTA capital needs in the SCIP will be focused on capital expansion with VTA BSV Phase 2, EBRC and the buildout of the Express Lanes network.
- VTA BSV Phase 1 begins to have considerable capital renewal needs in FY 2030 for systems and in FY 2035 for rail cars.
- Other smaller categories of capital expenditures in the SCIIP include Complete Streets, bike and pedestrian improvements, TOD, and Express Lanes assets renewal.

Scenario Implications - Backlog

3 Additional funding for unconstrained

- No backlog at all (fully paid down each year)
- Highly unrealistic

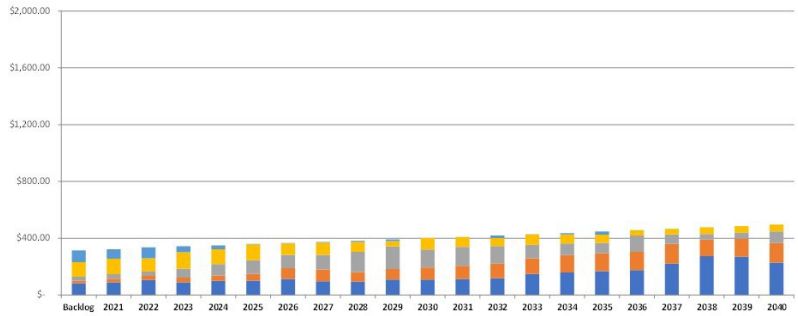
2 Additional funding required to maintain backlog

- Backlog grows with inflation
- Requires additional funding

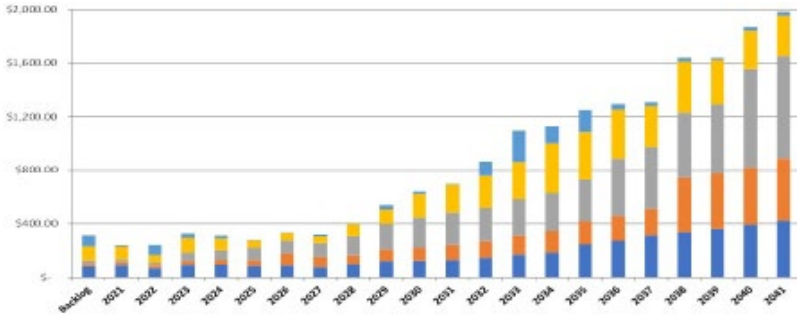
1 Average annual funding required for constrained scenario (i.e., continuation of current funding levels)

- Backlog balloons in out years to $2 billion ($YOE)
- Assumes funding at historical levels

"Flat" Backlog (Medium Scenario)



Ballooning Backlog (Low Scenario)



- **1** **Low Scenario** *(Constrained)*
- **2** **Medium Scenario** *(Maintain Backlog)*
- **3** **High Scenario** *(Fully Unconstrained)*

- Vehicles
- Systems
- Stations
- Guideway Elements
- Facilities

Scenario Implications - Asset Conditions

3 Additional funding for unconstrained

- Best outcomes
- Marginal assets: ~10%

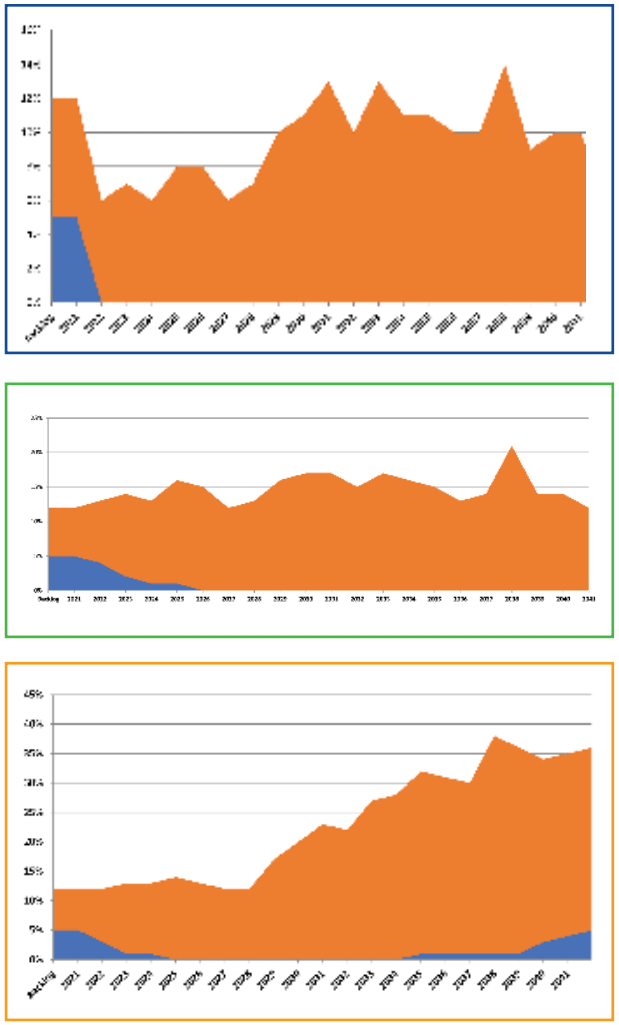
2 Additional funding required to maintain backlog

- Good outcomes
- Assets in poor condition eliminated by 2026
- Marginal assets: ~12% (like today)

1 Average annual funding required for constrained scenario (i.e., continuation of current funding levels)

- Worst outcomes
- Assets in marginal or poor condition rise to ~35% of all assets by 2041
- Passenger stations in marginal condition

Assets in Marginal or Poor Condition



1 **Low Scenario** *(Constrained)*
2 **Medium Scenario** *(Maintain Backlog)*
3 **High Scenario** *(Fully Unconstrained)*

Appendices:

Appendix A - Scoring Criteria

Approved SCIP Criteria and Weights for CAP 6 Element of Inaugural SCIP (FY 2022 – FY 2041)

Criteria	Definition	Weight
Enhances Safety & Security	» Enhance user safety (transit, highway, bike/ped) » Enrich employee safety & security » Improve system security	15%
Environmental Sustainability	» Support VTA Sustainability Plan » Address climate change adaptation and global warming » Create or enhance land use and transit connections » Support VTA TOD Policy » Support VTA Complete Streets Policy and initiatives » Address negative effects of proximity to major surface transportation facilities	10%
Improves Cost Efficiency/Effectiveness	» Reduce lifecycle cost for asset » Exhibit positive benefit-cost ratio or Return on Investment (ROI) » Create positive impact to operating expense » Deploy resources effectively	20%
Preserves/ Maintains Transportation System	» Maintain assets in a State of Good Repair » Replace/rehabilitate assets at optimal intervals » Support Transit Asset Management Plan, Pavement Management System » Address system resilience (e.g., climate change) and asset risk » Address historic underinvestment relative to need	20%
Increases Mobility / Ridership	» Support increased mobility and accessibility » Drive increased ridership » Address VTA Congestion Management Plan strategies » Improve multi-modal access (e.g., active transportation) » Improve transportation network connectivity	20%
Improves Transportation System	» Enhance network capacity (transit, highway, bike/ped) » Deliver innovative projects and new technologies » Improve customer experience » Increase access/utility for people with difficulty meeting transportation needs » Address historic underinvestment relative to need	15%

Appendix B - Transit Enterprise Projects

VTA Capital Program - Transit Enterprise Projects for FY 2022 - FY 2027 (CAP 6) can be seen on the following pages.

VTA Capital Program
Transit Enterprise Projects for FY 2022 - FY 2027 (CAP 6)

Tier 1 = Mandated/Regulatorily Required | Tier 2 = Board Direction | Tier 3 = Majority Externally Funded | Tier 4 = Continuing Projects | Tier 5 = All Others

Tier	Request #	Project Name (Dollars in Thousands)	Existing (FY22)	FY22 & FY23 (Approved by Board on 6/3/21) Requested Amount $$	Net Transit Enterprise Cost $$	Net Transit Enterprise Cost %	Net VTA Cost Cum. $$	FY24 & FY25 Requested Amount $$	Net Transit Enterprise Cost $$	Net Transit Enterprise Cost %	Net VTA Cost Cum. $$	FY26 & FY27 Requested Amount $$	Net Transit Enterprise Cost $$	Net Transit Enterprise Cost %	Net VTA Cost Cum. $$
	Contingency			-	-	-	-	2,000	2,000	100.0%	2,000	2,000	2,000	100.0%	2,000
	Revenue Vehicles and Equipment														
1	VTA-7	Purchase of Electric Buses (48)	X	300	60	20.0%	60	56,278	11,256	20.0%	13,256	0	0	-	2,000
2	VTA-132	Purchase of Electric Buses (63)		-	-	-	60	-	-	-	13,256	70,000	14,000	20.0%	16,000
3	VTA-26	LRV Electronic Equipment Modernization	X	4,761	1,704	35.8%	1,764	30,706	21,163	68.9%	34,418	20,278	10,678	20.0%	26,678
4	VTA-8	Purchase of Hybrid and Electric Buses	X	78,300	12,660	16.2%	14,424	-	-	-	34,418	0	0	-	26,678
5	VTA-32	Paratransit Fleet Procurement FY22 & FY23	X	6,771	1,354	20.0%	15,778	6,400	4,955	77.4%	39,373	6,200	2,195	35.4%	28,873
6	VTA-27	LRV Next Generation High Capacity Transit Fleet Pilot Project		-	-	-	15,778	16,592	16,592	100.0%	55,965	0	0	-	28,873
7	VTA-48	Collision Avoidance Deployment Program	X	1,800	1,800	100.0%	17,579	-	-	-	55,965	0	0	-	28,873
8	VTA-62	Video Analytics on Paratransit Accessible Fleet	X	763	763	100.0%	18,342	1,263	1,263	100.0%	57,229	0	0	-	28,873
		Total, Revenue Vehicles and Equipment:		**92,696**	**18,342**			**111,239**	**55,229**			**96,478**	**26,873**		
	Operating Facilities and Equipment														
9	VTA-133	Zanker Facility Lease and Improvements		4,201	-	0.0%	18,342	2,841	-	0.0%	57,229	2,943	0	0.0%	28,873
10	VTA-81	Facilities Assessment FY22 & FY23	X	400	400	100.0%	18,742	-	-	-	57,229	400	400	100.0%	28,873
11	VTA-78	Drain Inlet Filter Project	X	881	881	100.0%	19,623	-	-	-	57,229	0	0	-	28,873
12	VTA-3	Expand Bus Charging Capacity at Cerone Yard for Electric Buses	X	350	-	0.0%	19,623	30,650	-	0.0%	57,229	0	0	-	28,873
13	VTA-10	Axle Press Replacement Project	X	2,170	434	20.0%	20,057	-	-	-	57,229	0	0	-	28,873
14	VTA-17	Guadalupe Steam Rack Improvements and Liner Replacement	X	200	40	20.0%	20,097	-	-	-	57,229	0	0	-	28,873
15	VTA-19	HVAC Replacement	X	2,028	406	20.0%	20,502	2,501	1,331	53.2%	58,560	588	384	65.3%	29,256
16	VTA-82	Guadalupe Second Entrance - Single Point of Failure	X	200	200	100.0%	20,702	7,348	2,158	29.4%	60,717	31,935	(17,058)	-53.4%	12,199
17	VTA-67	Chaboya Yard Well Removal	X	1,150	1,150	100.0%	21,852	-	-	-	60,717	0	0	-	12,199
18	VTA-15	Facilities Equipment Replacement Program FY22-FY23	X	2,178	435	20.0%	22,288	1,080	1,080	100.0%	61,797	1,674	954	57.0%	13,153
19	VTA-6	Overhead Fall Protection on all Bus Bays	X	1,590	1,590	100.0%	23,878	-	-	-	61,797	0	0	-	13,153
20	VTA-76	Security Enhancements at Chaboya Parking Lot	X	600	120	20.0%	23,998	-	-	-	61,797	0	0	-	13,153
21	VTA-5	Expand VTA's North Yard for Electric Buses	X	500	500	100.0%	24,498	19,500	3,900	20.0%	65,697	0	0	-	13,153
22	VTA-4	Expand VTA's Chaboya Yard for Electric Buses	X	1,524	1,524	100.0%	26,021	23,614	723	3.1%	66,420	38,862	6,772	17.4%	19,925
23	VTA-16	Facilities and Equipment Emergency Repair	X	-	-	-	26,021	750	750	100.0%	67,170	750	750	100.0%	20,675
24	VTA-12	Chaboya and Cerone Dedicate Detail Areas		-	-	-	26,021	582	262	45.0%	67,432	0	0	-	20,675
25	VTA-21	North Yard Tire Awning		-	-	-	26,021	582	262	45.0%	67,693	0	0	-	20,675
26	VTA-24	Roofing Management Program FY22 & FY23	X	2,215	2,215	100.0%	28,237	3,134	3,134	100.0%	70,827	2,055	2,055	100.0%	22,730
27	VTA-65	North Yard Pavement Rehabilitation	X	630	630	100.0%	28,867	-	-	-	70,827	0	0	-	22,730
28	VTA-22	Painting Management Program FY22 & FY23	X	1,000	1,000	100.0%	29,867	1,505	1,505	100.0%	72,333	1,583	1,583	100.0%	24,313
29	VTA-23	Paving Management Program FY22 & FY23	X	1,000	1,000	100.0%	30,867	4,321	4,321	100.0%	76,654	3,073	3,073	100.0%	27,386

	Tier	Request #	Project Name (Dollars in Thousands)	Exists (FY22)	FY22 & FY23 (Approved by Board on 6/3/21) Requested Amount $$	Net Transit Enterprise Cost $$	Net Transit Enterprise Cost %	Net VTA Cost Cum. $$	FY24 & FY25 Requested Amount $$	Net Transit Enterprise Cost $$	Net Transit Enterprise Cost %	Net VTA Cost Cum. $$	FY26 & FY27 Requested Amount $$	Net Transit Enterprise Cost $$	Net Transit Enterprise Cost %	Net VTA Cost Cum. $$
30		VTA-14	Electrical Equipment Survey & Replacements FY22 & FY23	X	1,509	1,509	100.0%	32,376	-	-	-	76,654	0	0	-	27,386
31		VTA-11	Cerone Building B Reconfiguration Project		-	-	-	32,376	3,492	698	20.0%	77,352	0	0	-	27,386
32		VTA-40	DC Grounding- UPS - HVAC		-	-	-	32,376	200	200	100.0%	77,552	0	0	-	27,386
33		VTA-18	Guadalupe Trailer Replacement Project		-	-	-	32,376	221	221	100.0%	77,774	0	0	-	27,386
34		VTA-2	Cerone Maintenance Restrooms and Breakrooms Remodel		-	-	-	32,376	393	393	100.0%	78,166	0	0	-	27,386
35		VTA-1	Cerone Maintenance Offices Remodel		-	-	-	32,376	1,565	1,565	100.0%	79,731	0	0	-	27,386
36		VTA-13	Cubicle Furniture Replacement		-	-	-	32,376	1,786	1,786	100.0%	81,517	0	0	-	27,386
			Total, Operating Facilities and Equipment		**24,326**	**14,034**			**106,064**	**24,289**			**83,862**	**(1,087)**		
			Light Rail Way, Power & Signal													
37		VTA-74	Bridge and Structures Repairs FY22 & FY23	X	1,640	328	20.0%	32,704	1,000	200	20.0%	81,717	1,000	200	20.0%	27,586
38		VTA-42	Light Rail Platform CCTV Replacement	X	500	500	100.0%	33,204	1,000	1,000	100.0%	82,717	800	800	100.0%	28,386
39		VTA-66	Downtown San Jose Speed Improvements	X	4,450	890	20.0%	34,094	-	-	-	82,717	0	0	-	28,386
40		VTA-80	North 1st Street/Tasman Drive - EB Track Switch Addition Proj. - TSP Enhancements	X	2,050	410	20.0%	34,504	-	-	-	82,717	0	0	-	28,386
41		VTA-69	OCS Rehab & Replacement Program FY22 &	X	16,400	3,280	20.0%	37,784	14,300	2,900	20.3%	85,617	7,650	1,530	20.0%	29,916
42		VTA-86	Laser Intrusions Detection System (LIDS) Replacement	X	4,280	4,280	100.0%	42,064	-	-	-	85,617	0	0	-	29,916
43		VTA-84	Signal Improvements Guadalupe	X	5,175	1,035	20.0%	43,099	21,415	4,283	20.0%	89,900	0	0	-	29,916
44		VTA-88	Signal Improvements - Tasman West		-	-	-	43,099	-	-	-	89,900	3,441	688	20.0%	30,604
45		VTA-87	Audio Frequency Train Activated Circuit (AFTAC) Vasona Line		-	-	-	43,099	919	919	100.0%	90,819	2,080	2,080	100.0%	32,684
46		VTA-85	Light Rail Crossovers and Switches		-	-	-	43,099	34,250	34,250	100.0%	125,069	13,750	5,610	40.8%	38,294
47		VTA-79	Guadalupe Elevator And Escalator Drainage	X	1,025	205	20.0%	43,304	-	-	-	125,069	0	0	-	38,294
48		VTA-71	Traction Power Substation Replacement FY22 & FY23	X	5,200	1,040	20.0%	44,344	18,600	15,120	81.3%	140,189	12,763	3,643	28.5%	41,937
49		VTA-75	Safety Enhancements at Grade Crossings FY22	X	3,869	3,869	100.0%	48,213	1,361	1,361	100.0%	141,550	0	0	-	41,937
50		VTA-72	Track Intrusion Abatement FY22 & FY23	X	2,784	557	20.0%	48,770	2,324	465	20.0%	142,015	1,930	386	20.0%	42,323
51		VTA-70	Rail Replacement/Rehabilitation FY22 & FY23	X	18,600	3,720	20.0%	52,490	26,200	5,240	20.0%	147,255	19,520	3,904	20.0%	46,227
52		VTA-28	Systemwide Stray Current and Corrosion Control	X	382	382	100.0%	52,872	194	194	100.0%	147,449	153	153	100.0%	46,380
53		VTA-68	SCADA Control Center & System Replacement		-	-	-	52,872	2,662	382	14.4%	147,831	15,868	4,729	29.8%	51,109
			Total, Light Rail Way, Power & Signal		**66,355**	**20,496**			**124,225**	**66,313**			**78,954**	**23,723**		
			Passenger Facilities													
54		VTA-60	Better Bus Stops 2027		-	-	-	52,872	-	-	-	147,831	1,300	1,300	100.0%	52,409
55		VTA-59	Better Bus Stops 2025		-	-	-	52,872	1,300	-	0.0%	147,831	0	0	-	52,409
56		VTA-58	Better Bus Stops 2023	X	1,300	-	0.0%	52,872	-	-	-	147,831	0	0	-	52,409
57		VTA-73	Transit Center, Park and Ride and Bus Stop Rehabilitation FY22 & FY23	X	2,000	400	20.0%	53,272	2,000	400	20.0%	148,231	2,000	400	20.0%	52,809
58		VTA-55	E-Locker Upgrade and Replacement	X	1,064	280	26.3%	53,552	876	237	27.0%	148,467	0	0	-	52,809
			Total, Passenger Facilities		**4,364**	**680**			**4,176**	**637**			**3,300**	**1,700**		

Tier	Request #	Project Name (Dollars in Thousands)	Existing (FY22)	FY22 & FY23 (Approved by Board on 6/3/21) Requested Amount $$	Net Transit Enterprise Cost $$	Net Transit Enterprise Cost %	Net VTA Cost Cum. $$	FY24 & FY25 Requested Amount $$	Net Transit Enterprise Cost $$	Net Transit Enterprise Cost %	Net VTA Cost Cum. $$	FY26 & FY27 Requested Amount $$	Net Transit Enterprise Cost $$	Net Transit Enterprise Cost %	Net VTA Cost Cum. $$
Information Systems & Technology															
59	VTA-30	Transit Enterprise System Server Replacement	X	1,800	1,800	100.0%	55,352	-	-	-	148,467	623	623	100.0%	53,431
60	VTA-77	Dry Fire Suppression for Communication and Data Rooms	X	460	460	100.0%	55,812	-	-	-	148,467	0	0	-	53,431
61	VTA-128	GIS & Advanced Data Analytics Program Development	X	1,982	1,982	100.0%	57,794	1,583	1,583	100.0%	150,050	1,319	1,319	100.0%	54,750
62	VTA-91	Network Switch Replacement/Upgrade	X	4,600	920	20.0%	58,714	-	-	-	150,050	0	0	-	54,750
63	VTA-34	Advanced Cyber Security	X	353	353	100.0%	59,067	353	353	100.0%	150,404	353	353	100.0%	55,104
64	VTA-43	Network and Gigabit Fiber Upgrade	X	1,850	1,850	100.0%	60,917	-	-	-	150,404	0	0	-	55,104
65	VTA-41	Server Refresh	X	1,550	1,550	100.0%	62,467	1,400	1,400	100.0%	151,804	2,900	2,900	100.0%	58,004
66	VTA-38	VTA Network Cabling	X	1,150	1,150	100.0%	63,617	600	600	100.0%	152,404	0	0	-	58,004
67	VTA-37	SAP Enterprise Asset Management Enhancement	X	1,809	1,809	100.0%	65,426	-	-	-	152,404	0	0	-	58,004
68	VTA-29	Enterprise Database for Key Performance Indicators (TransitDB)	X	150	150	100.0%	65,576	-	-	-	152,404	0	0	-	58,004
69	VTA-35	Bus Signage (RTI) Central System Modifications		-	-	-	65,576	281	281	100.0%	152,685	0	0	-	58,004
70	VTA-36	Passenger Information Monitoring System (PIMS) Refresh		-	-	-	65,576	1,021	1,021	100.0%	153,705	186	186	100.0%	58,189
71	VTA-39	Conference Room Tech AV Modernization (Focus on Yards)		-	-	-	65,576	150	150	100.0%	153,855	0	0	-	58,189
72	VTA-44	Production Printers for Document Services Shop		-	-	-	65,576	650	650	100.0%	154,505	152	152	100.0%	58,341
73	VTA-47	AspireHR Cloud Benefits Program		-	-	-	65,576	158	158	100.0%	154,663	0	0	-	58,341
		Total, Information Systems & Technology		**15,704**	**12,024**			**6,196**	**6,196**			**5,532**	**5,532**		
Studies, Plans, and Pilot Projects															
74	VTA-129	ADA Transition Plan	X	554	554	100.0%	66,130	-	-	-	154,663	0	0	-	58,341
75	VTA-130	Integrated Land Use-Transportation Model Phase	X	95	-	0.0%	66,130	-	-	-	154,663	0	0	-	58,341
76	VTA-46	2022 Transit Asset Management Plan		418	418	100.0%	66,547	-	-	-	154,663	0	0	-	58,341
77	VTA-61	Transportation Demand Management (TDM) Program Guide		-	-	-	66,547	900	200	22.2%	154,863	700	700	100.0%	59,041
78	VTA-51	Diridon Integrated Concept Plan (DISC)	X	1,714	1,714	100.0%	68,261	6,670	0	0.0%	154,863	37,817	2,472	6.5%	61,513
79	VTA-93	Climate Action and Adaptation Plan		494	494	100.0%	68,755	-	-	-	154,863	0	0	-	61,513
80	VTA-64	Next Generation High Capacity Transit Study - Phase 2	X	1,247	1,247	100.0%	70,002	-	-	-	154,863	0	0	-	61,513
81	VTA-50	TNCs & Microtransit in Santa Clara County: Opportunities and Challenges for VTA		-	-	-	70,002	495	218	44.1%	155,082	0	0	-	61,513
82	VTA-131	Development of VTA's Countywide Activity-Based Model	X	-	-	-	70,002	682	-	0.0%	155,082	0	0	-	61,513
83	VTA-33	On-Demand Paratransit Pilot	X	2,000	-	0.0%	70,002	-	-	-	155,082	0	0	-	61,513
84	VTA-52	Fast Transit Program Implementation	X	1,868	1,868	100.0%	71,871	1,688	1,688	100.0%	156,770	4,744	2,244	47.3%	63,757
85	VTA-57	High Capacity Transit Corridors Implementation		1,781	1,781	100.0%	73,651	-	-	-	156,770	5,146	5,146	100.0%	68,903
86	VTA-63	Downtown Transit Study		1,361	1,361	100.0%	75,012	-	-	-	156,770	0	0	-	68,903
87	VTA-56	Countywide Micromobility (Bike-Scooter) Support		-	-	-	75,012	5,077	1,055	20.8%	157,825	4,729	568	12.0%	69,471
		Total, Studies, Plans, and Pilot Projects		**11,531**	**9,436**			**15,512**	**3,161**			**53,137**	**11,130**		

Tier	Request #	Project Name (Dollars in Thousands)	Exists (FY22)	FY22 & FY23 (Approved by Board on 6/3/21) Requested Amount $$	Net Transit Enterprise Cost $$	Net Transit Enterprise Cost %	Net VTA Cost Cum. $$	FY24 & FY25 Requested Amount $$	Net Transit Enterprise Cost $$	Net Transit Enterprise Cost %	Net VTA Cost Cum. $$	FY26 & FY27 Requested Amount $$	Net Transit Enterprise Cost $$	Net Transit Enterprise Cost %	Net VTA Cost Cum. $$
Non-Revenue Vehicles and Equipment															
88	VTA-20	Non-Revenue Vehicle Replacement Program FY22 & FY23	X	1,200	400	33.3%	75,412	5,015	4,215	84.0%	162,040	5,044	2,992	59.3%	72,462
		Total, Non-Revenue Vehicles and Equipment		**1,200**	**400**			**5,015**	**4,215**			**5,044**	**2,992**		
		GRAND TOTAL		**216,177**	**75,412**			**374,427**	**162,040**			**328,307**	**72,862**		

Appendix C - VTP Projects

VTA Capital Program
Valley Transportation Plan (VTP) Projects for FY 2022 - FY 2027

Tier 1 = Mandated/Regulatorily Required | Tier 2 = Board Direction | Tier 3 = Majority Externally Funded | Tier 4 = Continuing Projects | Tier 5 = All Others

Tier	Request #	Project Name (Dollars in Thousands)	Existing	FY22 & FY23 (CAP 1 & 2) (Approved by Board on 6/3/21) Requested Amount	Secured Funding	Funding Not Secured	Cum. Requested Amount	FY24 & FY25 (CAP 3 & 4) Requested Amount	Secured Funding	Funding Not Secured	Cum. Requested Amount	FY26 & FY27 (CAP 5 & 6) Requested Amount	Secured Funding	Funding Not Secured	Cum. Requested Amount
Fully Funded Projects															
Highways															
1	VTA-95	SR 87/Capitol Expressway Interchange Improvement	X	5,670	5,670	-	5,670	36,530	36,530	-	36,530	-	-	-	-
2	VTA-94	US 101/De la Cruz Blvd/Trimble Rd Interchange Improvement	X	16,863	16,863	-	22,533	1,084	1,084	-	37,614	-	-	-	-
3	VTA-105	US 101/SR 25 Interchange Improvements - Phase 1	X	35,100	35,100	-	57,633	900	900	-	38,514	-	-	-	-
4	VTA-115	US 101/Ellis St Interchange Improvement		4,100	4,100	-	61,733	3,900	3,900	-	42,414	17,000	17,000	-	17,000
5	VTA-98	101 SB San Antonio / Charleston/Rengstorff Ave Ramp	X	2,000	2,000	-	63,733	36,000	36,000	-	78,414	148,000	148,000	-	165,000
6	VTA-106	I-280/Winchester Boulevard Interchange Improvements	X	16,700	16,700	-	80,433	197,036	197,036	-	275,450	1,850	1,850	-	166,850
7	VTA-104	I-280/Wolfe Road Interchange Improvement Project	X	84,500	84,500	-	164,933	8,200	8,200	-	283,650	840	840	-	167,690
8	VTA-125	SR 237 Improvement - Lawrence Expwy to US 101	X	-	-	-	164,933	5,000	5,000	-	288,650	13,000	13,000	-	180,690
9	VTA-122	SR 237/El Camino Real/Grant Rd. Intersection Improvements		-	-	-	164,933	2,145	2,145	-	290,795	3,855	3,855	-	184,545
10	VTA-124	SR 152 Trade Corridor	X	-	-	-	164,933	16,560	16,560	-	307,355	-	-	-	184,545
11	VTA-110	US 101/Blossom Hill Road Interchange Improvement	X	3,500	3,500	-	168,433	-	-	-	307,355	-	-	-	184,545
12	VTA-109	SR17 Corridor Congestion Relief	X	8,670	8,670	-	177,103	94,700	94,700	-	402,055	1,150	1,150	-	185,695
13	VTA-112	US 101/SR 25 Interchange Phase 2 - Santa Teresa Boulevard Extension		5,000	5,000	-	182,103	24,460	24,460	-	426,515	540	540	-	186,235

	Tier	Request #	Project Name (Dollars in Thousands)	Existing	FY22 & FY23 (CAP 1 & 2) (Approved by Board on 6/3/21) Requested Amount	Secured Funding	Funding Not Secured	Cum. Requested Amount	FY24 & FY25 (CAP 3 & 4) Requested Amount	Secured Funding	Funding Not Secured	Cum. Requested Amount	FY26 & FY27 (CAP 5 & 6) Requested Amount	Secured Funding	Funding Not Secured	Cum. Requested Amount
14		VTA-108	Calaveras Boulevard Near-Term Improvements	X	1,000	1,000	-	183,103	-	-	-	426,515	-	-	-	186,235
15		VTA-113	US 101/Blossom Hill Interchange Improvement Plant Establishment Period (PEP)	X	5,500	5,500	-	188,603	-	-	-	426,515	-	-	-	186,235
16		VTA-123	US 101 Dela Cruz Blvd/Trimble Road Landscaping Plant Establishment Period		-	-	-	188,603	758	758	-	427,272	1,043	1,043	-	187,278
17		VTA-103	I-680 Soundwalls	X	2,400	2,400	-	191,003	100	100	-	427,372	-	-	-	187,278
18		VTA-107	I-280 Soundwalls	X	5,640	5,640	-	196,643	1,360	1,360	-	428,732	-	-	-	187,278
			Total, Highways		**196,643**				**428,732**				**187,278**			
Bicycle & Pedestrian																
19		VTA-119	Homestead Corridor Improvements		1,518	1,518	-	198,161	13,154	13,154	-	441,886	-	-	-	187,278
20		VTA-118	Bernardo Caltrain Bike/Ped Undercrossing		3,000	3,000	-	201,161	18,148	18,148	-	460,035	1,852	1,479	373	189,129
21		VTA-53	Expressway Bike Superhighway Feasibility Study		123	123	-	201,284	109	109	-	460,144	-	-	-	189,129
			Total, Bicycle & Pedestrian		**4,641**				**31,411**				**1,852**			
			TOTAL, FULLY FUNDED PROJECTS		**201,284**				**460,144**				**189,129**			
Projects Contingent on Receiving External Funding																
Highways																
22		VTA-96	US 101 SB Ramp Improvement 10th Street in Gilroy	X	400	400	-	201,684	3,500	3,500	-	463,644	10,000	9,000	1,000	199,129
23		VTA-102	US101/Zanker Road/Skyport Drive/North 4th Street Interchange	X	53,950	53,950	-	255,634	168,250	168,250	-	631,894	4,700	3,250	1,450	203,829
24		VTA-116	I-280/Bird Ave Interchange Improvement		2,500	2,500	-	258,134	6,500	6,500	-	638,394	-	-	-	203,829
25		VTA-126	SR 237/Great America Pkwy. WB Off-ramp Improvement	X	-	-	-	258,134	3,600	3,600	-	641,994	9,400	2,000	7,400	213,229
26		VTA-120	SR 237/Maude Avenue Interchange Improvement		-	-	-	258,134	3,800	3,800	-	645,794	16,200	2,750	13,450	229,429
27		VTA-121	SR 237/Java Drive Interchange Improvement		-	-	-	258,134	5,350	5,350	-	651,144	44,650	800	43,850	274,079

	Tier	Request #	Project Name (Dollars in Thousands)	Existing	FY22 & FY23 (CAP 1 & 2) (Approved by Board on 6/3/21) Requested Amount	Secured Funding	Funding Not Secured	Cum. Requested Amount	FY24 & FY25 (CAP 3 & 4) Requested Amount	Secured Funding	Funding Not Secured	Cum. Requested Amount	FY26 & FY27 (CAP 5 & 6) Requested Amount	Secured Funding	Funding Not Secured	Cum. Requested Amount
28		VTA-114	SR 237/Caribbean Drive/Lawrence Express Interchange Improvement		6,700	6,700	-	264,834	8,500	8,500	-	659,644	56,800	53,500	3,300	330,879
			Total, Highway Projects		**63,550**				**199,500**				**141,750**			
Express Lanes																
29		VTA-100	Silicon Valley Express Lanes - US 101 Phase 5	X	116,565	116,565	-	381,399	5,400	5,400	-	665,044	-	-	-	330,879
30		VTA-99	Silicon Valley Express Lanes - US 101/SR 85 - Phase 4	X	11,000	11,000	-	392,399	-	-	-	665,044	-	-	-	330,879
31		VTA-97	I-880 Express Lanes (SR 237 to US 101)	X	1,500	1,500	-	393,899	48,700	48,700	-	713,744	5,800	4,000	1,800	336,679
32		VTA-101	Silicon Valley Express Lanes - Future Phase Project B	X	15,000	15,000	-	408,899	132,000	132,000	-	845,744	8,000	8,000	-	344,679
			Total, Express Lanes		**144,065**				**186,100**				**13,800**			
Bicycle & Pedestrian																
33		VTA-54	East Channel Trail Feasibility Study		178	178	-	409,077	185	185	-	845,929	-	-	-	344,679
			Total, Bicycle & Pedestrian		**178**				**185**				**-**			
Complete Streets																
34		VTA-117	Countywide Traffic Signal Network Project	X	451	451	-	409,528	-	-	-	845,929	-	-	-	344,679
			Total, Complete Streets		**451**				**-**				**-**			
			TOTAL, CONTINGENT PROJECTS		**208,244**				**385,785**				**155,550**			
			TOTAL: VTP PROJECTS		**409,528**				**845,929**				**344,679**			

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Appendix D - Project Descriptions

VTA Strategic Capital Expenditure Plan
FY 2022 - FY 2041
Project Descriptions

Transit Enterprise (TE) Projects **(Dollars in Thousands)**

VTA-1 **Cerone Maintenance Offices Remodel**

Request: $1,565.0 External Funding: $0 Net VTA Cost: **$1,565.0**
Estimated Completion: June 2023

Project Scope

Extensive remodel of the maintenance department offices in the Cerone yard to improve efficiency and communication between supervisory staff and forepersons by relocating the foreman's office. Includes removing both the large foreman's office and document storage room above the middle bays and relocating them to expand overall office space on the north side of the shop. Also includes adding badge access to the Tool Room.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-2 **Cerone Maintenance Restrooms and Breakrooms Remodel**

Request: $392.5 External Funding: $0 Net VTA Cost: **$392.5**
Estimated Completion: June 2023

Project Scope

Restrooms and breakrooms in the Cerone Maintenance shop are old and worn and need new flooring, doors, lockers, cabinets, and fixtures.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-3 **Expand Bus Charging Capacity at Cerone Yard for Electric Buses**

Request: $350.0 External Funding: $0 Net VTA Cost: **$350.0**
Estimated Completion: December 2025

Project Scope

VTA is mandated to transition to a zero-emission bus fleet by 2040. Transit buses have a 12-year minimum service life, meaning the last non-zero-emission bus will be purchased in 2027, at the latest. This project is for the installation of an appropriate transformer for charging up to 130 buses, along with the chargers and needed electrical infrastructure at Cerone Yard, to support electric buses. Requested funding initiates the process.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-4 **Expand Chaboya Yard for Electric Buses and Other Modifications**

Request: $1,523.6 External Funding: $0 Net VTA Cost: **$1,523.6**
Estimated Completion: June 2024

Project Scope

VTA is mandated to transition to a zero-emission bus fleet by 2040. Since buses have a 12-year minimum service life, the last non-zero-emission bus will be purchased in 2027, at the latest. Zero emission buses require much more space for refueling, whether for dozens of electric bus chargers or major storage tanks for hydrogen. Expansion of yard space is required to physically fit the required infrastructure. Requested funding initiates the project.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-5 **Expand North Yard for Electric Buses**

Request: $500.0 External Funding: $0 Net VTA Cost: **$500.0**
Estimated Completion: June 2024

Project Scope

VTA is mandated to transition to a zero-emission bus fleet by 2040. Since buses have a 12-year minimum service life, the last non-zero-emission bus will be purchased in 2027, at the latest. Zero emission buses require much more space for refueling, whether for dozens of electric bus chargers or major storage tanks for hydrogen. Expansion of yard space is required to physically fit the required infrastructure. Requested funding initiates the project.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-6 **Overhead Fall Protection on all Bus Bays**

Request: $1,590.0 External Funding: $0 Net VTA Cost: **$1,590.0**
Estimated Completion: June 2024

Project Scope

All VTA buses will soon be either hybrid or electric powered. These vehicles have a significant amount of key equipment mounted on the roof, requiring mechanics to routinely climb on the bus roof to perform service or repair. This safety project will add fall protection harnesses and the necessary structure reinforcement as needed to 12 bays at Cerone, 12 bays at North Yard, and 14 bays at Chaboya Yard to secure mechanics while working on top of the bus roofs.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-7 **Purchase of Electric Buses**

Request: $300.0 External Funding: $240.0 Net VTA Cost: **$60.0**
Estimated Completion: December 2025

Project Scope

Purchase 48 electric buses to replace 40' hybrid buses (including 8 express style buses) from 2010 that will have reached the end of their projected useful life. Replacing worn buses increases service reliability and reduces maintenance costs.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Delivering Projects and Programs
- Transportation System Management

VTA-8 **Purchase of Hybrid and Electric Buses**

Request: $78,300.0 External Funding: $65,640.0 Net VTA Cost: **$12,660.0**
Estimated Completion: December 2023

Project Scope

Purchase 40 forty-foot hybrid buses and 37 electric forty-foot buses along with spare parts, training, training equipment, tools, and manuals. These will replace buses from 2001 and 2002 that have reached the end of their projected useful life

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Delivering Projects and Programs
- Transportation System Management

VTA-10 **Axle Press Replacement**

Request: $2,170.4 External Funding: $1,736.3.0 Net VTA Cost: **$434.1**
Estimated Completion: December 2025

Project Scope

Axle press at Guadalupe Light Rail Yard, which is a critical piece of equipment for maintaining light rail vehicles, is over 30 years old, has exceeded its useful life, is not reliable, and needs replacement.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-13 **Cubicle Furniture Replacement**

Request: $1,786.0 External Funding: $0 Net VTA Cost: **$1,786.0**
Estimated Completion: June 2023

Project Scope

Make work environment more open, transparent, and collaborative by replacing all existing taller walls with 36-inch-tall panels to ensure a uniform height. This will involve developing drawings and procuring new 36-inch panels to replace existing taller panels.

Business Line(s) Supported

- Transportation System Management

VTA-14 **Electrical Equipment Survey & Replacements**

Request: $1,509.2 External Funding: $0 Net VTA Cost: **$1,509.2**
Estimated Completion: June 2023

Project Scope

Evaluate, manage, and replace as needed main electrical equipment throughout VTA since many of VTA's main power equipment is the age of the facilities themselves and thus need assessment and possible replacement.

Business Line(s) Supported

- Transportation System Management

VTA-15 **Facilities Equipment Replacement Program**

Request: $2,177.6 External Funding: $1,742.1 Net VTA Cost: **$435.5**
Estimated Completion: June 2023

Project Scope

This program replaces equipment that has exceeded its useful life by/during period. This includes: bus lifts (38); articulated bus lifts (6); floor scrubbers (16); freon recycling units (15); brake lathes (5); mill – Type A (2); hot tanks (6); tug (1); stationary pressure washers (11); crane (1); burden carrier (1); and parts washers (5).

Business Line(s) Supported

- Fast, Frequent, Reliable Transit

VTA-17 **Guadalupe Steam Rack Improvements and Liner Replacement**

Request: $200.0 External Funding: $160.0 Net VTA Cost: **$40.0**
Estimated Completion: June 2022

Project Scope

Project: (A) replaces and upgrades the existing steam rack track with a new liner system prior to failure of the existing unit, and (B) constructs an overhead roof structure to reduce unnecessary collection and treatment of rainwater. Requested funding is remaining amount needed to complete project.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-18 **Guadalupe Trailer Replacement Project**

Request: $221.3 External Funding: $0 Net VTA Cost: **$221.3**
Estimated Completion: June 2022

Project Scope

Replace the modular trailer that houses the Light Rail Engineering department at Guadalupe that has reached the end of its useful life. Replacement unit will include an ADA ramp.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit

VTA-19 **HVAC Replacement Program**

Request: $2,028.3 External Funding: $1,622.6 Net VTA Cost: **$405.6**
Estimated Completion: June 2023

Project Scope

Make physical and programming changes to agencywide HVAC systems to incorporate suggested safety functionalities as recommended by the Centers for Disease Control (CDC) and the American Society of Heating, Refrigerating and Air-Conditioning Engineers. Project also includes replacing 22 A/C units in the train control (SCADA) cabinets for the light rail system that have reached the end of their useful life to prevent catastrophic failure and ensure reliability of the Light Rail system.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-20 **Non-Revenue Vehicle Replacement Program**

Request: $1,200.0 External Funding: $800.0 Net VTA Cost: **$400.0**
Estimated Completion: June 2023

Project Scope

Planned replacement of Non-Revenue Vehicles (NRVs) due to: (A) being lost due to major accidents; (B) decommissioned because of mechanical failures that are not cost-effective to repair; or (C) having exceeded their useful life. Every reasonable effort is made to replace retired vehicles with ones that are hybrid/electric, electric, and/or higher mile per gallon when possible in keeping with the VTA Sustainable Fleet Policy.

Business Line(s) Supported

- Transportation System Management

VTA-22 **Painting Management Program**

Request: $1,000.0 External Funding: $0 Net VTA Cost: **$1,000.0**
Estimated Completion: June 2023

Project Scope

This program manages the large-scale preventative painting maintenance and repair of VTA operational, administrative, and passenger facilities, both exterior and interior, and includes graffiti abatement.

Business Line(s) Supported

- Transportation System Management

VTA-23 **Paving Management Program**

Request: $1,000.0 External Funding: $0 Net VTA Cost: **$1,000.0**
Estimated Completion: June 2023

Project Scope

This program manages the maintenance of VTA's paved surfaces to ensure they are kept in a state of good repair, thus preventing expensive future major failure. The current maintenance schedules for various types of work are that bus yards are seal coated every five (5) years and erosion of asphalt by fluids that leak out of the buses removed and replaced every eight to ten (8-10) years.

Business Line(s) Supported

- Transportation System Management

VTA-24 **Roofing Management Program**

Request: $2,215.4 External Funding: $0 Net VTA Cost: **$2,215.4**
Estimated Completion: June 2023

Project Scope

This program manages the maintenance and repair of roofs at VTA facilities to maintain the integrity of the building envelopes covered by the roofs to prevent water and other intrusion. The project will also fund the replacement of four (4) roofs at Cerone Division and three (3) roofs at Guadalupe Division that have reached or exceeded their intended lifespans.

Business Line(s) Supported

- Transportation System Management

VTA-26 **LRV Electronic Equipment Modernization**

Request: $4,761.4 External Funding: $3,056.9 Net VTA Cost: **$1,704.5**
Estimated Completion: June 2026

Project Scope

Project replaces the major electronic components on the Kinkisharyo light rail vehicles to increase reliability, reduce maintenance costs, increase efficiency of vehicle operation, and modernize connectivity of the fleet. Instead of overhauling or continuing to maintain the aging technology that is increasing difficult to get parts for, this project will phase-in a replacement technology on the existing vehicle fleet to maintain operability for an additional number of years. This applies primarily to the propulsion system, auxiliary power equipment, and fault monitoring system network.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-28 **Systemwide Stray Current and Corrosion Control**

Request: $382.2 External Funding: $0 Net VTA Cost: **$382.2**
Estimated Completion: June 2025

Project Scope

Many of the existing stray current monitoring stations, especially along the Guadalupe Light Rail line, were installed when the system was originally built, some over 30 years ago. To ensure safety and system reliability, the current system need to be assessed by a corrosion control engineering expert to identify needed corrective action measures.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-29 **Enterprise Database for Key Performance Indicators (TransitDB)**

Request: $150.0 External Funding: $0 Net VTA Cost: **$150.0**
Estimated Completion: June 2022

Project Scope

Funding for last portion of development of VTA's Transit Enterprise Database, a central repository of key performance data used agency-wide for analysis, planning, tracking, measuring, reporting, and decision-making purposes. Tools include business intelligence and dashboarding capabilities.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-30 **Transit Enterprise System Server Replacement**

Request: $1,800.0 External Funding: $0 Net VTA Cost: **$1,800.0**
Estimated Completion: June 2023

Project Scope

To ensure reliability, procure and replace servers and associated storage and software licenses for CAD-AVL and Trapeze, which are mission-critical transit systems.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management
- Delivering Projects and Programs

VTA-32 **Paratransit Fleet Procurement**

Request: $3,709.9 External Funding: $2,967.9 Net VTA Cost: **$742.0**
Estimated Completion: June 2023

Project Scope

Procurement of new paratransit vehicles to replace units that will have exceed their useful life. The current paratransit fleet continues to age and accumulate mileage resulting in increasing maintenance costs and decreased reliability. Providing complementary paratransit service without any trip denial is a federal requirement and thus it is critical that the paratransit program have enough vehicles to provide paratransit service for client demand. Planned replacement includes: 35 Dodge Caravans and supplemental hardware/services; 45 cutaways and supplemental hardware/services; and 20 Toyota Priuses; and supplemental hardware/services.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-33 **On-Demand Paratransit Pilot**

Request: $2,000.0 External Funding: $0 Net VTA Cost: **$2,000.0**
Estimated Completion: June 2022

Project Scope

This explores the option of VTA partnering with an on-demand service provider like a transportation network company (TNC) to offer additional transit options to paratransit riders. Partnerships with emerging service providers have the potential to lower costs by reducing demand on ADA paratransit service. In addition, paratransit riders would have the opportunity to book same-day trips, thus allowing for more spontaneous travel.

The proposed pilot program would identify geographical zones for implementation. The goal of the zones would be to reduce some of the tension on paratransit operations by offering an additional on-demand option to riders. A successful pilot for paratransit riders could potentially be scaled up to assist VTA in providing first/last mile and general on-demand service in underserved transit areas.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-34 **Advanced Cyber Security**

Request: $353.2 External Funding: $353.2 Net VTA Cost: **$353.2**
Estimated Completion: June 2026

Project Scope

Scope includes, but is not limited to, purchasing of software, hardware, network monitoring tools, anti-malware tools, consulting services, audit services, testing services, development and/or purchasing of user awareness training, and development or updating policies and procedures to mitigate the risk of cyber attack. Requested amount comprises the next installment in the project.

Business Line(s) Supported

- Transportation System Management

VTA-35 **Bus Signage Real-Time Information (RTI) Central System Modifications**

Request: $281.0 External Funding: $0 Net VTA Cost: **$281.0**
Estimated Completion: May 2023

Project Scope

The bus signage RTI control system has several obsolete software components. Without timely intervention, the system will likely malfunction and may not be able to be restored due to the obsolete software. Also, VTA has a very large current inventory of dynamic bus signs. Project will provide services to redesign the signage prediction services to allow for another 5-10 years of life for the existing inventory and provide a path to add new, more functional signs in the next several years.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-36 **Passenger Information Monitoring System (PIMS) Refresh**

Request: $1,020.8 External Funding: $0 Net VTA Cost: **$1,020.8**
Estimated Completion: June 2023

Project Scope

PIMS monitors on Light Rail platforms provide information to customers on train times and current events. These monitors degrade over time due to weather exposure and other factors that affect their functionality and reliability. The PIMS monitors are reaching the end of their useful life (five years) and replacement is needed to ensure continued functionality and reliability in providing needed customer information.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

VTA-37 **SAP Enterprise Asset Management Enhancement**

Request: $1,809.2 External Funding: $0 Net VTA Cost: **$1,809.2**
Estimated Completion: December 2021

Project Scope

Project converts the simple SAP Plant Maintenance (PM) module implemented in 1999 to the more sophisticated and beneficial Enterprise Asset Management (EAM) module. The EAM modules consolidate into a single SAP-based platform an asset registry of all reportable/traceable assets at VTA. This includes buses, light rail vehicles, non-revenue vehicles, equipment, right-of-way and systems, and all maintenance and operations facilities. All inspection and maintenance processes will be coordinated for all users and assets through the EAM. The VTA Auditor General previously recommended that VTA consider implementing an EAM system.

Business Line(s) Supported

- Transportation System Management

VTA-38 **VTA Network Cabling**

Request: $1,150.0 External Funding: $0 Net VTA Cost: **$1,150.0**
Estimated Completion: July 2023

Project Scope

Most VTA facilities have outdated data cabling that does not meet current or future networking needs, thus resulting in bottlenecks, reduced networking speed, and inefficiency. This project is the next phase in replacing the old cabling with CAT6 and/or fiber optic cable and providing new communications room infrastructure. These changes are required to support newer technology like VOIP (Voice-over-Internet Protocol), ensure higher networking speeds, and future-proof VTA's network, especially given the current and projected increase in connected devices.

Business Line(s) Supported

- Transportation System Management

VTA-39 **Conference Room Tech AV Modernization (Focus on Yards)**

Request: $149.8 External Funding: $0 Net VTA Cost: **$149.8**
Estimated Completion: June 2022

Project Scope

The recent increase in usage of videoconferencing capability (for example, Zoom and Teams) has highlighted the need to improve VTA's capability to stream meetings, conferences, and training. This project will install or upgrade the existing audio/visual (AV) capability in conference rooms at all VTA location, with emphasis on the operating yards. Modifications include adding or modifying equipment to create a standard AV installation, configuring the devices to make the units work in a more cohesive and consistent method, and providing a simplified method of connection and operation of the devices.

Business Line(s) Supported

- Transportation System Management

VTA-40 **Data Center Grounding - UPS and HVAC**

Request: $200.0 External Funding: $0 Net VTA Cost: **$200.0**
Estimated Completion: December 2022

Project Scope

VTA's Data Center at River Oaks does not meet current electrical code for data centers. This project will correct that condition by installing the proper ground system while also bolstering the earthquake securement of all server racks. Project will reduce the risk of major system failure while enhancing efficient power management.

Business Line(s) Supported

- Transportation System Management

VTA-41 **Server Refresh**

Request: $1,550.0 External Funding: $0 Net VTA Cost: **$1,550.0**
Estimated Completion: December 2024

Project Scope

Scheduled replacement of aging equipment that has reached the end of its lifecycle at both VTA Enterprise Datacenters at River Oaks and Guadalupe Light Rail Yard to maximize reliability and minimize unplanned downtime, especially for VTA's core operations. Project includes procurement of hardware, software, and storage to support over 4,000 Active Directory accounts and over 1,800 mailboxes.

Business Line(s) Supported

- Transportation System Management

VTA-63 **Downtown Transit Study**

Request: $1,360.8 External Funding: $0 Net VTA Cost: **$1,360.8**

Study, conducted in partnership with the City of San Jose, will evaluate many potential infrastructure intensive transit solutions for downtown San Jose to provide faster, frequent, and more reliable transit service. Among the potential solutions being studied include bus lanes on Santa Clara Street and a potential realignment of light rail through downtown. This study builds on a number of existing efforts related to transit planning in Downtown San Jose including the Downtown West Plan, the Diridon Station Area Plan update, and the Downtown Transportation Plan.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Transportation System Management

Valley Transportation Plan (VTP) Projects

VTA-53 Expressway Bike Superhighway Feasibility Study

Estimated Total Project Cost: $.23 million

Estimated Completion Date: June 2024

Project Scope

VTA has been developing a Bicycle Superhighway Implementation Plan, building off efforts from the 2018 Countywide Bicycle Plan. VTA will work with the County of Santa Clara Roads and Airports Division to develop a study to determine the feasibility of installing high-quality bikeways that fall within the definition of a bike superhighway along a select number of the County's Expressways.

Business Line(s) Supported

- Delivering Projects and Programs
- Transportation System Management

VTA-54 East Channel Trail Feasibility Study

Estimated Total Project Cost: $0.36 million

Estimated Completion Date: June 2024

Project Scope

This multi-jurisdictional study is to determine the feasibility and public perception of building a north-south bikeway trail along the Santa Clara Valley Water District's East Channel between the Bay Trail in northern Sunnyvale to Inverness Way in Cupertino, then traveling south along on-street routes to eventually connect to Joe's Trail along the Union Pacific Railroad in Saratoga.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-94 US 101/De la Cruz Blvd/Trimble Road Interchange Improvement

Estimated Total Project Cost: $76.45 million

Estimated Completion Date: November 2024

Project Scope

The project includes replacing the existing overcrossing structure over US 101; constructing new onramps and offramps; modifying existing local street intersections; installing Class I bicycle and pedestrian facilities along De la Cruz Boulevard; and constructing retaining walls.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-95 **SR 87/Capitol Expressway Interchange Improvement**

Estimated Total Project Cost: $43.0 million

Estimated Completion Date: December 2026

Project Scope

Project will modify the existing State Route (SR) 87/Capitol Expressway interchange with standard northbound on and off ramps that connect directly to Capitol Expressway instead of Narvaez Avenue.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-96 **US 101 Southbound Ramp Improvement 10th Street in Gilroy**

Estimated Total Project Cost: $17.5 million

Estimated Completion Date: June 2028

Project Scope

The project improvements include, but are not limited to, modifying the southbound US 101 offramp to 10th Street and the SR 152 intersection, modifying other existing onramps and offramps as required, modifying existing local street intersections, and upgrading bicycle and pedestrian facilities along 10th Street.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-97 **I-880 Express Lanes (SR 237 to US 101)**

Estimated Total Project Cost: $60.0 million

Estimated Completion Date: June 2029

Project Scope

Project will implement a roadway pricing system on I-880 by converting the existing carpool lanes to Express Lanes from the US 101/I-880 interchange in San Jose to the Alameda County line.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-98 **US Southbound San Antonio/Charleston/Rengstorff Avenue Ramp**

Estimated Total Project Cost: $192.0 million

Estimated Completion Date: December 2028

Project Scope

The project modifies the US 101 interchanges at San Antonio Road and Charleston Road/ Rengstorff Avenue to relieve congestion and improve traffic operations on the freeway and local roadways. The scope includes providing a new exit from San Antonio Road to southbound US 101, adding new auxiliary lanes as necessary, modifying existing on and offramps and local intersections, and upgrading bicycle pedestrian facilities at these two interchanges.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-99 **Silicon Valley Express Lanes - US 101/SR 85 - Phase 4**

Estimated Total Project Cost: $55.0 million

Estimated Completion Date: July 2023

Project Scope

The US 101/SR 85 Express Lanes - Phase 4 will convert the existing SR 85 carpool lanes to Express Lanes from the US 101/SR 85 interchange in south San Jose to SR 87, and includes the existing US 101/SR 85 direct high-occupancy vehicle (HOV) to HOV connector ramps in the approaches to/from US 101.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-100 **Silicon Valley Express Lanes - US 101 Phase 5**

Estimated Total Project Cost: $155.0 million

Estimated Completion Date: June 2025

Project Scope

The US 101 Express Lanes Phase 5 project will implement a roadway pricing system on US 101 by converting the existing carpool lane to an Express Lane on US 101 between the SR 237 and I-880 interchanges in San Jose and add a second Express Lane to create a duel Express Lane system within that segment of US 101.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-101 **Silicon Valley Express Lanes – Future Phase Project B**

Estimated Total Project Cost: $156.0 million

Estimated Completion Date: June 2028

Project Scope

Project will construct a future phase of the Silicon Valley Express Lanes program on the US 101 or SR 85 Corridor. There are four possible segments that can be selected for this phase: (1) SR 85 from I-280 to SR 17; (2) SR 85 from SR 17 to SR 87; (3) US 101 from I-880 to SR 85; and (4) US 101 from SR 85 to Dunne Avenue in Morgan Hill.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-102 **US 101/Zanker Road/Skyport Drive/North 4th Street Interchange**

Estimated Total Project Cost: $240.0 million

Estimated Completion Date: July 2027

Project Scope

The project, located in the City of San Jose, will construct a new overcrossing structure over US 101 connecting Zanker Road with North 4th Street/Skyport Drive and modify the US 101 on- and offramps. The project will provide new connectivity in the area and improve traffic operations, local network circulation, improve access to and from Mineta San Jose International Airport, and accommodate all modes of transportation.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-103 **I-680 Soundwalls**

Estimated Total Project Cost: $9.5 million

Estimated Completion Date: June 2023

Project Scope

The project will construct sound walls on I-680 between Capitol Expressway and Mueller Avenue.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-104 **I-280/Wolfe Road Interchange Improvement Project**

Estimated Total Project Cost: $103.0 million

Estimated Completion Date: June 2026

Project Scope

This project will improve traffic operations and provide facilities for multimodal forms of transportation including bicycle, pedestrian, and high occupancy vehicle uses at the I-280/ Wolfe Road interchange in the City of Cupertino. The projects improvements include replacing the existing Wolfe Road structure over I-280, constructing new on and off ramps, modifying existing local street intersections, upgrading bicycle and pedestrian facilities along Wolfe Road, and constructing retaining walls and sound walls as needed.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-105 **US 101/SR 25 Interchange Improvements - Phase 1**

Estimated Total Project Cost: $101.0 million

Estimated Completion Date: December 2024

Project Scope

The project, located just south of the City of Gilroy, will reconstruct the US 101/SR 25 interchange slightly north of the current interchange, replace the SR 25 two-lane overcrossing with a four-lane overcrossing spanning the existing as well as the future widened US 101, increase the length of the southbound US 101 offramp to SR 25 to eliminate traffic backups onto US 101, upgrade the northbound US 101 ramps to improve exit and merging operations, add bike lanes, and install new traffic signals at the ramp intersections to improve traffic flow.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-106 **I-280/Winchester Boulevard Interchange Improvements**

Estimated Total Project Cost: $228.7 million

Estimated Completion Date: December 2028

Project Scope

Project will construct a new offramp from northbound I-280 towards Winchester Boulevard and a freeway-to-freeway ramp from northbound SR 17 to northbound I-280, replace an outdated pedestrian overcrossing, widen the Winchester Boulevard overcrossing, and provide other Complete Streets and local streets improvements.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-107 **I-280 Soundwalls**

Estimated Total Project Cost: $9.0 million

Estimated Completion Date: December 2025

Project Scope

Project will construct sound walls along I-280 between Los Gatos Creek Bridge and SR 87 in San Jose.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-108 **Calaveras Boulevard Near-Term Improvements**

Estimated Total Project Cost: $3.5 million

Estimated Completion Date: October 2023

Project Scope

Project will construct high-occupancy vehicle bypass lanes at the westbound SR 237 onramp from McCarthy Boulevard and at the westbound SR 237 onramp from Calaveras Boulevard to reduce traffic congestion during peak periods. It will also include an SR 237 Corridor Study in the vicinity of Abel Street and Town Center Drive in the City of Milpitas to address existing congestion.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-109 **SR 17 Corridor Congestion Relief**

Estimated Total Project Cost: $43.0 million

Estimated Completion Date: September 2028

Project Scope

Project constructs SR 17 improvements in the Town of Los Gatos to reduce congestion, increase active transportation mobility and connectivity, improve SR 17 mainline and SR 17/SR 9 interchange operations, and reduce cut-through traffic through the town.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-110 **US 101/Blossom Hill Road Interchange Improvement**

Estimated Total Project Cost: $38.5 million

Estimated Completion Date: June 2024

Project Scope

Project will: (1) construct a new overcrossing structure over US 101; (2) widen and reconfigure the existing on and off ramps; (3) widen east side of Coyote Road to add a merge lane; and (4) construct a Class I bicycle/pedestrian path through the interchange.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-112 **SR US 101/SR 25 Interchange Phase 2 - Santa Teresa Boulevard Extension**

Estimated Total Project Cost: $30.0 million

Estimated Completion Date: February 2028

Project Scope

The project would construct, just south of the City of Gilroy, a new two-lane roadway from Santa Teresa Boulevard to just north of Castro Valley Road to the planned US 101/SR 25 Interchange - Phase 1 project to reduce congestion and increase active transportation mobility and connectivity.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-113 **US 101/Blossom Hill Road Interchange Improvement Plant Establishment Period (PEP)**

Estimated Total Project Cost: $2.0 million

Estimated Completion Date: March 2026

Project Scope

Construction of the US 101/Blossom Hill Road interchange project is in progress and expected to be completed in Fall 2023 which includes construction of civil infrastructure, landscaping and first year Plant Establishment Period. This project is to complete the follow-on two-year PEP as required by Caltrans.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-114 **SR 237/Caribbean Drive/Lawrence Express Interchange Improvement**

Estimated Total Project Cost: $72.0 million

Estimated Completion Date: December 2028

Project Scope

Project will modify the SR 237/Caribbean Drive/Lawrence Express interchange in the City of Sunnyvale to reduce congestion and improve traffic flow and safety. Improvements will include, but not be limited to: Modify onramps and offramps; provide multimodal transportation modes and Complete Streets elements including sidewalks and bikeways, intersection improvements, and intelligent transportation system elements as applicable.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-115 **US 101/Ellis Street Interchange Improvement**

Estimated Total Project Cost: $25.0 million

Estimated Completion Date: December 2028

Project Scope

The project modifies the US 101/Ellis Street interchange in the City of Mountain View. Improvements include, but are not limited to, modifying on and off ramps and Complete Streets elements including sidewalks, bikeways, and intersection improvements.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-116 **I-280/Bird Avenue Interchange Improvement**

Estimated Total Project Cost: $9.0 million

Estimated Completion Date: December 2028

Project Scope

The project will improve bike and pedestrian facilities from Virginia Street, northward through the interchange, to San Carlos Street. The project would also consider signal and signal timing improvements and other roadway and interchange ramp modifications.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-117 **Countywide Traffic Signal Network Project**

Estimated Total Project Cost: $0.50 million

Estimated Completion Date: December 2023

Project Scope

This innovative project will build a countywide traffic signal network on a single database platform that can be used by VTA, VTA Member Agencies (the 15 cities in the county and the County of Santa Clara), and consultants to analyze the effects of land-use and transportation projects on traffic flow for all modes, including autos, transit, bicyclists, and pedestrians. The network model can also be used to develop plans for increasing efficiencies of intersection operations, accommodating mobility for all users of the roadway, and improving the integration of the roadway network between jurisdictions.

Business Line(s) Supported

- Faster, Frequent, Reliable Transit
- Delivering Projects and Programs
- Transportation System Management

VTA-118 **Bernardo Caltrain Bike/Ped Undercrossing**

Estimated Total Project Cost: $23.0 million

Estimated Completion Date: December 2026

Project Scope

Project will provide a new across-border bicycle and pedestrian connection to close a north-south gap across the Caltrain railroad tracks and County of Santa Clara's Central Expressway at the border of Sunnyvale and Mountain View. The project includes design of a pedestrian/bicycle undercrossing and associated access points between the Evelyn Avenue/South Bernardo Avenue intersection and the north side of Central Expressway at North Bernardo Avenue, with a possible third ramp for advanced cyclists to access Central Expressway.

Business Line(s) Supported

- Delivering Projects and Programs
- Transportation System Management

VTA-119 **Homestead Corridor Improvements**

Estimated Total Project Cost: $14.67 million

Estimated Completion Date: August 2024

Project Scope

This multi-jurisdictional project upgrades pedestrian and bicycle infrastructure on Homestead Road between Foothill Expressway and Hollenbeck Avenue. The improvements were developed to respond to local concerns about youth bicycle and pedestrian safety and include bike paths, separated bike lanes, widened sidewalks, high-visibility crosswalks, curb ramps, and pedestrian and bicycle detection upgrades.

Business Line(s) Supported

- Delivering Projects and Programs
- Transportation System Management

VTA-120 **SR 237/Maude Avenue Interchange Improvement**

Estimated Total Project Cost: $20.0 million

Estimated Completion Date: December 2028

Project Scope

Project modifies the SR 237/Maude Avenue interchange in the City of Mountain View. Improvements include but are not limited to: Modifying onramps and offramps; and incorporating Complete Streets elements including sidewalks, bike ways, and intersection improvements.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-121 **SR 237/Java Drive Interchange Improvement**

Estimated Total Project Cost: $50.0 million

Estimated Completion Date: December 2030

Project Scope

Project will modify the SR 237/Java Drive interchange in the City of Sunnyvale to reduce congestion and improve traffic flow and safety. Improvements will include, but not be limited to: Modifying onramps and offramps; provide multimodal transportation modes and Complete Streets elements including sidewalks and bikeways, intersection improvements, and intelligent transportation system elements as applicable.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-122 **SR 237/El Camino Real/Grant Road Intersection Improvements**

Estimated Total Project Cost: $6.0 million

Estimated Completion Date: December 2028

Project Scope

Project will modify the SR 237/El Camino Real/Grant Road intersection to reduce congestion and improve traffic flow and safety and will include Complete Streets elements.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-123 **US 101 De la Cruz Blvd/Trimble Road Landscaping Plant Establishment Period**

Estimated Total Project Cost: $43.0 million

Estimated Completion Date: December 2026

Project Scope

Construction of the US 101/De la Cruz Boulevard/Trimble Road interchange in San Jose is in progress and expected to be completed in late 2024. Project includes construction of civil infrastructure, landscaping and first year Plant Establishment Period (PEP). This project is to complete the follow-on two-year PEP as required by Caltrans.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-124 **SR 152 Trade Corridor**

Estimated Total Project Cost: $1.8 million

Estimated Completion Date: December 2025

Project Scope

Project will provide a new toll facility on SR 152 between US 101 and I-5 and includes the realignment of SR 152 between US 101 and SR 156. The purpose of this project is to improve truck/freight movement, air quality, traffic operations, and safety between the Central Valley and the South Bay through the use of truck climbing lanes and a new highway alignment between US 101 and SR 156.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-125 **SR 237 Improvement - Lawrence Expressway to US 101**

Estimated Total Project Cost: $20.0 million

Estimated Completion Date: June 2026

Project Scope

This project proposes to relieve congestion along SR 237 between Lawrence Expressway and US 101 and improve westbound SR 237 to northbound US 101 and northbound US 101 from SR 237 to Ellis Street. Improvements include extending existing high-occupancy vehicle lanes on SR 237 between Lawrence Expressway and US 101.

Business Line(s) Supported

- Delivering Projects and Programs

VTA-126 **SR 237/Great America Parkway Westbound Offramp Improvement**

Estimated Total Project Cost: $14.5 million

Estimated Completion Date: December 2029

Project Scope

Project will modify the existing westbound SR 237 offramp to Great America Parkway in the City of Santa Clara to reduce congestion and improve traffic flow.

Business Line(s) Supported

- Delivering Projects and Programs