

POLICY ADVISORY COMMITTEE

Thursday, May 12, 2016 4:00 PM

VTA Conference Room B-104 3331 North First Street San Jose, CA

AGENDA

COMMITTEE MISSION:

The Policy Advisory Committee (PAC) represents the prioritized transportation policy views of the Member Agencies, individually and collectively, to the VTA Board of Directors. The PAC proposes approaches to transportation issues identified by the Board, VTA staff, and the PAC itself.

CALL TO ORDER

1. ROLL CALL

2. ORDERS OF THE DAY

• The quorum requirement for this meeting is: 9

3. PUBLIC PRESENTATIONS:

This portion of the agenda is reserved for persons desiring to address the Committee on any matter not on the agenda. Speakers are **limited to 2 minutes**. The law does not permit Committee action or extended discussion on any item not on the agenda except under special circumstances. If Committee action is requested, the matter can be placed on a subsequent agenda. All statements that require a response will be referred to staff for reply in writing.

- 4. Receive Committee Staff Report. (Verbal Report) (Lawson)
 - Receive Government Affairs Update.
- 5. Receive Chairperson's Report. (Verbal Report) (Carr)

CONSENT AGENDA

- 6. Approve the Regular Meeting Minutes of April 14, 2016.
- 7. ACTION ITEM -Recommend that the VTA Board of Directors adopt a resolution approving the project priorities for the FY2016/17 Countywide Transportation Development Act Article 3 program and modify VTA policy regarding the banking of TDA3 funds..
- **8.** ACTION ITEM -Recommend that the VTA Board of Directors approve the programming of FY 2016/17 Transportation Fund for Clean Air Program Manager (TFCA 40%) funds to projects.
- **9.** ACTION ITEM -Recommend that the VTA Board of Directors approve revisions to VTA's Joint Development Policy.
- **10.** INFORMATION ITEM -Review the Legislative Update Matrix.
- **11.** INFORMATION ITEM -Receive the Development Review Quarterly Report for January to March 2016.
- **12.** INFORMATION ITEM -Receive the 2015 Regional Pavement Condition Summary Report.

REGULAR AGENDA

- **13.** INFORMATION ITEM -Receive an update and provide input on key elements of the Caltrain Modernization Program.
- **14.** INFORMATION ITEM -Receive and discuss information on land use and transportation in the San Jose Tri-Villages area.
- **15.** ACTION ITEM Recommend the VTA Board of Directors adopt the framework for a ¹/₂-cent 30-year sales tax measure and place measure on the November 2016 ballot.
- 16. ACTION ITEM Recommend that the Board of Directors modify the FY16/17 VTA Budget 2000 Measure A Transit Improvements Program and appropriate Measure A funds to projects.
- **17.** INFORMATION ITEM -Receive the Transit Ridership Improvement Program's draft Transit Choices Report. (*Deferred from the April 14, 2016, meeting.*)
- **18.** INFORMATION ITEM -Receive a report on the Transit Ridership Improvement Program's network concepts.

OTHER

19. Review PAC Work Plan. (Lawson)

20. ANNOUNCEMENTS

21. ADJOURN

In accordance with the Americans with Disabilities Act (ADA) and Title VI of the Civil Rights Act of 1964, VTA will make reasonable arrangements to ensure meaningful access to its meetings for persons who have disabilities and for persons with limited English proficiency who need translation and interpretation services. Individuals requiring ADA accommodations should notify the Board Secretary's Office at least 48-hours prior to the meeting. Individuals requiring language assistance should notify the Board Secretary's Office at least 72-hours prior to the meeting. The Board Secretary may be contacted at **2** (408) 321-5680 or **board.secretary@vta.org** or **2** (408) 321-2330 (TTY only). VTA's home page is www.vta.org or visit us on Facebook www.facebook.com/scvta. **2** (408) 321-2300: 中文/ Español / 日本語 / 한국어 / tiếng Việt / Tagalog.

All reports for items on the open meeting agenda are available for review in the Board Secretary's Office, 3331 North First Street, San Jose, California, (408) 321-5680, the Friday, Monday, and Tuesday prior to the meeting. This information is available on VTA's website at www.vta.org and also at the meeting.



POLICY ADVISORY COMMITTEE

Thursday, April 14, 2016

MINUTES

CALL TO ORDER

The Regular Meeting of the Policy Advisory Committee (PAC) was called to order at 4:04 p.m. by Chairperson Carr in Conference Room B-104, Valley Transportation Authority (VTA), 3331 North First Street, San Jose, California.

1. ROLL CALL

Attendee Name	Title	Status
Paul Resnikoff	City of Campbell	Absent
Michael Kotowski (Alternate)	City of Campbell	Present
Savita Vaidhyanathan	City of Cupertino	Present
Barry Chang (Alternate)	City of Cupertino	N/A
Harney, Daniel	City of Gilroy	Absent
Tucker, Cat (Alternate)	City of Gilroy	Absent
Mary Prochnow	City of Los Altos	Present
Megan Satterlee (Alternate)	City of Los Altos	N/A
John Harpootlian	Town of Los Altos Hills	Present
Gary Waldeck (Alternate)	Town of Los Altos Hills	N/A
Marcia Jensen	Town of Los Gatos	Present
Rob Rennie (Alternate)	Town of Los Gatos	N/A
Carmen Montano	City of Milpitas	Present
Garry Barbadillo (Alternate)	City of Milpitas	N/A
Evert Wolsheimer	City of Monte Sereno	Absent
Marshall Anstandig (Alternate)	City of Monte Sereno	Absent
Larry Carr	City of Morgan Hill	Present
Rich Constantine (Alternate)	City of Morgan Hill	N/A
John McAlister	City of Mountain View	Present
Pat Showalter (Alternate)	City of Mountain View	N/A
Liz Kniss	City of Palo Alto	Present
Cory Wolbach (Alternate)	City of Palo Alto	N/A
Charles "Chappie" Jones	City of San Jose	Present
Vacant (Alternate)	City of San Jose	N/A
Kathy Watanabe	City of Santa Clara	Absent
Patrick Kolstad(Alternate)	City of Santa Clara	Absent
Jerry Marsalli (Alternate)	City of Santa Clara	Absent
Howard Miller	City of Saratoga	Present
Rishi Kumar (Alternate)	City of Saratoga	N/A
Jim Davis	City of Sunnyvale	Present
Gustav Larsson (Alternate)	City of Sunnyvale	N/A
Mike Wasserman	SCC Board of Supervisors	Present

A quorum was present.

2. ORDERS OF THE DAY

Chairperson Carr requested **Agenda Item #15.**, One Bay Area Grant Cycle 2 Formula and Criteria be removed from the Regular Agenda and placed on the Consent Agenda.

M/S/C (Wasserman/Montano) to approve the Orders of the Day.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Wasserman, Member
SECONDER:	Montano, Member
AYES:	Carr, Davis, Harpootlian, Jensen, Jones, Kniss, Kotowski, McAlister,
	Montano, Prochnow, Vaidhyanathan, Wasserman
NOES:	None
ABSENT:	Harney, Miller, Watanabe, Wolsheimer

3. <u>PUBLIC PRESENTATIONS</u>

There were no Public Presentations.

4. <u>Committee Staff Report</u>

Jim Lawson, Director of Public Affairs and Executive Policy Advisor, and Committee Staff Liaison, provided a report on actions taken and reports received by the Board of Directors at their April 7, 2016, meeting, highlighting: 1) approved an amendment to the FY 2016 Transit Capital Budget to augment the Small Business Sustainability Program (SBSP), for Santa Clara/Alum Rock Bus Rapid Transit (BRT) project which will provide funding and assistance to businesses in that area. Upon request of the Board of Directors, VTA is working with the City of San Jose to implement a 24-hour hotline for construction activities; 2) Joint Development Policy was amended to include an Affordable Housing Policy; 3) authorized the General Manager to execute an agreement between VTA and the Bay Area Rapid Transit (BART) for an Operations Control Center (OCC); and 4) received a report from Jarrett Walker and Associates report regarding the factors involved in transit ridership.

• <u>Government Affairs Update</u>

Mr. Lawson noted a copy of the report was provided to the Committee Members and placed on the public table.

5. <u>Chairperson's Report</u>

Chairperson Carr provided a brief report, highlighting: 1) April 22, 2016, is Earth Day and VTA will offer free rides. He encouraged the Committee to use transit; 2) April 22, 2016, Board of Directors Workshop meeting; 3) noted the importance of **Agenda Item #16.,** Transit Ridership Improvement Program (TRIP), which is a policy and planning effort to redesign VTA's transit service network; and 4) Jarrett Walker's presentation at the April 7, 2016, Board meeting discussed VTA's transit choices are between coverage versus ridership, and how to achieve a balance.

On order of Vice Chairperson Davis and there being no objection, the Committee received a report from the Chairperson.

NOTE: M/S/C MEANS MOTION SECONDED AND CARRIED AND, UNLESS OTHERWISE INDICATED, THE MOTION PASSED UNANIMOUSLY.

CONSENT AGENDA

6. <u>Regular Meeting Minutes of March 10, 2016</u>

M/S/C (Davis/Wasserman) to approve the Regular Meeting Minutes of March 10, 2016.

7. <u>Legislative Update Matrix</u>

M/S/C (Davis/Wasserman) to review the Legislative Update Matrix.

8. <u>Caltrans-VTA 3-Year FY 2016-18 Project Initiation Document Workplan Update</u>

M/S/C (Davis/Wasserman) to receive an update on Caltrans-VTA FY 2016-18 Three-Year Project Initiation Document Work plan.

9. Crossroads Traffic Collision Database Progress Report

M/S/C (Davis/Wasserman) to receive the progress report on Crossroads Traffic Collision Database Pilot Program.

10. <u>I-680 Corridor Study Report Update</u>

M/S/C (Davis/Wasserman) to receive an informational report on the I-680 Corridor Study.

11. (Removed from Consent Agenda and placed on the Regular Agenda

Receive an information item on the draft project list for Pedestrian Access to Transit Plan.

12. <u>Development Review Annual Report for 2015</u>

M/S/C (Davis/Wasserman) to receive the Development Review Annual Report for 2015.

13. Bay Area Express Lanes Operations Policy Updates

M/S/C (Davis/Wasserman) to receive update on Bay Area Express Lanes Operations Policy Updates.

15. One Bay Area Grant Cycle 2 Formula and Criteria

M/S/C (Davis/Wasserman) to recommend that the VTA Board of Directors approve the Santa Clara County One Bay Area Grant (OBAG) Cycle 2 Guarantee Program Distribution Formula and Countywide Competitive Complete Streets Project Selection Criteria.

RESULT:	APPROVED [UNANIMOUS]
	Consent Agenda Items #6-13, 15
MOVER:	Davis, Member
SECONDER:	Wasserman, Member
AYES:	Carr, Davis, Harpootlian, Jensen, Jones, Kniss, Kotowski, McAlister,
	Montano, Prochnow, Vaidhyanathan, Wasserman
NOES:	None
ABSENT:	Harney, Miller, Watanabe, Wolsheimer

REGULAR AGENDA

11. <u>Pedestrian Access to Transit Plan – Draft Project List</u>

Member Vaidhyanathan noted the Staff Report, Page 2 of 5, first bullet, includes first-last mile connections to transit. She stated the focus area does not show west of Highway 17, south of I-280 and north of SR85 covered. She queried about focus areas.

Lauren Ledbetter, Senior Transportation Planner, provided a brief overview of the staff report, highlighting the geographical analysis process. She stated City Staff were sent a form, and can request that VTA add projects to the Pedestrian Access to Transit Plan up until April 20, 2016.

Member Miller arrived and took his seat at 4:16 p.m.

Public Comment

Roland Lebrun, Interested Citizen, noted a missing focus area in the IBM Cottle Road vicinity.

On order of Chairperson Carr and there being no objection, the Committee received an information item on the draft project list for Pedestrian Access to Transit Plan.

14. <u>Envision Silicon Valley Update</u>

Chairperson Carr thanked the Committee for their work on the Envision Silicon Valley (ESV) process, and announced the VTA Board of Directors will have a workshop on April 22, 2016, to consider what kind of a sales tax measure is going to be created for ESV. He stated today staff would like the Committee to provide a recommendation to go forward to the Board about what the Committee believes are the most important transportation issues in Santa Clara County as ESV moves forward.

Scott Haywood, Policy and Community Relations Manager, provided an overview of the staff report and a presentation entitled "Envision Silicon Valley," highlighting: 1) Stakeholders; 2) Stakeholder Groups; 3) March Meeting; 4) Group #1; 5) Group #1 Summary; 6) Group #1 Notes; 7) Group #2; 8) Group #2 Summary; 9) Group #2 Notes; 10) Group #3; 11) Group #3 Summary; 12) Group #3 Notes; 13) Group #4: 14) Group #4 Summary; 15) Group #4 Notes; 16) Potential Category Policies; and 17) Next Steps.

Members of the Committee discussed the following: 1) expressed concern with the 20% match requirement under the Highways category; and 2) outreach and polling.

Member McAlister provided a handout entitled "Overall Draft Expenditure Plan."

VTA staff provided a handout entitled "Technical Advisory Committee (TAC) Recommendation on Measure."

Member Montano left the meeting at 4:36 p.m.

Discussion ensued regarding the following: 1) the interrelationship of the Committee's recommendations with the allocations recommended by other groups; 2) inclusion of individual cities category recommendation; 3) Silicon Valley Leadership Group (SVLG) polling; 4) 67% is needed to pass the measure; 5) inclusion of State Route (SR) 85; 6) "local match" also includes other sources of funding such as grants and state and federal funding; 7) expressed dissatisfaction with including a local match requirement; 8) TRIP focus is a decision on ridership versus coverage; 9) goals and context; 10) freeway and county expressway Average Daily Traffic (ADT) vehicle count; 11) suggested simplicity would be less confusing and have better odds of approval; 12) noted current polling indicates public

trust of county and local government is very low and better for local cities; and 13) queried about the reason for a 30-year measure.

Member Harpootlian left the meeting at 5:01 p.m.

Public Comment

Mr. Lebrun expressed support for Silicon Valley VTA Sprinters stating the coalition of neighborhood representatives are attempting to get VTA to explore the installation of an e-Bart system in Santa Clara County, to complement the existing transportation systems and to connect to the Silicon Valley BART system.

Omar Chatty, Interested Citizen, commented on the following: 1) expressed support for BART; 2) stated Highway 152, Pacheco Pass, needs to be addressed; 3) expressed concern about the removal of "pork chop islands" on local streets; and 4) noted 2000 Measure A was sold as street improvement for potholes, but ended up being used for some cities' road diets thus causing further congestion.

Chairperson Carr suggested the Committee reach consensus on the following: 1) categories supported; 2) funding levels supported; and 3) address policy issues such as local match and complete streets requirement.

Member McAlister stated several cities came together and were concerned with the general direction of VTA, noting there was no comprehensive plan to reduce congestion on the freeways. He stated the handout entitled "Overall Draft Expenditure Plan" constitutes a compromise reached between those cities and the Silicon Valley Leadership Group.

Member Wasserman expressed support for the plans indicated in the handouts, noting his preference for the verbiage of "target for affordable housing" rather than "requirement for affordable housing."

Member Miller expressed support for the percentages on "Overall Draft Expenditure Plan." He noted he would like the Committee to weigh in on: 1) the matching requirement; and 2) the inflexibility of some of the complete streets requirements.

Member Davis commented he would support the categories on the "TAC Recommendation on Measure" handout.

Member Jensen indicated the City of Los Gatos has not signed on formally to the calculations presented in the handout. She expressed concern with a requirement for complete streets. She noted Los Gatos does not think the categories are specific enough. Member Jensen stated Los Gatos City Council voted no on widening Highway 17.

Member Kotowski highlighted the following: 1) the importance of grade separating Lawrence Expressway and San Tomas Expressway, noting these two expressways represent the freeway that is not there; 2) expressed concern with another 30-year tax; 3) suggested simplifying ballot language; and 4) identify projects that can be completed within the time line chosen.

Chairperson Carr expressed his understanding of the Committee's concerns: 1) local match as a target rather than a requirement; and 2) complete streets.

M/S/C (McAlister/Miller) on a vote of 10 ayes, 1 no, and 0 abstention, to eliminate the complete streets requirement and local match requirement. Chairperson Carr opposed.

Chairperson Carr spoke against the motion noting his preference for a local agencies ability to opt out of Complete Streets rather than eliminating it altogether.

RESULT:	APPROVED
MOVER:	McAlister, Member
SECONDER:	Miller, Member
AYES:	Davis, Jensen, Jones, Kniss, Kotowski, McAlister, Miller, Prochnow,
	Vaidhyanathan, Wasserman
NOES:	Carr
ABSENT:	Harney, Harpootlian, Montano, Watanabe, Wolsheimer

M/S/C (Jones/Miller) on a vote of 10 ayes, 1 no, and 0 abstention, to adopt the "TAC Recommendation on Measure" list of categories to include: BART extension to Santa Clara; Local Streets and Roads; Core Transit; Congestion Relief; Active Transportation (including Bike Ped); Caltrain (including Grade Sep); Highways; and Expressways. Member Jensen opposed.

RESULT:	APPROVED
MOVER:	Jones, Member
SECONDER:	Miller, Member
AYES:	Carr, Davis, Jones, Kniss, Kotowski, McAlister, Miller, Prochnow,
	Vaidhyanathan, Wasserman
NOES:	Jensen
ABSENT:	Harney, Harpootlian, Montano, Watanabe, Wolsheimer

Chairperson Carr noted the Committee was now moving on to discuss funding level percentages.

The Committee came to a consensus on the following funding level percentages aligned with the "TAC Recommendation on Measure:": 1) BART extension to Santa Clara at 23%; 2) Local Streets and Roads at 20%; 3) Core Transit at 5%; 4) Congestion Relief at 7%; 5) Active Transportation (including Bike Ped) at 7%; 6) Caltrain (including Grade Sep) at 15%; Highways at 12%; and 7) Expressways at 12%.

Discussion ensued regarding placing a cap on the funding allocated to BART.

M/S/C (Miller/Kniss) on a vote of 10 ayes, 1 no, and 0 abstention, to place a funding level cap of 25% and not more than 1.5M on BART spending. Member Jensen opposed.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Miller, Member
SECONDER:	Kniss, Member
AYES:	Carr, Davis, Jones, Kniss, Kotowski, McAlister, Miller, Prochnow, Vaidhyanathan, Wasserman
NOES:	Jensen
ABSENT:	Harney, Harpootlian, Montano, Watanabe, Wolsheimer

M/S/C (**McAlister/Miller**) on a vote of 10 ayes, 1 no, and 0 abstention, to adopt the percentages as funding allocations defined in the "TAC Recommendation on Measure" handout. Member Jensen opposed.

RESULT:	APPROVED
MOVER:	McAlister, Member
SECONDER:	Miller, Member
AYES:	Carr, Davis, Jones, Kniss, Kotowski, McAlister, Miller, Prochnow,
	Vaidhyanathan, Wasserman
NOES:	Jensen
ABSENT:	Harney, Harpootlian, Montano, Watanabe, Wolsheimer

Member Jones left the meeting at 6:05 p.m.

15. (Removed from the Regular Agenda and placed on the Consent Agenda

Recommend that the VTA Board of Directors approve the Santa Clara County One Bay Area Grant (OBAG) Cycle 2 Guarantee Program Distribution Formula and Countywide Competitive Complete Streets Project Selection Criteria.

16. (Deferred to the May 12, 2016, Policy Advisory Committee (PAC) Meeting)

Receive the Transit Ridership Improvement Program Choices Report.

On order of Chairperson Carr and there being no objection, the Committee deferred the Transit Ridership Improvement Program Choices Report.

OTHER

17. <u>Committee Work Plan</u>

On order of Chairperson Carr and there being no objection, the Committee reviewed the Committee Work Plan.

18. ANNOUNCEMENTS

Member McAlister thanked the Committee for their hard work on the ESV process.

Member Vaidhyanathan requested placing a Quick Response (QR) Code at transit stations to provide a link to the VTA website where customers can fill out a survey.

19. ADJOURNMENT

On order of Chairperson Carr and there being no objection, the Committee meeting was adjourned at 6:07 p.m.

Respectfully submitted,

Anita McGraw, Board Assistant VTA Office of the Board Secretary



Date:	May 2, 2016
Current Meeting:	May 12, 2016
Board Meeting:	June 2, 2016

BOARD MEMORANDUM

TO: Santa Clara Valley Transportation Authority Policy Advisory CommitteeTHROUGH: General Manager, Nuria I. Fernandez

FROM: Director of Planning and Program Development, John Ristow

SUBJECT: FY2016/17 TDA3 Project Priorities

Policy-Related Action: No

Government Code Section 84308 Applies: No

ACTION ITEM

RECOMMENDATION:

Recommend that the VTA Board of Directors adopt a resolution approving the project priorities for the FY2016/17 Countywide Transportation Development Act Article 3 program and modify VTA policy regarding the banking of TDA3 funds..

BACKGROUND:

Transportation Development Act (TDA) funds are derived from a ¹/₄-cent of the State's general sales tax. Article 3 of the TDA makes a portion of these funds available for use on bicycle and pedestrian projects.

The Metropolitan Transportation Commission (MTC) programs TDA Article 3 funds in the nine Bay Area counties. Each year, MTC requests that the Congestion Management Agency (CMA) in each Bay Area county coordinate and submit annual TDA Article 3 program funding priorities for their respective counties. VTA, as the CMA for Santa Clara County, develops the countywide program. After the VTA Board adopts the projects, the list is forwarded to MTC for approval and project sponsors apply for reimbursement directly to MTC.

On December 9, 2004, the VTA Board of Directors dedicated 25% of Santa Clara County's TDA Article 3 funds to projects on the countywide Bicycle Expenditure Program (BEP) list through 2030. Under subsequent revisions to BEP policy in March 2013, only BEP Category 1 projects are eligible for this set-aside. The remaining 75% of the annual allocation is guaranteed to Member Agencies based on the most recent California Department of Finance population estimates. These funds may be used for any eligible project and are referred to as the Guarantee

Fund.

On November 5, 2009, the VTA Board of Directors adopted a funding program for County Expressway Pedestrian Projects and dedicated up to \$150,000 per year from the TDA3 BEP setaside to help fund such projects.

If a Member Agency is unable to complete a TDA Article 3 funded project within the two-year period, the agency may rescind the project. When a project is rescinded, the funds are reallocated to the agency as part of its guarantee in the following cycle instead of reverting back to the countywide pool. In the event that an agency fails to rescind a project and funds lapse, the funds revert back to the countywide pool.

VTA policy also allows TDA Article 3 funds to be banked for up to two years plus one year to program funds. Banked funds are added to an agency's Guarantee Fund amount in the following year. A Member Agency must inform VTA in writing of its intent to either claim or bank its TDA3 guarantee funds; failure to do so means that the funds revert to the countywide pool in the next cycle.

DISCUSSION:

The total TDA Article 3 funding available for programming this year is \$2,452,115. Attachment A lists the VTA staff recommendations for the entire Santa Clara County TDA Article 3 program as discussed below and Attachment B contains a brief description of each project. The TDA Article 3 program was developed in accordance with MTC's Local Process Resolution, MTC's project requirements and the VTA board-adopted policies discussed above. The following paragraphs explain the staff recommendation for programming these funds:

Guarantee Fund:

This year, a total of \$1,962,399 is available to the cities and the County for the Guarantee Fund. This total includes funds that were banked or rescinded in prior years. Member Agencies claimed \$1,664,905 of their Guarantee Funds this year. Per attachment A, five agencies are collectively banking \$447,492 of their guaranteed funds and this total is not being added to the amount claimed.

BEP Fund:

This year, there is \$339,716 available for BEP projects. Last year, VTA received 2 applications for BEP projects requesting the entire amount: Santa Clara County's Montague Expressway Bicycle Detection/Adaptive Signal Timing Project and San Jose's Hedding Street bicycle lane project. Although both projects were "ready to go," county staff indicated that they could defer their project until this year. To honor this commitment, staff recommends that this year's BEP set-aside funds be dedicated to the Montague Expressway Bicycle Detection/Adaptive Signal Timing Project.

County Expressway Pedestrian Projects:

VTA staff concurs with Santa Clara County staff's request that the \$150,000 set aside for Expressway Pedestrian Improvements be banked this year. It will be combined with next year's funding for a \$300,000 allocation to a project.

During the preparation of the project list, one of the smaller member agencies approached VTA staff with a proposal to relax the current TDA Article 3 banking policy which states "VTA policy also allows TDA Article 3 funds to be banked for up to two years plus one year to program funds." Some smaller agencies feel that allowing additional time to bank funds will allow more flexibility for agencies to save for a larger, more expensive, project. After a discussion at the April 26, 2016 Capital Improvement Program Working Group (CIPWG) meeting, they recommended that the policy be changed to "VTA policy also allows TDA Article 3 funds to be banked for up to four years plus one year to program funds." VTA staff concurs with the CIPWG recommendation and notes that this change in compatible with MTC policy and TDA law.

ALTERNATIVES:

The VTA Board may recommend an alternative list of project priorities. However, all projects submitted for TDA Article 3 funds must adhere to TDA law and MTC's TDA Article 3 Rules and Procedures.

FISCAL IMPACT:

Approximately \$2.5 million in TDA Article 3 funds will be made available to projects in Santa Clara County. The projects and programming described in this memorandum are not included in the VTA Capital Budget because VTA's role in the TDA Article 3 process is limited to prioritizing the annual program of projects. Project sponsors apply for reimbursement directly to MTC. The appropriation for costs of VTA staff support of this program is included in the current Congestion Management Program Fund Operating Budget.

Prepared by: Bill Hough Memo No. 5242

ATTACHMENTS:

- Attachment A -- FY 2016-17 TDA Article 3 (PDF)
- Attachment B -- FY 2016-17 TDA Article 3 projects (PDF)
- Attachment 0 -- 2016 TDA3 Resolution.doc (DOCX)

Attachment A: Submittal of Countywide Coordinated Claim to MTC for the Allocation of FY2016/17 Funds to Claimants in Santa Clara County

				Expressway		
		Guarantee	BEP Project	Pedestrian		
Project Sponsor	Project Name	Request	Request	Imps.	Total Request	Banked Funds
Campbell	Citywide Bicycle & Pedestrian Project	\$32,543	\$0	\$0	\$32,543	\$0
Cupertino	McClellan Road Sidewalk Improvements-Phase 2	\$106,926	\$0	\$0	\$106,926	\$0
Cupertino	Pedestrian Master Plan	\$50,000	\$0	\$0	\$50,000	\$0
Gilroy	Funds banked	\$0	\$0	\$0	\$0	\$79,816
Los Altos	Crosswalk Improvements at Edith/University	\$45,429	\$0	\$0	\$45,429	\$0
Los Altos Hills	Funds banked.	\$0	\$0	\$0	\$0	\$6,485
Los Gatos	Bicycle & Pedestrian Master Plan	\$79,848	\$0	\$0	\$79,848	\$0
Milpitas	Construction of ADA ramps	\$108,083	\$0	\$0	\$108,083	\$0
Monte Sereno	Highway 9 Pedestrian Safety Improvements	\$9,028	\$0	\$0	\$9,028	\$0
Morgan Hill	green bike lane striping at major intersections	\$32,482	\$0	\$0	\$32,482	\$0
Mountain View	Funds banked	\$0	\$0	\$0	\$0	\$117,137
Palo Alto	Implementation of Bicycle Boulevards	\$203,463	\$0	\$0	\$203,463	\$0
San Jose	Citywide Bikeway Implementation	\$440,288	\$0	\$0	\$440,288	\$0
San Jose	Citywide ADA Curb Ramps	\$100,000	\$0	\$0	\$100,000	\$0
San Jose	Citywide Bike Plan	\$250,000	\$0	\$0	\$250,000	\$0
Santa Clara	Funds banked	\$0	\$0	\$0	\$0	\$94,054
Saratoga	Saratoga Avenue Pathway Project	\$23,945	\$0	\$0	. ,	\$0
Sunnyvale	Mary Avenue Bike Lanes	\$115,088		-	\$115,088	\$0
S. C. County	Montague Expressway Bicycle Detection/Adaptive Signal Timing	\$0	\$339,716	\$0	\$339,716	\$0
S. C. County	East San Jose Pedestrian Improvement Project	\$67,782	\$0	\$0	\$67,782	\$0
S. C. County	Funds banked (Expressway Pedestrian Imps.)	\$0	\$0	-		\$150,000
Totals		\$1,664,905	\$339,716	\$0	\$2,004,621	\$447,492

Attachment B Santa Clara County FY 2016/17 TDA3 Program Project Descriptions

Campbell Citywide Bicycle & Pedestrian Project

City will design and construct bike/ped improvements at seven locations throughout Campbell and install shared lane markings and construct ADA traffic signal improvements at several locations.

Cupertino McClellan Road Sidewalk Construction Project

City will construct a sidewalk along the south side of McClellan Road between Orange and San Leandro Avenues.

Cupertino Pedestrian Master Plan

City will develop a Pedestrian Master Plan identifying critical pedestrian networks, systemic issues, enhancement opportunities, and setting of priority for projects that improve safety, connectivity, and increased mobility and access.

Los Altos Crosswalk Improvements at Edith/University

City will construct crosswalk improvements at the West Edith/University Avenue intersection to improve pedestrian Safety.

Los Gatos Bicycle & Pedestrian Master Plan

City will update its Bicycle & Pedestrian Master Plan.

Milpitas Construction of ADA ramps

City will construct ADA ramps at various locations throughout Milpitas.

Monte Sereno Highway 9 Pedestrian Safety Improvements

City will construct ADA pedestrian safety improvements along Highway 9 in Monte Sereno.

Morgan Hill Green Bike Lane Striping at Major Intersections

City will provide green bike lane striping at the Dunne/Monterey and Tennant/Monterey intersections.

Palo Alto Implementation of Bicycle Boulevards

City will construct bicycle boulevards on Bryant Street, Maybell Avenue, Park Boulevard and Wilkie Way in Palo Alto.

San Jose Citywide Bikeway Implementation

City will install approximately 60 miles of new bikeways throughout the City.

San Jose Install ADA curb ramps on public sidewalks at various locations

City will install ADA Curb ramps on public sidewalks at locations throughout the City of San Jose.

San Jose Citywide Bike Plan

City will develop a citywide bicycle master plan.

Saratoga Saratoga Avenue Pathway

City will install a concrete/cement walkway along Saratoga Avenue from Park Place to just past La Paloma Avenue on the north side.

Sunnyvale Mary Avenue Bike Lanes

City will install bicycle lane treatments along Mary Avenue between Iowa Avenue and Maude Avenue.

<u>Santa Clara County</u> <u>Montague Expressway Bicycle Detection/Adaptive Signal Timing</u> County will install bicycle detection and adaptive signal timing at Montague Expressway intersections.

Santa Clara County East San Jose Pedestrian Improvements

County will construct sidewalks along various roads in East San Jose and will include ADA curb ramps and curbs/gutters.

Resolution No. INSERT NUMBER

Re: <u>Submittal of Countywide Coordinated Claim to the Metropolitan Transportation</u> <u>Commission for the Allocation of Fiscal Year 2016/17 TDA Article 3 Pedestrian/Bicycle</u> <u>Project Funds to Claimants in SANTA CLARA COUNTY.</u>

WHEREAS, Article 3 of the Transportation Development Act (TDA), Public Utilities Code (PUC) Section 99200 <u>et seq</u>., authorizes the submission of claims to a regional transportation planning agency for the funding of projects exclusively for the benefit and/or use of pedestrians and bicyclists; and

WHEREAS, the Metropolitan Transportation Commission (MTC), as the regional transportation planning agency for the San Francisco Bay region, has adopted MTC Resolution No. 4108, which delineates procedures and criteria for submission of requests for the allocation of TDA Article 3 funds; and

WHEREAS, MTC Resolution No. 4108 requires that requests from eligible claimants for the allocation of TDA Article 3 funds be submitted as part of a single, countywide coordinated claim, composed of certain required documents; and

WHEREAS, the **SANTA CLARA VALLEY TRANSPORTATION AUTHORITY** has undertaken a process in compliance with MTC Resolution No. 4108 for consideration of project proposals submitted by eligible claimants of TDA Article 3 funds in SANTA CLARA COUNTY, and a prioritized list of projects, included as Attachment A of this resolution, was developed as a result of this process; and

WHEREAS, each claimant in **SANTA CLARA COUNTY** whose project or projects have been prioritized for inclusion in the fiscal year **2016/17** TDA Article 3 countywide coordinated claim, has forwarded to the **SANTA CLARA VALLEY TRANSPORTATION AUTHORITY** a certified copy of its governing body resolution for submittal to MTC requesting an allocation of TDA Article 3 funds; now, therefore, be it

RESOLVED, that the **SANTA CLARA VALLEY TRANSPORTATION AUTHORITY** approves the prioritized list of projects included as Attachment A to this resolution; and furthermore, be it

RESOLVED, that the **SANTA CLARA VALLEY TRANSPORTATION AUTHORITY** approves the submittal to MTC, of the **SANTA CLARA COUNTY** fiscal year **2016/17** TDA Article 3 countywide, coordinated claim, composed of the following required documents:

- A. transmittal letter
- B. a certified copy of this resolution, including Attachment A;
- C. one copy of the governing body resolution and required attachments, for each claimant whose project or projects are the subject of the coordinated claim;

D. a description of the process for public and staff review of all proposed projects submitted by eligible claimants for prioritization and inclusion in the countywide, coordinated claim;

PASSED AND ADOPTED by the Santa Clara Valley Transportation Authority Board of Directors on this second day of June, 2016 by the following vote:

AYES:

NOES:

ABSENT:

Cindy Chavez, Chairperson Board of Directors

I HEREBY CERTIFY AND ATTEST that the foregoing resolution was duly and regularly introduced, passed and adopted by the Board of Directors of the Santa Clara Valley Transportation Authority, California, at a meeting of said Board of Directors on the date indicated, as set forth above.

ATTEST:

Elaine F. Baltao Board Secretary

APPROVED AS TO FORM:

Robert R. Fabela General Counsel



Date:	April 29, 2016
Current Meeting:	May 12, 2016
Board Meeting:	June 2, 2016

BOARD MEMORANDUM

TO:	Santa Clara Valley Transportation Authority Policy Advisory Committee
THROUGH:	General Manager, Nuria I. Fernandez
FROM:	Director of Planning and Program Development, John Ristow
SUBJECT:	2016 TFCA Program Manager Fund

Policy-Related Action: No

Government Code Section 84308 Applies: No

ACTION ITEM

RECOMMENDATION:

Recommend that the VTA Board of Directors approve the programming of FY 2016/17 Transportation Fund for Clean Air Program Manager (TFCA 40%) funds to projects.

BACKGROUND:

The Transportation Fund for Clean Air (TFCA) is generated by a \$4.00 surcharge on vehicle registrations in the nine-county Bay Area. The Bay Area Air Quality Management District (BAAQMD) administers the funds; money is available for allocation to alternative fuels, arterial management, bicycle, and trip-reduction projects that reduce vehicle emissions. State law is very specific as to how the funds may be spent.

BAAQMD returns 40% of TFCA funds to the county in which they are collected for allocation by a "program manager." This fund is called the TFCA County Program Manager Fund (TFCA 40%). VTA is the program manager for Santa Clara County and project sponsors apply directly to VTA for funding. The VTA Board of Directors allocates these funds to projects in Santa Clara County, subject to approval by BAAQMD. To be approved by BAAQMD, all TFCA projects must conform to BAAQMD's board-adopted policies, cost-effectiveness requirements, and the *County Program Manager Fund Expenditure Plan Guidance-Fiscal Year Ending 2017*.

The VTA Board of Directors set aside up to 25% of the annual TFCA 40% allocation to bicycle projects in the Countywide Bicycle Expenditure Program (BEP) for FY 2010/11-FY 2029/30 at its December 9, 2004 meeting. Under subsequent revisions to BEP policy in March 2013, only BEP Category 1 projects are eligible for this set-aside. Eligible BEP projects are funded "off the

top" subject to VTA Board-adopted screening criteria and BAAQMD policies cited above. Since TFCA 40% funds cannot be "banked" from year to year, if less than the set-aside amount can be programmed to qualified BEP projects, the remainder is programmed via the competitive process and the difference does not carry over to the following years.

Unless the program is undersubscribed, the competitive projects are evaluated by a scoring working group of the Technical Advisory Committee's Capital Improvement Program Working Group. The scoring group consists of transportation professional staff members from VTA's Member Agencies, and they serve on a volunteer basis. If necessary, this group meets, reviews project applications and ranks the projects subject to the BAAQMD policies and the VTA Board's TFCA 40% Screening/Scoring Criteria, as adopted on December 11, 2014.

DISCUSSION:

There is a total of \$2,936,201 available for TFCA 40% projects this year and VTA received 13 applications from project sponsors requesting a total of \$3,602,677.

BEP Projects:

Sunnyvale and Santa Clara County submitted two BEP projects, for a total amount of \$370,000. Staff recommends funding these projects out of the BEP set-aside. The remaining 11 project applications went through the competitive review process described below:

Competitive Projects:

The total grant request for the 11 competitive project applications was \$3,217,301, significantly greater than the amount available. On March 22, 2016, a scoring subcommittee of the Technical Advisory Committee's Capital Improvement Program Working Group met to evaluate these applications. The committee evaluated and ranked these projects, which are listed in Attachment A. Staff recommends approval of these projects, which are briefly described in Attachment B. Nine projects received full funding and the remaining two projects received partial funding: Santa Clara's County's Weekend Expressway Signal Timing Coordination project was only eligible for \$180,000 in TFCA funds due to BAAQMD's cost-effectiveness requirements and Sunnyvale's Pedestrian Infrastructure Improvements-Phase 2 grant was reduced to the available \$45,961. VTA staff recommended that Sunnyvale consider future funding opportunities such as the upcoming OBAG or VERBS cycles.

ALTERNATIVES:

The VTA Board may request other programming alternatives. However, all projects submitted for consideration in the TFCA program must adhere to state law and the BAAQMD policies cited above.

FISCAL IMPACT:

As the program manager for Santa Clara County, VTA distributes the TFCA 40% grant funds directly to the project sponsors, retaining 5% to cover administrative expenses. The projected

administrative expense and revenue reimbursement are included in the FY17 Adopted Congestion Management Program Fund Operating Budget. The grant revenue for the DASH Shuttle project, for which VTA is the project sponsor, is reflected in the FY17 Adopted VTA Transit Fund Operating Budget.

Prepared by: Bill Hough Memo No. 5243

ATTACHMENTS:

- Attachment A -- FY16-17 TFCA 40% Program (PDF)
- Attachment B -- FY16-17 TFCA 40% Projects (PDF)

Attachment A Santa Clara County FY 2016/17 TFCA 40% Program

Project Sponsor	Project Name	Grant Request	Grant Recommended	TFCA Cost/Ton
	<u>Competitive Projects</u>			
VTA	DASH Shuttle	\$826,000	\$826,000	\$174,513
Santa Clara	Lafayette Street Signal Timing	\$210,000	\$210,000	\$92,329
Santa Clara	Bowers Avenue Signal Timing	\$590,000	\$590,000	\$93,159
Santa Clara	SRTS Pedestrian Infrastructure Improvements	\$290,000	\$290,000	\$173,634
Sunnyvale	Fremont Avenue Signal Timing	\$55,321	\$55,321	\$46,956
Sunnyvale	Mary Avenue Signal Timing	\$98,724	\$98,724	\$59,076
Sunnyvale	Hollenbeck Avenue Signal Timing	\$59,869	\$59,869	\$71,234
Sunnyvale	Remington Drive Signal Timing	\$38,897	\$38,897	\$49,156
Palo Alto	Bike Share Expansion	\$171,429	\$171,429	\$484,059
S.C. County	Weekend Expressway Signal Timing Coordination*	\$240,000	\$180,000	\$59,961
Sunnyvale	Pedestrian Infrastructure Improvements phase 2**	\$591,100	\$45,961	\$109,949
Subtotal		\$3,171,340	\$2,566,201	
	Bicycle Expenditure Program (BEP) Projects			
S.C. County	I-280/Page Mill Bike Improvements	\$125,000	\$125,000	\$204,000
Sunnyvale	Mary Avenue Bike Lanes	\$245,000	\$245,000	\$249,900
Subtotal		\$370,000	\$370,000	
Total		\$3,541,340	\$2,936,201	

*Santa Clara County was only able to obtain \$180,000 of the \$240,000 funding requested due to BAAQMD cost-effectiveness rules.

**Grant recommended reduced to the remaining available \$45,961. VTA staff anticipates combining this project with last year's approved 16SC04-Comprehensive Pedestrian Infrastructure Improvements.

Attachment B Santa Clara County FY 2016/17 TFCA 40% Program Recommended Project Descriptions

DASH Shuttle

VTA will use TFCA funds to help support operations of the Downtown Area Shuttle (DASH) in downtown San Jose.

Lafayette Street Signal Timing

Santa Clara will perform signal timing on Lafayette Street between Lewis Street and Newhall Street.

Bowers Avenue Signal Timing

Santa Clara will perform signal timing on Bowers Avenue between El Camino Real and US-101.

SRTS Pedestrian Infrastructure Improvements

Santa Clara will improve safety for students walking and biking to school. Improvements include enhanced crosswalks, improve signals and traffic calming.

Fremont Avenue Signal Timing

Sunnyvale will perform signal timing on Fremont Avenue between SR 85 and Fieldfair Drive/Rembrandt Drive.

Mary Avenue Signal Timing

Sunnyvale will perform signal timing on Mary Avenue between Homestead Road and Maude Avenue.

Hollenbeck Avenue Signal Timing

Sunnyvale will perform signal timing on Hollenbeck Avenue between Homestead Road and Danforth Drive.

Remington Drive Signal Timing

Sunnyvale will perform signal timing on Remington Drive between Bernardo Avenue and Manet Drive.

Palo Alto Bike Share Expansion

Palo Alto will add three new stations and 30 bikes to its bike share network.

Weekend Expressway Signal Timing Coordination

Santa Clara County will perform signal timing along Foothill, Capitol, and Lawrence Expressways.

Pedestrian Infrastructure Improvements-Phase 2

Sunnyvale will improve safety for students walking and biking to school in Sunnyvale. Improvements include in-pavement lighted crosswalks, raised crosswalks and traffic calming.

I-280/Page Mill Bike Improvements

Santa Clara County will improve bicycle access at the I-280/Page Mill interchange area. Improvements include signing and striping improvements.

Mary Avenue Bike Lanes

Sunnyvale will construct Bike Lanes on Mary Avenue from Iowa Avenue to Maude Avenue.



Date:	May 4, 2016
Current Meeting:	May 12, 2016
Board Meeting:	June 2, 2016

BOARD MEMORANDUM

- TO: Santa Clara Valley Transportation Authority Policy Advisory Committee
- **THROUGH:** General Manager, Nuria I. Fernandez
- FROM: Chief Financial Officer, Raj Srinath
- **SUBJECT:** Revisions to Joint Development Policy

Policy-Related Action: Yes

Government Code Section 84308 Applies: No

ACTION ITEM

RECOMMENDATION:

Recommend that the VTA Board of Directors approve revisions to VTA's Joint Development Policy.

BACKGROUND:

The current *Joint Development Policy Guidance Documents* were adopted by the Board of Directors in 2009, and have not been significantly revised since then aside from the recent adoption of VTA's Affordable Housing Policy. Since creation of the Joint Development Fund as part of the policy, the balance in the Fund has grown to approximately \$29 million, which provides resources to advance implementation of Joint Development projects and support intensification of land uses. VTA's understanding of the opportunities and challenges associated with Joint Development have increased since adoption of the Policy, setting the stage for revisions that facilitate an expanded Joint Development Program particularly with BART Phase 2, new Bus Rapid Transit lines, and other future transit system extensions.

DISCUSSION:

Staff recommends revisions to the *Preamble and Part I: Joint Development* Policy sections of VTA's *Joint Development Policy Guidance Documents* that will create an enhanced joint development, including: authority for acquisition of new sites for joint development, including as part of transit system expansions; expanded use of the Joint Development Fund for site acquisition, incentives to support land use intensification, and other one-time uses; language requiring joint development to be done via long-term ground leases unless otherwise approved by the Board of Directors; creation and use of Joint Development Program portfolio return metrics to measure long-term benefits; authority for the General Manager to negotiate agreements and make expenditures from the Joint Development Fund consistent with existing Administrative Code authority for the General Fund; incorporation of community workforce opportunities into joint development projects; references to affordable housing based on the recently adopted Affordable Housing Policy in *Part II: Implementation* Plan; and other revisions to provide clarification.

The recommended revisions to the Joint Development Policy are shown in redline form in "Attachment A" to this memorandum.

As noted in the recent Joint Development Program update, VTA seeks to issue multiple competitive developer offerings for Joint Development opportunities. There remain considerable opportunities for VTA, through its Joint Development projects and working with other Transit-Oriented Development adjacent to VTA transit stations, to advance greater intensification of land uses and better linkages between growth and VTA's transit investments.

Staff, in recommending revisions to the Policy, seeks to provide policy authorization for a wide range of new or expanded activities to allow acquisition of additional sites to increase the Joint Development portfolio and number of future Joint Development projects; broader use of the Joint Development Fund, including incentives to intensify land uses; and policy language for incorporation of community workforce opportunities, such as apprenticeship programs into Joint Development projects. Future Board of Directors approval would be required for all actions or programs based on the new policy authorizations.

VTA's practice has been to pursue Joint Development through long-term ground leases with developers, however this has never been adopted as policy even though it maximizes long-term revenues from Joint Development projects. The proposed Policy revisions would make this explicit, while allowing the Board of Directors to make exceptions in extraordinary situations.

An expanded Joint Development Program would result in a significant increase in workload for VTA. To facilitate more efficient and effective implementation, Staff proposes that the General Manager be provided authority to enter into agreements and make expenditures from the Joint Development Fund under \$500,000 consistent with current Administrative Code provisions for General Fund expenditures.

Finally, other changes relate to the recent adoption of the Affordable Housing Policy, or other existing policies or practices that are not currently in the Joint Development Policy.

ALTERNATIVES:

The Board could approve a more limited set of revisions, or request Staff to provide additional information or re-evaluate certain aspects of the proposed policy changes.

FISCAL IMPACT:

Adoption of revisions to the Joint Development Policy that result in additional joint development projects would significantly increase the proceeds that VTA receives from these projects.

Prepared by: Ron Golem Memo No. 5591

ATTACHMENT A: REDLINE OF JOINT DEVELOPMENT POLICY CHANGES (SECTIONS WITH CHANGES)

VTA JOINT -DEVELOPMENT PROGRAM GUIDANCE DOCUMENTS

PREAMBLE

The Santa Clara Valley Transportation Authority (VTA) has an extensive portfolio of real estate assets, many of which are underutilized and/or have potential for transitoriented development. VTA recognizes the importance of VTA's ongoing expansion of its transit system, including Bus Rapid Transit, light-rail, and other modes, also presents important opportunities to acquire additional real estate assets to support further transitoriented development. VTA recognizes the importance of acquiring and developing these real estate assets, as reflected in the agency's creation and ongoing support of the Joint Development Program (JDP). Operating under the CMA division of VTA, the)) in the Real Estate & Joint Development Department. The JDP has primary organizational responsibility for managing the process by which development of VTA's real estate assets occurs.

To ensure the success of the JDP, the VTA Board of Directors has mandated this major organizational effort be guided in principle and procedure by the Joint Development Policy (Part I of the JDP Guidance Documents) and the Joint Development Implementation Plan (Part II of the JDP Guidance Documents), both as adopted on ______, 2009. These two documents, along with this Preamble, together replace in its entirety the previously adopted Joint Development Policy, as last amended by the VTA Board of Directors on May 3, 2007.as amended by the Board from time to time.

The Joint Development Policy sets forth the fundamental principles that guide the JDP. This document articulates the primary goal of VTA's JDP as that of providing appropriate stewardship of VTA's real estate assets through maximization of their respective economic values. Secondary goals of the JDP are to create vibrant community assets in the form of transit-oriented development that includes affordable housing and enhance VTA's transit operations through improvements in ridership and infrastructure. All of these goals shall be accomplished through a consensus-driven, broad-based site-appropriate development process which includes both comprehensive intra-agency coordination and extensive collaboration with external stakeholders both interested in, and affected by, VTA's JDP.

The Joint Development Implementation Plan, which comprises Part II of this document, lays out procedures that expand upon the core principles articulated in Part I. Together, these principles and procedures outline an intentioned path for VTA staff to follow to achieve success for the JDP. Starting with priority-setting of VTA's joint development assets, this path includes procedures for collaborative identification of site-appropriate development concepts, competitive developer selection processes, and industry standard legal instruments for effective public-private partnerships with selected developers. The Joint Development Implementation Plan also specifies VTA processes to ensure intra-

agency consultation and guidance, collaboration with affected localities, and an open public participation process.

PART I: JOINT -DEVELOPMENT POLICY

I.- MISSION STATEMENT

The mission of VTA's Joint Development Program is to provide appropriate stewardship of VTA's real estate assets by maximizing their respective economic values through consensus-driven, site-appropriate development that also increases transit ridership, creates vibrant community assets and enhances the long-term life of VTA's facilities.

II. GOALS

The goals of the Joint Development Program are set forth below, in priority order. These goals and their respective priorities shall inform the entire arc of development pursued under the Joint Development Program. In instances where a conflict appears either among these goals or between these goals and the interests of stakeholders, these goals and there<u>their</u> respective priorities shall govern VTA's actions.

- A.- <u>Revenue</u>. To- provide a long-term, stable source of revenue for VTA by obtaining fair market value on the sale or lease of its real property assets through an open and competitive process.
- B.- <u>Transit-Oriented Development</u>. To carry out transit-oriented development, where appropriate, that provides the highest and best use of each site, conforms to the regulations of the affected jurisdiction in which the site is located, provides affordable housing, and achieves the goals set forth in VTA's Community Design and Transportation Manual for high quality design and community benefits. <u>This includes acquisition of new sites and use of construction staging areas for joint development, in accordance with applicable funding and regulatory requirements, in order to create additional projects.</u>
- C. <u>Transit Operations</u>. To create development that results in ridership growth on VTA's multi-modal transit system and/or enhances VTA's operational infrastructure. <u>This includes evaluation of all new transit projects, including their construction staging areas, for the potential to create additional sites for joint development, consistent with applicable funding and regulatory requirements.</u>

III. OBJECTIVES

The aforementioned Goals shall be met through implementation of the following Objectives, as each may be further articulated in Part II, the Joint Development Implementation Plan.

A. REVENUE

- 1. <u>Return on Investment</u>. For each Joint Development asset, VTA shall achieve a rate of return over the life of the asset that is competitive in the market and reflects fair market value. <u>VTA will maximize long-term returns by entering into joint development projects</u> through long-term ground leases with significant participation to share in project upside, except as otherwise approved by the VTA Board of Directors. VTA will develop portfolio return metrics to evaluate the long-term benefits from the joint development program, including increases in ridership.
- 2. <u>Participation in Asset Value Increase</u>. For each Joint Development asset involving a long-term <u>leaseholdlease</u>, VTA shall seek financial participation in the increase in the asset's value over time in the form of market competitive contractual mechanisms.
- 3. <u>Use of Proceeds</u>. Proceeds from the Joint Development Program shall be set aside in a special fund within the <u>agency'sVTA's</u> fiscal organization and shall be appropriated for use from this fund for the continued operation and development of the agency, as determined by the VTA Board of Directors from time to time through formal actions. <u>These uses include support for increased land-use density to support joint development and transit-oriented development around station areas and along transit corridors, as well as other one-time uses.</u>

The General Manager is authorized to negotiate and execute agreements and expend funds to support implementation of the Joint Development Policy, provided such agreements and expenditures are consistent with the Administrative Code.

B. TRANSIT-ORIENTED DEVELOPMENT

- 1. <u>High Density Development</u>. Residential development projects pursued under the Joint Development Program shall strive to provide higher density <u>consistent with transit</u>-<u>oriented development best practices</u> at VTA's major transit nodes and the downtown or core areas of the local jurisdictions in which the projects are situated.
- 2. <u>Land Use Policies</u>. Development projects pursued under the Joint Development Program shall comply with all the review and approval policies and procedures of the local jurisdictions in which the respective projects are sited. <u>The Joint Development</u> <u>Program shall work with local jurisdictions in support of higher-density land uses</u> <u>consistent with transit-oriented development best practices</u>.
- 3. <u>Stakeholder Interests</u>. Development projects pursued under the Joint Development Program shall address stakeholder interests to the extent consistent with the Joint Development Policy. <u>This includes creation of community workforce opportunities</u>.
- 4. <u>Urban Design Standards</u>. Development projects pursued under the Joint Development Program shall strive to incorporate the urban design concepts, principles and guidance set forth in VTA's Community Design and Transportation Program, the urban design

standards of the localities with jurisdiction over them, and the "best practices" identified by industry leaders in transit-oriented development.

- 5. <u>Site Circulation</u>. Development projects pursued under the Joint Development Program shall incorporate efficient and safe vehicular, bicycle and pedestrian circulation and promote convenient, accessible and safe connections to transit service.
- 6. <u>Project Parking</u>. Each development project shall provide parking commensurate with demand forecasts and smart growth principles resulting from site evaluation documents. These documents may include environmental impact reports, on-site and off-site parking analyses, shuttle and bus linkages, and non-physical solutions to parking that are consistent with local jurisdiction requirements.

C. TRANSIT OPERATIONS

- 1. <u>Transit and Ridership Improvements</u>. Development projects pursued under the Joint Development Program shall strive to include physical improvements and/ortransitor transit programs that encourage utilization of multi-modal transit services and increase long-term ridership.
- 2. <u>VTA Operational Requirements</u>. The Joint Development Program shall be implemented in a manner that is mindful of VTA's necessity to manage costs, maximize revenues and balance system expansion with the maintenance of existing service.
- 3. <u>Replacement Parking</u>. For any development project pursued at a VTA park-and——ride <u>lots</u>, a site-by-site analysis shall be undertaken to determine the appropriate level at which existing parking should be replaced, with full consideration of the relative growth in future ridership that can result from dense joint development versus provision of <u>future parking spaces</u>.



Date:	May 3, 2016
Current Meeting:	May 12, 2016
Board Meeting:	June 2, 2016

BOARD MEMORANDUM

- TO: Santa Clara Valley Transportation Authority Policy Advisory Committee
- **FROM:** Director of Government Affairs, Jim Lawson

SUBJECT: Legislative Update Matrix

FOR INFORMATION ONLY

BACKGROUND:

The Legislative Update Matrix describes the key bills that are being considered by the California State Legislature during the second year of the 2015-2016 regular session, as well as during the special session called by Gov. Jerry Brown to address issues related to transportation funding. The matrix indicates the status of these measures and any VTA positions with regard to them.

DISCUSSION:

The purpose of this report is to provide an update on recent developments concerning important transportation issues facing lawmakers in Sacramento.

Transportation Funding Special Session: On April 22, Senate Transportation & Housing Committee Chairman Jim Beall (D-San Jose) released an amended version of SBX1-1, which calls for providing approximately \$5.5 billion per year in new, ongoing revenues and \$1 billion in one-time funding for transportation purposes. The money would be used to: (1) address the significant funding shortfalls that currently exist for maintaining and rehabilitating state highways and local streets/roads; (2) fund mobility improvements in key goods movement corridors; and (3) invest in public transit.

SBX1-1 establishes the Road Maintenance and Rehabilitation Account to be funded with revenues derived from the following sources:

- Increase in the gasoline excise tax of 12 cents per gallon, which would be indexed to inflation.
- Increase of 22 cents per gallon in the diesel excise tax, which would be indexed to inflation. Under the provisions of SBX1-1, the revenues derived from 12 cents of this increase would be deposited into the existing Trade Corridors Improvement Fund and

used for goods movement projects programmed by the California Transportation Commission (CTC). The revenues generated from the remaining 10 cents would be deposited into the Road Maintenance and Rehabilitation Account.

- Registration surcharge of \$35 per year imposed on all motor vehicles, which would be indexed to inflation.
- Registration surcharge of \$100 per year imposed on zero-emission vehicles.
- Road access charge of \$35 per year imposed on all motor vehicles to be collected by the Department of Motor Vehicles (DMV) as part of the annual vehicle registration process. This charge would be indexed to inflation.
- Repayment by June 30, 2016, of approximately \$1 billion in outstanding loans owed by the General Fund to the State Highway Account, the Motor Vehicle Fuel Account, the Highway Users Tax Account (HUTA), and the Motor Vehicle Account.

SBX1-1 calls for distributing the revenues deposited into the new Road Maintenance and Rehabilitation Account in the following manner:

- 5 percent would be taken off the top for allocation to counties that currently do not have a local transportation sales tax, but gain voter approval of one after July 1, 2016. SBX1-1 requires the CTC to develop guidelines to define the specific methodology that would be used to distribute these funds to eligible counties and to cities within those counties. The funds must be expended for road maintenance and rehabilitation purposes.
- Of the amount remaining in the Road Maintenance and Rehabilitation Account after the 5-percent set-aside, 50 percent would be allocated to Caltrans for maintenance of the state highway system, and for projects programmed in the State Highway Operation and Protection Program (SHOPP). The other 50 percent would be provided to cities and counties for maintenance and rehabilitation work on their local roadway systems. In the latter case, the funds would be equally divided between cities and counties, with the cities' portion being allocated by a formula based on population, and the counties' share by a formula based on vehicle registrations and miles of maintained county roads.

The amended version of SBX1-1 includes new funding for public transit, which would be derived from the following sources:

- Increase in the percentage of cap-and-trade auction proceeds continuously appropriated to the Transit and Intercity Rail Capital Program from 10 percent to 20 percent. Assuming that the total amount of cap-and-trade revenues raised through the allowance auctions held by the California Air Resources Board (CARB) is \$2 billion per year, as projected in the Governor's FY 2017 budget, this program would receive \$400 million, as opposed to \$200 million under current law.
- Increase in the percentage of cap-and-trade auction proceeds continuously appropriated to

the Low Carbon Transit Operations Program (LCTOP) from 5 percent to 10 percent. This means the amount distributed to this program on an annual basis would grow from \$100 million to \$200 million, again assuming that cap-and-trade auction proceeds are \$2 billion a year.

- Requirement that a total of \$550 million in cap-and-trade auction proceeds currently dedicated to high-speed rail be set aside for allocation to intercity, commuter and urban rail systems through a competitive process administered by the CTC for projects that enhance connectivity to the state's planned high-speed rail system.
- Increase in the diesel sales tax rate to provide additional funding for the State Transit Assistance Program (STA). SBX1-1 requires public transit agencies to expend these new revenues for activities related to: (1) repairing, maintaining, rehabilitating, or modernizing their existing vehicles or facilities; or (2) designing, acquiring or construction new vehicles or facilities that would improve existing services or allow for the implementation of future planned services.

In addition to raising new revenues for transportation purposes, the amended version of SBX1-1 would:

- Address the volatility of the variable portion of the state's gasoline excise tax by: (1) ending the Board of Equalization's annual adjustments; (2) converting the variable rate to a fix rate of 17.3 cents per gallon; and (3) indexing the fixed rate to inflation to maintain purchasing power.
- End the erosion of purchasing power of the existing 18-cent-per-gallon gasoline and 13-cent-per gallon diesel excise taxes by indexing them to inflation.
- Retain half of the revenues generated annually from vehicle weight fees (approximately \$500 million) in the State Highway Account for transportation purposes, rather than transferring these dollars to the General Fund for bond debt service. In addition, SBX1-1 requires the Department of Finance to develop a plan to ensure that all vehicle weight fee revenues are being spent for transportation purposes no later than FY 2022.
- Require Caltrans to submit a plan for increasing its efficiency by up to 30 percent over the next three fiscal years to the CTC. SBX1-1 also requires Caltrans to present to the CTC a five-year plan for generating additional income from properties that the department owns.
- Create the Division of Active Transportation within Caltrans to administer the state's Active Transportation Program (ATP). In addition, SBX1-1 requires \$100 million per year in cap-and-trade auction proceeds to be allocated to the ATP.
- Require gas tax revenues derived from boats, agricultural vehicles and off-road vehicles to be deposited into HUTA, rather than the General Fund, and distributed to cities and counties for local roadway purposes.

• Require any reduction in debt service costs resulting from a refunding of transportationrelated general obligation bonds to be transferred from the General Fund to the CTC for allocation to high-priority state highway and local street/road maintenance and rehabilitation projects.

The amended version of SBX1-1 incorporates a number of policy proposals that were included in the Governor's transportation funding package, or that were suggested by the Assembly and Senate Republican caucuses. These policy measures include:

- Making the existing statutory authority for using public-private partnerships for transportation projects permanent, as well as amending current law to allow VTA to take advantage of this project delivery tool.
- Creating an Office of the Transportation Inspector General to ensure that Caltrans, the California High-Speed Rail Authority and other state agencies expending state transportation funds are operating efficiently, effectively, and in compliance with applicable federal and state laws.
- Providing an exemption from the California Environmental Quality Act (CEQA) for roadway maintenance projects occurring within existing rights-of-way.
- Pulling the CTC out from under the California State Transportation Agency (CalSTA) and re-establishing it as a separate state government entity.
- Establishing an Advanced Transportation Project Mitigation Program administered by the state Natural Resources Agency to accelerate project delivery and improve the outcomes of environmental mitigation through the use of mitigation banks, mitigation credits, conservation easements, and other tools.
- Extending indefinitely the statutory authorization for Caltrans to participate in a federal program that allows states to assume the responsibilities of the Federal Highway Administration (FHWA) under the National Environmental Policy Act (NEPA).

SBX1-1 is currently pending before the Senate Appropriations Committee. If approved by this committee, the bill would move to the Senate Floor, where a two-thirds majority vote is required for passage.

State Transportation Improvement Program: The CTC is poised to approve the 2016 State Transportation Improvement Program (STIP), which will cover FY 2017 through FY 2021. Because of an anticipated funding shortfall, the recommended 2016 STIP reflects the following: (1) no new projects; (2) project deletions and delays proposed by Caltrans and regional transportation agencies; and (3) additional project deletions and delays proposed by CTC staff that take into consideration geographic balance and other factors to ensure that the STIP stays within the amount of funding expected to be available.

Currently, the only source of funding for the STIP is the variable gas tax. The variable gas tax is a product of the complex transportation funding swap that was enacted by the Legislature in 2010-2011. Under the swap, the state's share of the sales tax on gasoline was eliminated and replaced with a variable excise tax that the Board of Equalization is required to adjust annually to ensure that the same amount of money is being generated as by the former sales tax. Revenues derived from the variable gas tax are allocated 44 percent to cities and counties for local streets/roads; 44 percent to the STIP; and 12 percent to the SHOPP.

Originally established at 17.3 cents per gallon in 2010, the variable gas tax rate has been adjusted annually since then. Earlier this year, the Board of Equalization announced that because of a continuing decline in fuel prices, the rate will be reduced to 9.8 cents per gallon, effective July 1, 2016. This action will be the third fiscal year in a row in which the Board of Equalization has adjusted the rate downward.

The CTC is required by law to estimate the amount of funding expected to be available over the five-year STIP period. The Fund Estimate for the 2016 STIP, which was adopted by the commission in January, takes into account the loss of revenues resulting from current and potentially future downward adjustments to the variable gas tax rate. The Fund Estimate projects a \$1.5 billion shortfall in the amount of money needed to meet project commitments made in the 2014 STIP for FY 2017 through FY 2019. This marks the largest scaling back of the STIP since the creation of its current funding structure nearly 20 years ago. As a result, there is no capacity to add any new projects to the 2016 STIP. Instead, 98 projects totaling \$754 million are recommended for full or partial deletion from the STIP, while another 90 projects totaling \$755 million are recommended to be delayed to FY 2020 and FY 2021.

The variable gas tax problem is one of a myriad of issues being discussed as the Legislature grapples with trying to put together a comprehensive transportation funding package. The three major proposals that have been put forth -- SBX1-1, AB 1591 (Frazier) and Gov. Brown's plan -- all address the volatility of the variable gas tax in the same way. They call for converting the variable rate to a fix rate (18 cents per gallon under the Governor's plan versus 17.3 cents per gallon under SBX1-1 and AB 1591) and indexing the fixed rate to inflation to maintain purchasing power. However, this approach has not gained the support of Assembly or Senate Republicans, who consider it to be a tax increase.

Meanwhile, SB 321 (Beall) continues to linger on the Senate Floor. Addressing the problem in a completely different way, this bill changes the methodology used by the Board of Equalization to set the rate for the variable gas tax. While SB 321 would not eliminate downward adjustments to the rate, it would substantially "smooth out" the impact of any adjustments and, thus, reduce the volatility of this revenue stream.

<u>High-Speed Rail:</u> During the week of April 25, the California High-Speed Rail Authority formally adopted its 2016 business plan, which signals a major shift in the proposed planning and construction of the state's high-speed rail project. Rather than pursuing a south-oriented Initial Operating Segment (IOS) from the city of Merced in the Central Valley through the Tehachapi Mountains to the San Fernando Valley in Los Angeles County, the High-Speed Rail Authority is now proposing a north-oriented IOS running from the Central Valley to San Jose.

The authority expects construction of the north-oriented IOS to be completed by 2024 and service to begin in 2025. The estimated cost is \$20.8 billion, and encompasses everything needed to construct the line and start revenue service, including rolling stock, maintenance facilities, stations, and all necessary rail systems. The business plan indicates that the north-oriented IOS can be completed using Proposition 1A bond revenues, federal funds already committed to the high-speed rail project, continued annual appropriations of cap-and-trade auction proceeds, and financing to be repaid with cap-and-trade money expected to be available from 2025 through 2050.

In addition, the 2016 business plan presents a fiscally constrained funding strategy for proceeding with an extension of the IOS to Bakersfield and to San Francisco, as well as corridor improvements between Burbank and Anaheim.

Finally, the plan updates the capital costs and schedule for the entire Phase I of the high-speed rail system (San Francisco to Anaheim), and assumes additional funding will become available, so that Phase 1 would be completed and operational by 2029. However, while the business plan discusses potential revenue sources that might be able to partially pay for additional portions of Phase I, it does not include a full funding plan.

State Transit Assistance Program: STA funding is derived solely from the sales tax on diesel fuel. The amount of money available for public transit agencies under this program varies from year to year based on the ups and downs of diesel fuel prices. The State Controller's Office is responsible for allocating STA dollars to the 26 regional transportation agencies in California, which subsequently suballocate the funds to public transit operators within their respective jurisdictions.

STA was created through the enactment of the Transportation Development Act in the early 1970s. For most of the life of this program, public transit operators and regional transportation agencies have understood the following:

- 50 percent of all STA funding flows from the State Controller's Office to regions based on the ratio of the population of each region to the population of the state. Each regional transportation agency has the discretion to determine how to suballocate these population-based dollars to public transit operators within its jurisdiction.
- 50 percent of all STA funding flows from the State Controller's Office to regions based on the ratio of the locally generated revenues of each public transit operator in each region to the locally generated revenues of all public transit operators in the state. Each regional transportation agency is required to suballocate these revenue-based dollars to public transit operators within its jurisdiction based on the specific ratios published by the Controller's Office.
- The definition of "transit operator" used by the Controller's Office to generate a list of eligible STA recipients each year means an agency providing transportation services to the general public for which a fare is collected.
Late last year, the State Controller's Office reinterpreted the statutes and regulations governing STA, and implemented significant changes to how STA revenue-based funds are to be distributed without any opportunity for legislative or public review and comment. These controversial changes went into effect starting with the first quarter allocations for FY 2016, which were issued in January 2016. The changes have resulted in a shifting of STA revenue-based funds not only between different regions of the state, but also between different public transit operators within each region, thereby creating winners and losers up and down the state. Moreover, the Controller's Office has stated that public transit operators are no longer guaranteed their share of STA revenue-based funds. Instead, the Controller's Office intends to calculate the total amount of STA revenue-based funding that would be allocated to each region, and then leave it up to each regional transportation agency to determine the suballocations to the public transit operators within its jurisdiction.

In response, the California Transit Association is pursuing a two-pronged legislative strategy to address this situation. First, in the short-term, the Association is pushing for the enactment of FY 2017 budget trailer bill language that would require the State Controller's Office to use the longstanding STA methodology for distributing any unallocated FY 2016 and all FY 2017 revenue-based funds. Second, the Association is planning to develop a subsequent policy measure to take effect beginning in FY 2018 that would fix the ambiguities in the current STA statutory and regulatory framework that caused the Controller's Office to depart from the longstanding methodology for distributing revenue-based funds.

In order to maintain STA as a stable source of public transit funding, it has become apparent that statutory changes clarifying how STA revenue-based dollars should be allocated are necessary. Making these changes through the policy bill process, however, may take some time. The budget trailer bill language is intended to prevent the State Controller's Office from using its reinterpreted allocation methodology until the appropriate statutory clarifications can be enacted. For the time being, the Controller's Office would be required to use the same list of eligible recipients and the same proportional shares as were used for the fourth quarter of FY 2015.

Prepared By: Kurt Evans, Government Affairs Manager Memo No. 5392

LEGISLATIVE UPDATE MATRIX 2015 - 2016 State Legislative Session April 22, 2016

2016 Regular Session Calendar

DAY	JANUARY			
1	Statutes signed into law in 2015 take effect.			
4	egislature reconvenes.			
10	udget must be submitted by the Governor to the Legislature on or before is date.			
15	Last day for policy committees to hear and report fiscal bills introduced in their house of origin in 2015.			
22	Last day for any committee to hear and report to the floor bills introduced in their house of origin in 2015.			
22	Last day to submit bill requests to the Legislative Counsel's Office.			
31	Last day for bills introduced in 2015 to be passed out of their house of origin.			

DAY	FEBRUARY
19	Last day for new bills to be introduced.
DAY	MARCH

17	Spring Recess begins upon adjournment.
28	Legislature reconvenes from Spring Recess.

DAY	APRIL
22	Last day for policy committees to hear and report fiscal bills introduced in their house of origin in 2016.

DAY	MAY
6	Last day for policy committees to hear and report to the floor non-fiscal bills introduced in their house of origin in 2016.
27	Last day for fiscal committees to hear and report to the floor bills introduced in their house of origin in 2016.

DAY	JUNE
3	Last day for bills introduced in 2016 to be passed out of their house of origin.
15	Budget must be passed by midnight.
30	Last day for legislative measures to qualify for placement on November 8 general election ballot.

DAY	JULY
1	Last day for policy committees to hear and report bills introduced in the other house. Summer Recess begins upon adjournment, provided that the Budget Bill has been enacted.

DAY	AUGUST			
1	Legislature reconvenes from Summer Recess.			
12	Last day for fiscal committees to hear and report to the floor bills introduced in the other house.			
19	Last day to amend bills on the Assembly and Senate floors.			
31	Last day for each house to pass bills. Final Recess begins at the end of this day's session.			

DAY	SEPTEMBER
30	Last day for the Governor to sign or veto bills passed by the Legislature before September 1, and in his possession on or after September 1.

DAY DECEMBER

5 2017-2018 Regular Session convenes.

2015-2016 Legislative Update Matrix

State Assembly Bills

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 12 (Cooley) State Agency Regulations	By January 1, 2018, requires each state agency to do all of the following: (1) review all provisions of the California Code of Regulations adopted by that state agency; (2) identify any regulations that are duplicative, overlapping, inconsistent, or out-of-date; and (3) adopt, amend or repeal regulations to reconcile or eliminate any duplication, overlap, inconsistencies, or out-of-date provisions.	8/19/15	Senate Appropriations Committee	
AB 51 (Quirk) Motorcycles: Lane Splitting	Allows a motorcycle that has two wheels in contact with the ground to be driven between rows of stopped or moving vehicles in the same lane, including both divided and undivided streets, roads or highways, if both of the following conditions are present: (1) the motorcycle is not driven at a speed of more than 50 miles per hour (mph); and (2) the motorcycle is not driven more than 15 mph faster than the speed of traffic moving in the same direction. Specifies that the provisions of the bill do not authorize a motorcycle to be driven in contravention of other laws relating to the safe operation of a vehicle.	5/22/15	Senate Transportation & Housing Committee	
AB 156 (Perea) Cap-and-Trade: Disadvantaged Communities Technical Assistance Program	Requires the California Air Resources Board (CARB) to prepare and post on its Internet Web site a report on the projects being funded with cap-and-trade auction proceeds from the Greenhouse Gas Reduction Fund. Requires this report to include all of the following: (1) a general description of each project; (2) the location where each project will be implemented; (3) the estimated date of completion of each project; (4) the amount awarded to each project; and (5) the status of any revenues in the Greenhouse Gas Reduction Fund not awarded to projects and the reasons why those moneys have not been awarded. Upon an appropriation of cap-and-trade auction proceeds from the Greenhouse Gas Reduction Fund, requires CARB to establish a comprehensive technical assistance program for eligible applicants assisting disadvantaged communities that CARB determines require technical assistance in accessing programs funded with cap-and-trade auction proceeds. Requires this program to provide assistance to eligible applicants with regard to any of the following: (1) identifying state agencies with appropriate grant programs; (2) developing competitive project proposals to apply for cap-and-trade funding available through state agencies; (3) coordinating existing local programs to reduce greenhouse gas emissions with new programs receiving cap-and-trade funding; or (4) conducting community outreach to residents of disadvantaged communities that CARB determines require such assistance. Requires the technical assistance provided pursuant to the bill to promote programs that reduce greenhouse gas emissions and demonstrate a direct, meaningful benefit to disadvantaged communities.	8/18/15	Senate Appropriations Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 318 (Chau) Lost Items Found on Public Transit Property	If a lost or unclaimed item worth \$100 or more in value is found on a vehicle or the property of a public transit agency, requires the person who found the item to turn it in to the public transit agency, rather than to law enforcement. Provides 90 days for the owner of the item to reclaim it from the public transit agency. Allows the public transit agency to require payment by the owner of a reasonable charge to defray the costs of storage and care of the property. If the reported value of the item is \$250 or more, and no owner appears and proves his or her ownership of the item within 90 days, requires the public transit agency to cause notice of the item to be published at least once in a newspaper of general circulation. If, after seven days, no owner appears and proves his or her ownership of the item, and the person who found or saved the item pays the cost of the publication, provides that the title shall vest in that person. If the item was found in the course of employment by an employee of the public transit agency, requires the item to be sold at public auction. If the reported value of the item is less than \$250, and no owner appears and proves his or her ownership of the item within 90 days, provides that the title shall vest in the person who found the item. If the item was found in the course of employment by an employee of the public transit agency: (1) if the owner of a bicycle suppears within 45 days after receipt by the public transit agency to give notice of the sale at public cauction to the highest bidder; (3) requires the public transit agency to give notice of the sale at public transit agency to destroy or otherwise dispose of it; and (5) allows a public transit agency to give notice of the sale at least five days prior to the auction by publication in a newspaper of general circulation in the courty in which the bicycle wore dispose of it; and (5) allows a public transit agency to destroy or otherwise dispose of it; and (5) allows a public transit agency to donate an unclaimed bicycle	6/11/15	Senate Judiciary Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 338 (R. Hernandez) LA Metro: Local Transportation Sales Taxes	In addition to any other tax that it is authorized to impose or has imposed, allows the Los Angeles County Metropolitan Transportation Authority (LA Metro) to impose a transactions and use tax at the rate of 0.5 percent for a period not to exceed 30 years that would be applicable in the incorporated and unincorporated areas of Los Angeles County. Requires the ordinance imposing the tax to contain the following: (1) an expenditure plan that lists the transportation projects and programs to be funded from net revenues from the tax; (2) a requirement that the expenditure plan include measures to ensure that net revenues are share equitably between regions of the county; (3) a provision limiting LA Metro's costs of administering the ordinance and the net revenues from the tax to 1.5 percent of the total tax revenues; (4) a requirement that the net revenues from the tax, defined to mean the total tax revenues less any refunds, costs of administration by the state Board of Equalization and LA Metro's administrative costs, be used to fund the transportation projects and programs identified in the expenditure plan; (4) a requirement that LA Metro, during the period that the ordinance is operative, allocate 20 percent of all net revenues from the tax for operating costs associated with bus service provided by LA Metro and the municipal transit operators in Los Angeles County; and (5) a requirement that LA Metro, during the period that the ordinance is operative, allocate 5 percent of all net revenues from the tax for rail operations. Requires LA Metro to notify the Legislature prior to taking action on any amendments to the adopted expenditure plan. Provides that the ordinance shall become operative if approved by a two-thirds vote of the electorate in Los Angeles County. Authorizes LA Metro to incur bonded indebtedness payable from the net revenues of the tax.	4/13/15	Senate Transportation & Housing Committee	
AB 516 (Mullin) Temporary License Plates	No later than January 1, 2018, requires the Department of Motor Vehicles to develop and implement an operational system that allows a vehicle dealer or lessor-retailer to electronically report the sale of a vehicle and provide a temporary license plate. Requires the dealer or lessor-retailer to attach a temporary license plate at the point of sale. Allows a vehicle to operate with temporary license plates until either: (1) the permanent license plates and registration card are received by the vehicle owner; or (2) 90 days have lapsed from the vehicle's selling date. Allows a vehicle to continue to display a report-of-sale form or temporary license plates after 90 days if the owner has not yet received the permanent license plates, and provides proof that he or she has submitted an application to the DMV. Requires the DMV to assess a fee for the recording of notices of delinquent parking and toll evasion violations given to the department by a processing agency that is sufficient to provide a total amount equal to at least its actual costs related to administering the electronic report-of-sale and temporary license plate system. Beginning January 1, 2018, authorizes vehicle dealers to raise their document processing fees by \$10. In addition, allows vehicle dealers to impose an electronic filing charge for reporting vehicle sales and producing temporary license plates. Specifies that it is a felony for a person to alter, forge, counterfeit, or falsify a temporary license plate.	7/16/15	Senate Floor	Support

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 590 (Dahle) Cap-and-Trade: Biomass Power Generation	Allows cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund to be made available to the State Energy Resources Conservation and Development Commission, upon appropriation by the Legislature, for purposes related to maintaining the current level of biomass power generation and geothermal energy generation in California, and revitalizing currently idle facilities in strategically located regions. To be eligible for funding, requires a generation facility to satisfy all of the following: (1) the energy is generated on and after January 1, 2016; (2) the energy is generated using biomass wood wastes and residues or geothermal resources, and is sold to a load-serving entity; (3) the energy is generated at a facility with a generation capacity of more than three megawatts; and (4) the energy is generated within California and sold to customers within the state. In prioritizing projects for funding, requires the State Energy Resources Conservation and Development Commission to maximize the reduction of greenhouse gas emissions achieved by a project for each dollar awarded. Working in consultation with the California Air Resources Board (CARB), requires the State Energy Resources Conservation and Development Commission to ensure that projects receiving funding achieve net reductions in greenhouse gas emissions.	7/9/15	Senate Appropriations Committee	
AB 620 (R. Hernandez) LA Metro Express Lanes: Low-Income Assistance Program	Requires the Los Angeles County Metropolitan Transportation Authority (LA Metro) to take additional steps to increase enrollment and participation in its existing low-income assistance program related to its I-10 and I-110 express lanes. In this regard, requires LA Metro to improve the awareness of the program through advertising, and by working with local community groups and social service agencies to distribute information about the program. Requires LA Metro to consider offering greater incentives to encourage participation in the program.	1/27/16	Senate Transportation & Housing Committee	
AB 645 (Williams) Electricity: California Renewables Portfolio Standard	Pursuant to the California Renewables Portfolio Standard, requires the California Public Utilities Commission (CPUC), by January 1, 2017, to establish the quantity of electricity products from eligible renewable energy resources to be procured by each retail seller for specified compliance periods sufficient to ensure that the procurement of electricity products from these resources achieves 50 percent of retail sales by December 31, 2030. Requires the quantities to reflect reasonable progress in each of the intervening years sufficient to ensure that the procurement of electricity products from eligible renewable energy resources achieves 25 percent of retail sales by December 31, 2016; 33 percent by December 31, 2020; 38 percent by December 31, 2023; 44 percent by December 31, 2026; and 50 percent by December 31, 2030. Requires the CPUC to require retail sellers to procure not less than 50 percent of retail sales of electricity products from eligible renewable energy resources in all subsequent years.	As Introduced	Senate Appropriations Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 678 (O'Donnell) Energy Efficiency and Greenhouse Gas Reductions Ports Program	Requires the California Air Resources Board (CARB), in conjunction with the State Energy Resources Conservation and Development Commission, to develop and implement an Energy Efficiency and Greenhouse Gas Reductions Ports Program. Provides that the purpose of this program is to fund energy efficiency upgrades and investments at public ports that help reduce the emissions of criteria pollutants, toxic air contaminants and greenhouse gases. Authorizes CARB to expend cap-and-trade auction proceeds that it receives from an appropriation from the Greenhouse Gas Reduction Fund to implement the program. In order to receive funding from the program for energy-related projects, requires a port to develop and adopt, in consultation with the respective electric utility providing service to the port, an energy plan. Requires a port's energy plan to be approved by the State Energy Resources Conservation and Development Commission. Provides that the plan shall: (1) adhere to the state's preferred energy loading order; and (2) require benchmarking for energy retrofit projects and reporting of measurable energy savings. In prioritizing projects for funding, requires CARB to consider the extent to which a project would reduce greenhouse gas emissions, and provide environmental and public health co-benefits, including improved air and water quality.	8/18/15	Senate Appropriations Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 779 (Garcia) Congestion Management Programs	Makes a number of modifications to state statutes pertaining to congestion management programs (CMPs). Eliminates the requirement that an infill opportunity zone must be located within one-half mile of a major transit stop and, instead, allows a city or county to designate an area as an infill opportunity zone if it is a transit priority area within a sustainable communities strategy or alternative planning strategy adopted by the applicable metropolitan planning organization (MPO). Replaces traffic level of service standards within a CMP with "measures of effectiveness" established for a system of highways and roadways designed by the congestion management agency (CMA). Requires the performance element of a CMP to include performance measures that support greenhouse gas emissions reduction objectives, as well as mobility, air quality, land-use, and economic objectives. Requires the land-use element of a CMP to analyze the relationship between land-use decisions made by local jurisdictions and regional transportation systems, instead of analyzing the impacts of local land-use decisions on regional transportation systems. If the capital improvement program (CIP) element of a CMP includes capacity enhancement projects, requires a CMA to develop a uniform data base on transportation system. At least biennially, requires a CMA to determine if the applicable county and cities are conforming to its CMP, including, but not limited to, the following: (1) achieving performance standards for the transportation system; and (3) adoption and implementation of a deficiency plan, if required. Requires a city or county to prepare a deficiency plan if the CMA determines that it is not conforming with the CMP. Regarding the preparation of a deficiency plan, adds the following to the list of exclusions from an analysis of the cause of a deficiency plan, adds the following to the list of exclusions from an analysis of the cause of a deficiency plan, adds the following to the list of exclusions from an analysis of the cause of a de	8/19/15	Senate Transportation & Housing Committee	
AB 828 (Low) Regulated Transportation Services	Until January 1, 2018, excludes any motor vehicle operated in connection with a transportation network company from the definition of "commercial vehicle" if the vehicle: (1) is operated only for passenger service; (2) is limited to seven passengers, not including the driver; (3) is operated exclusively by the person to whom it is registered or insured; (4) is not a paratransit vehicle; (5) is not operated for public transit services; and (6) is not operated for school bus services. Requires the California Public Utilities Commission (CPUC) to conduct an investigation to consider whether existing statutes and regulations relating to transportation services meet the public interest, encourage innovation, and create a fair and competitive transportation market between companies that provide regulated transportation services. Requires the CPUC to complete this investigation, and report its conclusions and recommendations to the Legislature by January 1, 2017.	7/14/15	Senate Energy, Utilities & Communications Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 869 (Cooper) Fare Evasion and Prohibited Conduct on Transit Vehicles	For those public transit agencies that use an administrative adjudication process for fare evasion and passenger misconduct violations, provides that a person who fails to pay the administrative penalty when due or to have the violation dismissed may be subject to criminal penalties. Requires the public transit agency to include in the notice of fare evasion or passenger misconduct a printed statement indicating that the person may be charged with an infraction or misdemeanor if the administrative penalty is not paid when due or is not dismissed. Requires the public transit agency to dismiss the original notice of fare evasion or passenger misconduct, and to make no further attempts to collect the administrative penalty if the person is charged with an infraction or misdemeanor after failing to pay the administrative penalty or failing to successfully complete the administrative adjudication process. Requires the public transit agency to serve the person charged with an infraction or misdemeanor with a new notice of fare evasion or passenger misconduct that sets forth the criminal violation.	6/18/15	Senate Floor	
AB 1030 (Ridley-Thomas) Cap-and-Trade: Disadvantaged Workers	For projects involving hiring that are seeking an allocation of cap-and-trade auction proceeds from the Greenhouse Gas Reduction Fund, requires priority to be given to those projects that support the targeted training and hiring of workers from disadvantaged communities for career-track jobs.	7/7/15	Senate Appropriations Committee	
AB 1169 (Gomez) Strategic Growth Council: Signs for Project Funding	Requires recipients of state grant funding from the Strategic Growth Council or any of its member state agencies for a project located in a public place and that provides public benefits to post signs acknowledging the sources of funds for the project pursuant to guidelines adopted by the council. If the state funding equals 50 percent or more of the total cost of the project, requires the state funding sources to be listed first on the signs.	9/4/15	Senate Floor	
AB 1176 (Perea) Advanced Low- Carbon Diesel Fuels Access Program	Establishes the Advanced Low-Carbon Diesel Fuels Access Program to be administered by the State Energy Resources Conservation and Development Commission, in consultation with the California Air Resources Board (CARB). Specifies that the purpose of the program is to reduce greenhouse gas emissions of diesel motor vehicles by providing capital assistance for projects that expand advanced low-carbon diesel fueling infrastructure in communities that are disproportionately impacted by environmental hazards and where the greatest air quality impacts can be identified. Requires cap-and-trade auction proceeds from the Greenhouse Gas Reduction Fund to be available, upon appropriation by the Legislature, for implementing this program.	8/18/15	Senate Appropriations Committee	
AB 1360 (Ting) Transportation Network Companies: Ridesharing	Allows a transportation network company or a charter-party carrier of passengers that prearranges a ride among multiple passengers who share the ride in whole or in part to charge an individual fare, rather than a vehicle-mileage or time-of-use fare, provided that all of the following conditions are met: (1) the vehicle seats no more than seven passengers, not including the driver; (2) the driver is a participating driver, as defined; (3) the vehicle is not used to provide public transit services or to carry passengers over a fixed route; (4) the vehicle is not used to provide pupil transportation or public paratransit services; and (5) the individual fare for each passenger is less than the fare that would be charged for the same ride to a passenger traveling alone.	7/2/15	Senate Energy, Utilities & Communications Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 1364 (Linder) California Transportation Commission	Excludes the California Transportation Commission (CTC) from the California State Transportation Agency (CalSTA), and establishes it as a separate and independent entity in state government.	As Introduced	Senate Transportation & Housing Committee	
AB 1549 (Wood) State Highway Rights- of-Way: Fiber-Optic Cables	Requires Caltrans to maintain an inventory of all conduits owned by the department that: (1) house fiber optic communication cables; (2) are located in state highway rights-of-way; and (3) were installed on or after January 1, 2017.	1/14/16	Senate Transportation & Housing Committee	
AB 1550 (Gomez) Greenhouse Gas Reduction Fund: Investment Plan	Requires the three-year investment plan prepared by the Department of Finance for the expenditure of cap-and-trade auction proceeds deposited in the Greenhouse Gas Reduction Fund to do the following: (1) allocate a minimum of 25 percent of available dollars in the fund to projects located within the boundaries of, and benefitting individuals living in, disadvantaged communities; and (2) allocate a minimum of 25 percent to projects that benefit low-income households, which must be separate from the minimum 25 percent required for disadvantaged communities.	4/11/16	Assembly Appropriations Committee	
AB 1555 (Gomez) Cap-and-Trade Auction Proceeds: FY 2017 Funds	For FY 2017, appropriates \$800 million in cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund for the following: (1) \$290 million to the California Air Resources Board (CARB) for low carbon transportation and infrastructure programs; (2) \$10 million to CARB for active transportation and transit pass investments; (3) \$100 million to the Department of Community Services and Development, and the California Conservation Corps for weatherization and low-income solar rooftop programs; (4) \$100 million to the State Energy Resources Conservation and Development Commission, and the Department of Water Resources for equipment and other replacement programs; (5) \$10 million to the Department of Water Resources for energy efficient groundwater pump replacement grant programs; (6) \$5 million to the Department of Food and Agriculture, and \$15 million to the Department of Resources Recycling and Recovery to provide incentive programs for water diversion, biogas development and compost programs; (7) \$10 million to the Department of Fish and Wildlife for wetland development, rehabilitation and enhancement; (9) \$85 million to the California Coastal Conservancy for wetland and watershed restoration, and carbon sequestration; (10) \$15 million to the Natural Resources Agency for local-climate-beneficial projects; (12) \$10 million to the Natural Resources Agency for agricultural and rangeland carbon sequestration programs; and (13) \$25 million to the Department of Forestry and Fire Protection for urban forestry. States the intent of the Legislative priorities.	3/28/16	Assembly Budget Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 1569 (Steinorth) CEQA: Exemption for Certain Transportation Projects	Exempts from the California Environmental Quality Act (CEQA) a project that consists of the inspection, maintenance, repair, rehabilitation, replacement, or removal of existing transportation infrastructure, including highways, roadways, bridges, tunnels, culverts, public transit systems, bikeways, paths and sidewalks serving bicycles or pedestrians, and the addition of auxiliary lanes or bikeways to existing transportation infrastructure, if the project meets all of the following conditions: (1) the project is located within an existing right-of-way; (2) any area surrounding the right-of-way that is to be altered as a result of construction activities that are necessary for the completion of the project will be restored to its condition before the project; and (3) the project does not add additional motor vehicle lanes, except auxiliary lanes.	3/28/16	Assembly Natural Resources Committee	
AB 1572 (Campos) School Transportation	Provides that a pupil attending a public, non-charter school that is eligible for Title 1 federal funding shall be entitled to free transportation to and from school if either of the following conditions are met: (1) the pupil resides more than one-half mile from the school; or (2) the neighborhood through which the pupil must travel to get to school is unsafe due to such factors as stray dogs, lack of sidewalks, known gang activity, presence of environmental problems and hazards, required crossings of freeways or busy intersections, or other reasons as documented by stakeholders. Requires a school district not currently providing transportation to all pupils attending schools that are eligible for Title 1 federal funding to implement a plan to ensure that all pupils entitled to free transportation pursuant to this bill receive it. Requires the plan to be developed in consultation with teachers, school administrators, regional and local transit authorities, local air districts, Caltrans, parents, pupils, and other stakeholders. Specifies that if free, dependable and timely transportation is currently not already available to pupils who are entitled to it pursuant to this bill to middle school and high school pupils if all of the following conditions are met: (1) all drivers of the transit agency are public employees; and (2) the transit agency can certify that the public transit system can ensure consistent, adequate routes and schedules to enable pupils to get home, to school and back, and does not charge the school district more than marginal cost for each transit pass. Creates the Transportation and Access to Public School Fund. Upon appropriation by the Legislature, requires revenues distributed to the Transportation and Access to Public School Fund. Upon appropriation by the Legislature, requires revenues distributed to the Transportation and Access to Public School Fund to be allocated to local educational agencies pursuant to a process established by the Department of Education.	4/5/16	Assembly Education Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 1591 (Frazier) Transportation Funding	Proposes to generate new revenues for transportation purposes from the following sources: (1) an increase in the gasoline excise tax of 22.5 cents per gallon; (2) an increase in the diesel excise tax of 30 cents per gallon; (3) a registration surcharge of \$165 per year imposed on all motor vehicles; and (4) a registration surcharge of \$165 per year imposed on zero-emission vehicles. Requires the repayment over the next two years of approximately \$879 million in outstanding loans owed by the General Fund to the State Highway Account, the Motor Vehicle Fuel Account, the Highway Users Tax Account (HUTA), and the Motor Vehicle Account. Beginning July 1, 2019, and every three years thereafter, indexes the gas tax and the diesel excise tax to inflation. Calls for the revenues derived from the 30-cent-per-gallon increase in the diesel excise tax to be deposited into the Trade Corridors Improvement Fund and used for goods movement projects programmed by the California Transportation Commission (CTC). Requires the revenues derived from the 22.5-cent-per gallon increase in the gas tax and the two vehicle registration surcharges to be deposited into a new Road Maintenance and Rehabilitation Account. Requires the revenues in the account to be used for the following purposes: (1) road maintenance and rehabilitation; (2) safety projects; (3) railroad grade separations; and (4) active transportation and pedestrian/bicycle safety projects in conjunction with any other allowable project. Requires 5 percent of the funds in the Road Maintenance and Rehabilitation Account to be set aside for counties that currently do not have a local transportation sales tax, but gain voter approval for one after July 1, 2016. Allocates the remaining balance in the account after the 5-percent set-aside as follows: (1) 50 percent to Caltrans for state highway maintenance, or State Highway Operation and Protection Program (SHOPP) projects; and (2) 50 percent to cities and counties for thei local roadway systems. In the latter case, equally divides	As Introduced	Assembly Transportation Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 1592 (Bonilla) Contra Costa Transportation Authority: Autonomous Vehicles Pilot Project	Authorizes the Contra Costa Transportation Authority (CCTA) to conduct a pilot project for the testing of autonomous vehicles that do not have an operator, and that are not equipped with a steering wheel, a brake pedal or an accelerator, provided that the following requirements are met: (1) the testing is conducted only at a privately owned business park designated by CCTA and at the GoMentum Station located within the boundaries of the former Concord Naval Weapons Station; (2) the autonomous vehicles operate at speeds of less than 35 miles per hour; and (3) a change in ownership of the property comprising the GoMentum Station does not affect the authorization to conduct the testing.	3/28/16	Senate Rules Committee	
AB 1595 (Campos) Mass Transportation Employees: Human Trafficking Training	Requires a private or public employer that provides mass transportation services in California to train its relevant employees in recognizing the signs of human trafficking and how to report those signs to the appropriate law enforcement agency. Requires the Department of Justice to develop guidelines for this training that include all of the following: (1) the definition of human trafficking, including sex and labor trafficking; (2) myths and misconceptions about human trafficking; (3) red flags of human trafficking to be aware of, including physical and mental signs; and (4) guidance on how to report human trafficking, including national hotlines and that the person reporting may do so confidentially. By January 1, 2018, requires this training to be incorporated into the initial training process for all new employees who are likely to interact or come into contact with victims of human trafficking to receive this training by January 1, 2018. Exempts taxi services and airlines from the provisions of the bill.	3/29/16	Assembly Labor & Employment Committee	Support
AB 1640 (Stone) Retirement: Public Transit Employees	Clarifies that public transit employees whose interests are protected under Section 5333(b) of Title 49 of the United States Code and who became a member of a state or local public retirement system prior to December 30, 2014, are exempt from the California Public Employees' Pension Reform Act of 2013 (PEPRA).	As Introduced	Assembly Appropriations Committee	Sponsor
AB 1641 (Allen) Private Shuttles	Allows a public transit agency, by ordinance or resolution, to permit the vehicles of a private shuttle service provider to stop for the loading or unloading of its passengers alongside any or all curb spaces designated for the passengers of the public transit agency's buses. States that it is not the intent of the Legislature to replace public transit service.	As Introduced	Assembly Transportation Committee	
AB 1661 (McCarthy) Sexual Harassment Training and Education	Requires local agency officials to receive sexual harassment training and education if the agency provides any type of compensation, salary or stipend to those officials. Defines "local agency official" to mean any member of a local agency governing board and any elected local agency official. Allows a local agency to also require any of its employees to receive such training and education. Requires each local agency official or employee who is so required to receive at least two hours of sexual harassment training and education within the first six months of taking office or commencing employment, and every two years thereafter. Requires a local agency to maintain records indicating both of the following: (1) the dates that local agency officials or employees satisfied the requirements of this bill; and (2) the entity that provided the training.	4/11/16	Assembly Appropriations Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 1665 (Bonilla) Contra Costa Transportation Authority: Transactions and Use Taxes	Until December 31, 2024, allows the Contra Costa Transportation Authority to impose a transactions and use tax for the support of countywide transportation programs at a rate of not more than 0.5 percent that would, in combination with all other such taxes imposed in the county, exceed the state's limit of 2 percent, subject to the following conditions: (1) the authority adopts an ordinance imposing the tax by the appropriate voting approval requirement; and (2) the ordinance is submitted to the county's electorate on a November general election ballot and is approved by the voters pursuant to Article XIII C of the California Constitution.	As Introduced	Assembly Revenue & Taxation Committee	
AB 1669 (R. Hernandez) Service Contracts: Solid Waste Collection and Transportation	Requires local agencies to give a bidding preference to any bidder on a contract for the collection and transportation of solid waste who agrees to retain employees of the prior contractor or subcontractor.	3/8/16	Assembly Appropriations Committee	
AB 1707 (Linder) Written Public Records Requests	Requires a local agency's response to a written request for public records that includes a denial of the request, in whole or in part, to be in writing. Requires a local agency's written response demonstrating that the record in question is exempt under an express provision of state law to also identify the type of record withheld and the specific exemption that justifies the withholding of that type of record.	3/28/16	Assembly Judiciary Committee	
AB 1717 (Hadley) Cap-and-Trade: High- Speed Rail	Provides that if the state's high-speed rail project becomes ineligible for cap-and-trade funding from the Greenhouse Gas Reduction Fund because of the selection of an alternative initial operating segment by the California High-Speed Rail Authority that is not as described in its 2012 business plan, requires the 25 percent in cap-and-trade auction proceeds that is required to be allocated to the authority under current law to be, instead, continuously appropriated to the Transit and Intercity Rail Capital Program.	3/18/16	Assembly Transportation Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 1746 (Stone) Transit-Bus-Only Traffic Corridors	Allows the Santa Clara Valley Transportation Authority (VTA), the Alameda-Contra Costa Transit District (AC Transit), the Central Contra Costa Transit Authority (County Connection), the Livermore Amador Valley Transit Authority, North County Transit District, the San Diego Association of Governments (SANDAG), and the San Diego Metropolitan Transit System (MTS) to utilize the shoulders of state highways within their service areas as transit-bus-only traffic corridors, subject to the approval of Caltrans and the California Highway Patrol (CHP). Requires these agencies to determine jointly with Caltrans and the CHP which state highway segments within their service areas would be designated as transit-bus-only traffic corridors based on right- of-way availability and capacity, peak congestion hours, and the most heavily congested areas. Requires the agencies to actively work with Caltrans and the CHP to develop guidelines that ensure driver and vehicle safety, as well as the integrity of the highway infrastructure. Requires the agencies and Caltrans to monitor the state of repair of highway shoulders used as transit-bus-only traffic corridors. Requires the agencies to be responsible for all costs associated with this effort, including those costs related to repairs attributable to the operation of transit buses on highway shoulders. Two years after an agency commences the operation of public transit service on a highway shoulder, requires the agency, in conjunction with Caltrans and the CHP, to submit a report to the Legislature that includes all of the following: (1) information regarding the geographic scope of the service; (2) a copy of the guidelines agreed to by the agency, Caltrans and the CHP; (3) information about any highway modifications; (4) information regarding the costs associated with the service; and (5) performance measures used to evaluate the success of the service, such as safety, freeway operations, and public transit travel time reliability and savings. Requires the agency to post the report o	3/30/16	Senate Rules Committee	Sponsor
AB 1768 (Gallagher) High-Speed Rail: Bond Funding	Specifies that no further bonds shall be sold for high-speed rail purposes pursuant to the Safe, Reliable High-Speed Passenger Train Bond Act for the 21 st Century (Proposition 1A), except as specifically provided with respect to an existing appropriation for early improvement projects related to the Phase I blended system. Upon appropriation by the Legislature, requires the unspent proceeds received from outstanding bonds issued and sold for high-speed rail purposes prior to the effective date of the provisions of this bill to be redirected to retiring the debt incurred from the issuance and sale of those outstanding bonds. Allows the remaining unissued bonds, as of the effective date of the provisions of this bill, that were authorized for high-speed rail purposes to be issued and sold. Upon appropriation by the Legislature, requires the net proceeds from the sale of these remaining unissued bonds to be made available to fund projects in the State Highway Operation and Protection Program (SHOPP). Makes no changes to the authorization under Proposition 1A for the issuance of \$950 million in bonds for rail purposes other than high-speed rail.	2/25/16	Assembly Transportation Committee	
AB 1780 (Medina) Cap-and-Trade: Trade Corridors	Requires 20 percent of the annual amount of cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund to be continuously appropriated to the California Transportation Commission (CTC) to be allocated to reduce greenhouse gas emissions in trade corridors consistent with the guidelines developed by the commission for the Proposition 1B Trade Corridors Improvement Fund.	3/28/16	Assembly Appropriations Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 1813 (Frazier) California High-Speed Rail Authority: Membership	Provides for the appointment of one senator by the Senate Rules Committee and one Assemblymember by the Speaker to serve as ex-officio members of the California High-Speed Rail Authority. Specifies that the ex-officio members shall participate in the activities of the High- Speed Rail Authority to the extent that such participation is not incompatible with their positions as members of the Legislature.	As Introduced	Senate Rules Committee	
AB 1815 (Alejo) Cap-and-Trade: Disadvantaged Communities Technical Assistance Program	Upon an appropriation of cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund, requires the California Environmental Protection Agency (CalEPA) to establish a comprehensive technical assistance program for eligible applicants assisting disadvantaged communities that the agency determines require technical assistance in accessing programs funded with cap-and-trade auction proceeds. Requires this program to provide assistance to eligible applicants with regard to any of the following: (1) identifying state agencies with appropriate grant programs; (2) developing competitive project proposals to apply for cap-and-trade funding available through state agencies; (3) coordinating existing local programs to reduce greenhouse gas emissions with new programs receiving cap-and-trade funding; or (4) conducting community outreach to residents of disadvantaged communities that CalEPA determines require such assistance. Requires the technical assistance provided pursuant to the bill to promote programs that reduce greenhouse gas emissions and demonstrate a direct, meaningful benefit to disadvantaged communities. Requires the three-year cap-and-trade investment plan developed by the Department of Finance and submitted to the Legislature to allocate money from the Greenhouse Gas Reduction Fund to CalEPA to implement the technical assistance program.	4/11/16	Assembly Appropriations Committee	
AB 1833 (Linder) Advanced Mitigation Program	Requires Caltrans to establish an Advanced Mitigation Program to accelerate project delivery and improve the outcomes of environmental mitigation for transportation infrastructure projects. Allows the program to utilize mitigation instruments, including mitigation banks and conservation easements. Allows Caltrans to use advanced mitigation credits to fulfill mitigation requirements of any environmental law for a transportation project eligible for the State Transportation Improvement Program (STIP), or the State Highway Operation and Protection Program (SHOPP).	3/16/16	Assembly Natural Resources Committee	
AB 1841 (Irwin) Office of Emergency Services: Cybersecurity	By July 1, 2017, requires the Office of Emergency Services to transmit to the Legislature the Cyber Security Annex to the State Emergency Plan, also known as Emergency Function 18 or EL 18, which must include all of the following: (1) methods for providing emergency services; (2) command structure for statewide coordinated emergency services; (3) emergency service roles of appropriate state agencies; (4) identification of resources to be mobilized; (5) public information plans; and (6) continuity of government services. By July 1, 2018, requires the Office of Emergency Services to develop a comprehensive cybersecurity strategy setting standards for state agencies to prepare for cybersecurity interference with, or the compromise or incapacitation of, critical infrastructure and the development of critical infrastructure information, and to transmit critical infrastructure information to the office. Requires each state agency to report on its compliance with these standards to the Office of Emergency Services in a manner and at a time directed by the office, but no later than January 1, 2019. Requires the Office of Emergency Services to provide suggestions to a state agency to improve its compliance with the standards.	4/14/16	Assembly Governmental Organization Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 1851 (Gray) Clean Vehicle Rebate Project	As part of the state's Clean Vehicle Rebate Project, requires the California Air Resources Board (CARB) to provide specified rebate amounts for the purchase of battery electric, fuel-cell and plug- in hybrid electric vehicles. Limits these rebates to vehicles with a manufacturer's suggested retail price of \$60,000 or less. Requires CARB to issue specified rebates to a property owner or lessee up to the costs associated with the purchase and installation of electric vehicle charging stations. Requires the rebates for clean-fuel vehicles and electric vehicle charging stations to be funded with cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund, subject to annual appropriations by the Legislature. For purposes of calculating the amount of sales and use tax owed, requires that the value of a trade-in vehicle be deducted from the sales price of the purchase of battery electric, fuel-cell and plug-in hybrid electric vehicles. Requires cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund, subject to annual appropriations by the Legislature, to be used to reimburse cities and counties for any resulting loss of revenues. Deletes the current 85,000 cap on the number of decals, stickers or other identifiers that can be issued by the Department of Motor Vehicles (DMV) to allow plug-in hybrid electric vehicles to use high-occupancy vehicle (HOV) lanes without the required number of occupants in the vehicle.	4/13/16	Assembly Transportation Committee	
AB 1866 (Wilk) High-Speed Rail: Bonding Funding	Specifies that no further bonds shall be sold for high-speed rail purposes pursuant to the Safe, Reliable High-Speed Passenger Train Bond Act for the 21 st Century (Proposition 1A), except as specifically provided with respect to an existing appropriation for early improvement projects related to the Phase I blended system. Upon appropriation by the Legislature, requires the unspent proceeds received from outstanding bonds issued and sold for high-speed rail purposes prior to the effective date of the provisions of this bill to be redirected to retiring the debt incurred from the issuance and sale of those outstanding bonds. Allows the remaining unissued bonds, as of the effective date of the provisions of this bill, that were authorized for high-speed rail purposes to be issued and sold. Upon appropriation by the Legislature, requires the net proceeds from the sale of these remaining unissued bonds to be made available to fund the construction of water capital projects, including desalination facilities, wastewater treatment and recycling facilities, reservoirs, water conveyance infrastructure, and aquifer recharge. Makes no changes to the authorization under Proposition 1A for the issuance of \$950 million in bonds for rail purposes other than high-speed rail.	As Introduced	Assembly Transportation Committee	
AB 1873 (Holden) Board of Infrastructure Planning, Development and Finance	Within the Strategic Growth Council, creates a Board of Infrastructure Planning, Development and Finance. Requires the board to categorize and recommend the priority of the state's infrastructure needs and develop funding to finance those projects.	3/18/16	Assembly Accountability & Administrative Review Committee	
AB 1886 (McCarty) CEQA: Transit Priority Projects	Specifies that a transit priority project shall be considered to be within one-half mile of a major transit stop or high-quality transit corridor and, thus, shall qualify for an exemption from the California Environmental Quality Act (CEQA), if all parcels within the project have no more than 50 percent, rather than 25 percent, of their area farther than one-half mile from the stop or corridor.	As Introduced	Assembly Natural Resources Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 1908 (Harper) HOV Lanes in Southern California	Prohibits establishing a high-occupancy vehicle (HOV) lane on a state highway in Southern California, unless the lane is established as an HOV lane only during the hours of heavy commuter traffic, as determined by Caltrans. Requires existing HOV lanes in Southern California to be modified to conform to this provision. On or after May 1, 2018, provides that if Caltrans determines that there is an adverse impact on safety, traffic conditions or the environment by limiting the use of HOV lanes in Southern California only during the hours of heavy commuter traffic, authorizes the department to submit to the Legislature a notice of that determination and of the intent to reinstate 24-hour HOV lanes in Southern California. Provides that Caltrans may reinstate 24-hour HOV lanes following the submittal of the notice to the Legislature.	3/17/16	Assembly Transportation Committee	
AB 1910 (Harper) Transportation Advisory Ballot Measure	Requires the Secretary of State's Office to submit the following advisory question to the voters as part of the November 8, 2016, general election ballot: "Shall the California Legislature disproportionately target low-income and middle-class families with a regressive tax increase on gasoline and annual vehicle registrations to fund road maintenance and rehabilitation, rather than ending the diversion of existing transportation tax revenues for nontransportation purposes, investing surplus state revenue in transportation accounts, repaying funds borrowed from transportation accounts, prioritizing roads over high-speed rail, and eliminating waste at the Department of Transportation?"	As Introduced	Assembly Transportation Committee	
AB 1919 (Quirk) Local Transportation Authorities: Bonds	Clarifies that accrued interest received on the sale of bonds by a local transportation authority may be used either for the payment of bond debt service or for transportation purposes for which the debt was incurred.	4/4/16	Assembly Local Government Committee	
AB 1938 (Baker) Bay Area Toll Authority	Clarifies that the existing 1 percent limitation on the amount of direct contributions or loans that the Bay Area Toll Authority (BATA) may make to the Metropolitan Transportation Commission (MTC) applies to any revenues derived from bridge tolls, fees or taxes, regardless of classification.	As Introduced	Assembly Transportation Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 1964 (Bloom) HOV Lanes: Low- Emission and Energy Efficient Vehicles	On January 1, 2018, ends the authority of the Department of Motor Vehicles (DMV) to issue decals, stickers or other identifiers allowing battery electric, hydrogen fuel cell and compressed natural gas vehicles to use high-occupancy vehicle (HOV) lanes without the required number of occupants in the vehicle. Specifies that decals, stickers or other identifiers issued for these vehicles before January 1, 2018, are valid until January 1, 2019. Provides that decals, stickers or other identifiers allowing plug-in hybrid electric vehicles to use HOV lanes without the required number of occupants in the vehicle issued by the DMV prior to January 1, 2018, are valid until January 1, 2019. Provides that decals, stickers or other identifiers issued to plug-in hybrid electric vehicles after January 1, 2018, and prior to January 1, 2019, are valid until January 1, 2019, are valid until January 1, 2019, authorizes the DMV to issue an unlimited number of decals, stickers or other identifiers to allow HOV lane access for plug-in hybrid vehicles, which shall be valid for a three-year period. Prohibits the DMV from issuing decals, stickers or other identifiers for plug-in hybrid electric vehicles reaches at least 8.6 percent of the total new car market share for two consecutive years. Prohibits the DMV from reinstating the issuance of decals, stickers or other identifiers for plug-in hybrid electric vehicles resulting in less than 8.6 percent of the total new car market share in a later year.	4/11/16	Assembly Appropriations Committee	
AB 1982 (Bloom) California Transportation Commission Membership	Increases the membership of the California Transportation Commission (CTC) to 15 by providing for the Senate Rules Committee and the Assembly speaker to each appoint an additional member. Requires one member appointed by the Senate Rules Committee and by the Assembly speaker to be a person who works directly with communities in California that are most significantly burdened by, and vulnerable to, high levels of pollution, including communities with diverse racial and ethnic populations, and communities with low-income populations.	4/12/16	Assembly Transportation Committee	
AB 2014 (Melendez) Freeway Service Patrols: Program Assessment	No later than June 20, 2018, and every five years thereafter, requires Caltrans, in coordination with the California Highway Patrol (CHP) and regional and local entities, to publish a statewide Freeway Service Patrol Program Assessment. Requires this assessment to do all of the following: (1) identify, quantify and analyze existing freeway service patrols, and identify opportunities to increase or expand service levels; (2) analyze and provide recommendations regarding the current and anticipated future financial condition of the program; (3) include, as attachments, supporting data provided to Caltrans by regional and local entities, and by the CHP; (4) examine the financial sustainability of maintaining current freeway service patrols, the route miles unserved or underserved by freeway service patrols, and historical, current and future state and local funding for freeway service patrols; (5) analyze and quantify the public benefits received or to be received from existing and potential new freeway service patrols; and (6) discuss how freeway service patrols relate to other state policies, plans and goals. Requires the state budget to include a line item for Caltrans and the CHP to identify the amount of local assistance and state funds provided in support of freeway service patrols.	4/13/16	Assembly Appropriations Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 2030 (Mullin) SamTrans and BART: Contracting Issues	Allows the San Mateo County Transit District (SamTrans) and the Bay Area Rapid Transit District (BART) to use an informal bidding process for materials, supplies and equipment contracts, under which a minimum of three quotations are obtained from vendors, for those contracts between \$5,000 and \$150,000. In the case of SamTrans, indexes the \$5,000 threshold to inflation on an annual basis. Raises the threshold for when SamTrans and BART would be required to competitively bid construction contracts from \$10,000 to \$100,000. In the case of SamTrans, indexes the \$100,000 threshold to inflation on an annual basis.	As Introduced	Assembly Local Government Committee	
AB 2034 (Salas) Federal Environmental Review Process	Extends indefinitely the statutory authorization for Caltrans to participate in a federal program that allows states to assume the responsibilities of the Federal Highway Administration (FHWA) under the National Environmental Policy Act (NEPA). In addition, extends indefinitely provisions in existing law that authorize Caltrans to consent to the jurisdiction of the federal court's with regard to the assumption of FHWA's responsibilities under NEPA and that waive the state's Eleventh Amendment protection against NEPA-related lawsuits brought in federal court for as long as Caltrans participates in the program.	3/17/16	Assembly Appropriations Committee	
AB 2049 (Melendez) High-Speed Rail: Bond Funding	Specifies that no further bonds shall be sold for high-speed rail purposes pursuant to the Safe, Reliable High-Speed Passenger Train Bond Act for the 21 st Century (Proposition 1A), except as specifically provided with respect to an existing appropriation for early improvement projects related to the Phase I blended system. Upon appropriation by the Legislature, requires the unspent proceeds received from outstanding bonds issued and sold for high-speed rail purposes prior to the effective date of the provisions of this bill to be redirected to retiring the debt incurred from the issuance and sale of those outstanding bonds. Allows the remaining unissued bonds, as of the effective date of the provisions of this bill, that were authorized for high-speed rail purposes to be issued and sold. Upon appropriation by the Legislature, requires the net proceeds from the sale of these remaining unissued bonds to be made available as follows: (1) 40 percent for the State Transportation Improvement Program (STIP); (2) 40 percent for the State Highway Operation and Protection Program (SHOPP); and (3) 20 percent for the Trade Corridors Improvement Fund. Makes no changes to the authorization under Proposition 1A for the issuance of \$950 million in bonds for rail purposes other than high-speed rail.	As Introduced	Assembly Transportation Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 2090 (Alejo) Low Carbon Transit Operations Program	Authorizes Low Carbon Transit Operations Program (LCTOP) funding to be expended by a public transit agency to support the operation of existing bus or rail service if all of the following occur: (1) the governing board of the public transit agency declares a fiscal emergency within 90 days prior to requesting its formula share of LCTOP funds; (2) the LCTOP funds are necessary to sustain the agency's public transit service in the fiscal year in which the money is to be spent; (3) the governing board of the public transit agency would be required to reduce or eliminate public transit service if the LCTOP funds are not received; (4) the governing board makes a finding that a reduction in, or elimination of, public transit service would increase greenhouse gas emissions because customers would choose other less-efficient modes of transportation; (5) the public transit agency does not request funds over consecutive funding years unless it has declared a fiscal emergency in each year; and (6) the public transit agency does not request funds for more than three consecutive funding years. Requires the LCTOP funds to be expended to provide public transit operating assistance that meets both of the following criteria: (1) the expenditures support current bus or rail service operating costs, which may include labor, fueling, maintenance, and other costs to operate and maintain those services; and (2) the recipient public transit agency demonstrates that each expenditure directly sustains public transit service that would otherwise be reduced or eliminated in the upcoming year if those funds were not received.	4/7/16	Assembly Appropriations Committee	
AB 2094 (Obernolte) Transportation Development Act (TDA) Funding	Beginning in FY 2017, requires \$1 billion in cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund to be transferred to the Retail Sales Tax Fund for allocation pursuant to the Transportation Development Act (TDA) if certain conditions are met. Provides that in each fiscal year in which this transfer occurs, requires \$1 billion in TDA funding to be redirected, as follows: (1) 50 percent to Caltrans for maintenance of the state highway system, or for projects funded through the State Highway Operation and Protection Program (SHOPP); and (2) 50 percent to cities and counties for local streets/roads.	3/18/16	Assembly Transportation Committee	
AB 2100 (Calderon) 21 st Century Infrastructure Act of 2016	Requires the California Public Utilities Commission (CPUC), the State Energy Resources Conservation and Development Commission, the Independent System Operator, and the California Air Resources Board (CARB) to review and evaluate their policies and plans for the expansion of 21 st century infrastructure. Requires these agencies to do all of the following: (1) develop an interagency permitting committee to institute reforms and modernize infrastructure permitting and reviews; (2) strengthen dispute resolution mechanisms to quickly resolve conflicts and ensure that interagency disputes do not delay projects that are consistent with existing state policy priorities; and (3) identify duplicative, burdensome or unnecessary requirements, permits or processes, and evaluate whether they can be minimized or eliminated in a manner that would not jeopardize safety or electrical grid reliability.	3/18/16	Assembly Natural Resources Committee	
AB 2126 (Mullin) CMGC Contracting: Caltrans	Increases the number of state highway projects for which Caltrans may use the Construction Manager/General Contractor (CMGC) method of project delivery from six to 12. For at least eight of these projects, requires Caltrans to use department employees or consultants under contract to the department to perform all design and engineering services. For all 12 projects, requires Caltrans to use department employees or consultants under contract to perform all construction inspection services.	As Introduced	Assembly Appropriations Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 2170 (Frazier) Trade Corridors Improvement Fund: Federal Dollars	Requires revenues apportioned to California from the National Highway Freight Program established by the federal Fixing America's Surface Transportation (FAST) Act to be allocated by the California Transportation Commission (CTC) for projects pursuant to the process that was used for the Proposition 1B Trade Corridors Improvement Fund.	3/15/16	Assembly Appropriations Committee	
AB 2196 (Low) VTA Enabling Statutes	Makes a number of technical, non-substantive clean-up changes to the enabling statutes of the Santa Clara Valley Transportation Authority (VTA). Consistently uses "VTA" as the name of the organization throughout the enabling statutes. Uses the term "territory" to refer to VTA's area of jurisdiction. Clarifies that the representatives on the VTA Board of Directors from the cities may be either mayors or city council members. Changes references to "board of supervisors" to "board of directors" to reflect the appropriate governing board of VTA. Deletes obsolete provisions that relate to one-time events that occurred to form the Santa Clara County Transit District in the 1970s, and that occurred to implement the merger of the Transit District and the Santa Clara County Congestion Management Agency (CMA) to form VTA in the mid-1990s. Deletes obsolete provisions that the administrative head of VTA is a "general manager," not an "executive director." Changes references to "transit facilities" to "transit and other transportation facilities" to reflect the fact that VTA is a multi-modal transportation organization.	As Introduced	Assembly Local Government Committee	Sponsor

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 2222 (Holden) Cap-and-Trade Funding: Transit Pass Program	Creates the Transit Pass Program to support local programs that provide free or reduced-fare public transit passes to public school, community college, California State University, and University of California students. Requires Caltrans to administer this program. Beginning in FY 2017, continuously appropriates \$50 million annually in cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund for the Transit Pass Program. Requires Caltrans, in coordination with the California Air Resources Board (CARB), to develop guidelines describing the criteria that public transit agencies shall use to make available free or reduced-fare transit passes to eligible participants, and the methodologies that eligible participants shall use to demonstrate that the proposed expenditures will reduce greenhouse gas emissions. Defines "eligible participants" to mean a public agency, including a transit operator, school district, community college district, the California State University, or the University of California. Requires Caltrans to develop performance measures and reporting requirements to evaluate the effectiveness of the program, including an annual update of the number of free or reduced-fare transit passes distributed to students and whether the program to be expended to provide low- or no-cost public transit passes to students through programs that support new or existing transit pass programs. Allows a public transit agency to give priority to an application from an eligible participant with an existing, successful transit pass program, provided that the eligible participant can demonstrate that the additional funds will further reduce the cost of the transit pass or expand program. Requires at least 33 percent of the money allocated under the Transit Pass Program for the following fiscal year. Requires at least 33 percent of the money allocated under the Transit Pass Program to be used to benefit disadvantaged communities.	4/6/16	Assembly Appropriations Committee	
AB 2233 (Brown) Highways: Exit Information Signs	Requires Caltrans to adopt rules and regulations to allow for the placement, near exits and off- ramps on freeways located in urban and rural areas, of informational signs identifying the closest hospital owned and operated by a county that includes the full name of the hospital, if both of the following conditions are met: (1) the county requests the placement of the sign; and (2) the county agrees to pay for the cost of the sign. Requires Caltrans to erect the sign or signs within 30 days of receipt of payment from the county.	As Introduced	Assembly Transportation Committee	
AB 2257 (Maienschein) Local Agency Meetings: Online Posting of Agendas	Requires an online posting of an agenda of a meeting of a local agency's legislative body to have a prominent, direct link to the current agenda itself. Requires the link to be on the local agency's Internet Web site homepage, not in a contextual menu on the homepage.	4/11/16	Assembly Local Government Committee	
AB 2289 (Frazier) SHOPP Projects	Clarifies that capital projects to improve the operation of state highways and bridges are eligible for funding under the State Highway Operation and Protection Program (SHOPP).	As Introduced	Assembly Appropriations Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 2293 (C. Garcia) Cap-and-Trade: Green Assistance Program	Requires the California Environmental Protection Agency (CalEPA) to establish and administer the Green Assistance Program to do all of the following: (1) provide assistance, including the development of competitive project proposals, to small businesses and small non-profit organizations when they are applying for an allocation of cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund; (2) assist small businesses in applying for cap-and-trade funding for energy efficiency upgrades to meet and exceed the state's greenhouse gas emissions reduction goals; (3) assist small businesses in complying with all applicable federal, state and local air quality laws; (4) identify state agencies with appropriate cap-and-trade grant programs; and (5) coordinate existing local programs to reduce greenhouse gas emissions with new programs receiving cap-and-trade funding.	4/11/16	Assembly Appropriations Committee	
AB 2332 (E. Garcia) Caltrans: State Transportation Goals	By 2020, requires Caltrans to increase the annual number of complete streets projects undertaken by the department by 20 percent over the 2016 baseline. Establishes the following goals for Caltrans: (1) reducing the number of transit, pedestrian and bicyclist fatalities by 10 percent, based on the 2016 baseline; and (2) by 2020, reducing vehicle miles traveled by 15 percent of the statewide per capita relative to 2010 levels reported by Caltrans district. Establishes a Caltrans goal to increase travel by non-automobile modes by doing all of the following: (1) tripling the amount of bicycle travel relative to 2010-2012 California Household Travel Survey levels; (2) doubling the amount of pedestrian travel relative to 2010-2012 California Household Travel Survey levels; and (3) doubling the amount of transit travel relative to 2010-2012 California Household Travel Survey levels. Requires the draft five-year Interregional Transportation Improvement Program (ITIP) to include complete streets projects. Not later than July 1, 2017, requires the California Transportation Commission (CTC) to adopt targets and performance measures for the assets management plan prepared by Caltrans that reflect state transportation goals and objectives. Requires these targets and performance measures to include all of the following: (1) improving mobility, access and safety for non-motorized users in disadvantaged communities by requiring not less than 35 percent of State Highway Operation and Protection Program (SHOPP) projects to be located in urban and rural disadvantaged communities; (2) providing targeted and meaningful benefits to residents in disadvantaged communities; and (4) prioritizing projects that recruit, hire or train low-income, formerly incarcerated, underrepresented, or disconnect youth and adults, and other individuals with barriers to employment. Requires Caltrans to hold at least one public hearing in each of its districts on SHOPP projects. Requires these hearings to be accessible by public transit and held at time	4/5/16	Assembly Transportation Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 2348 (Levine) Retirement Plans: Infrastructure Investments	Authorizes the Department of Finance to identify infrastructure projects in the state for which the department will guarantee a rate of return for an investment made in that infrastructure project by the Public Employment Retirement System, the State Teachers' Retirement Plan, or the retirement system created pursuant to the County Retirement Law of 1937. Creates the Reinvesting in California Special Fund as a continuously appropriated fund. Requires money in the fund to be used to pay the rate of return on investments made in infrastructure projects. States the intent of the Legislature to identify special fund dollars to be transferred to the Reinvesting in California Special Fund.	As Introduced	Assembly Public Employees, Retirement & Social Security Committee	
AB 2355 (Dababneh) Intercity Rail Services: Noise Mitigation	Requires Caltrans to develop a program for the reasonable mitigation of noise and vibration levels in residential neighborhoods along railroad lines where the department contracts for state-funded intercity rail passenger service.	As Introduced	Assembly Transportation Committee	
AB 2374 (Chiu) CMGC Contracting: Local Expressways and Ramps	Clarifies that regional transportation agencies, including the Santa Clara Valley Transportation Authority (VTA), may use the Construction Manager/General Contractor (CMGC) project delivery method to design and construct projects on expressways and ramps that are not on the state highway system. Deletes provisions in current state law that require an expressway project to be developed in accordance with an expenditure plan approved by the voters in order for the regional transportation agency to be able to use CMGC contracting for that project.	As Introduced	Senate Rules Committee	Support
AB 2382 (Lopez) High-Speed Rail Authority: Membership	Beginning with an available vacancy on and after January 1, 2017, requires one of the Governor's appointments to the California High-Speed Rail Authority to be a person, other than a current or former elected official, who is from a disadvantaged community.	4/11/16	Assembly Transportation Committee	
AB 2398 (Chau) State Highways	Every five years, requires the California Transportation Commission (CTC) to report to the Legislature both of the following: (1) the number of selections, adoptions and location determinations for state highway routes; and (2) the amount of money allocated for the construction, improvement or maintenance of the various highways under the jurisdiction of Caltrans.	3/18/16	Assembly Transportation Committee	
AB 2411 (Frazier) Miscellaneous Caltrans Revenues	Prohibits revenues generated by Caltrans through the rental or sale of property, the sale of documents and other miscellaneous services to the public from being transferred to the General Fund and used for debt service on general obligation transportation bonds. Instead, requires these revenues to be retained in the State Highway Account and used for transportation purposes.	As Introduced	Assembly Appropriations Committee	
AB 2468 (Hadley) Public Employees' Retirement	Authorizes a public agency that has contracted with the California Public Employees' Retirement System (CalPERS) to offer an alternative formula from the one required by the Public Employees' Pension Reform Act of 2013 to be applicable to miscellaneous, non-safety employees hired after January 1, 2017, provided that the agency and the representative employee organization have agreed to its application in a valid memorandum of understanding. Specifies that the alternative formula would be 1 percent at 55.	4/12/16	Assembly Public Employees, Retirement & Social Security Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 2542 (Gatto) Streets and Highways: Reversible Lanes	When submitting a capacity-increasing project, or a major street or highway lane realignment project to the California Transportation Commission (CTC) for approval, requires Caltrans or a regional transportation agency to demonstrate that reversible lanes were considered for the project.	3/15/16	Assembly Transportation Committee	
AB 2620 (Dababneh) Proposition 116 Passenger Rail Funding	Requires Proposition 116 funds not expended or encumbered by July 1, 2020, to be reallocated to any other existing passenger rail project in the state by the California Transportation Commission (CTC) on a pro-rata basis.	4/11/16	Assembly Transportation Committee	
AB 2651 (Gomez) Urban Water and Transportation Environmental Revitalization Grant Program	Requires the Natural Resources Agency to establish and administer the Urban Water and Transportation Environmental Revitalization Grant Program. Requires the program to provide grants for projects that develop greenways in areas that are adjacent to an urban creek in certain areas. Appropriates \$500 million from the General Fund to the Natural Resources Agency for the program.	3/29/16	Assembly Water, Parks & Wildlife Committee	
AB 2741 (Salas) California Transportation Plan	Requires the California Transportation Plan to be approved by the California Transportation Commission (CTC).	3/18/16	Assembly Appropriations Committee	
AB 2742 (Nazarian) Public-Private Partnerships	Extends existing statutory authority for Caltrans and regional transportation agencies, including the Santa Clara Valley Transportation Authority (VTA), to utilize public-private partnerships for transportation infrastructure projects to January 1, 2030.	As Introduced	Assembly Appropriations Committee	Support
AB 2762 (Baker) Toll Bridges: Bicycles and Pedestrians	Extends the sunset date from January 1, 2021, to January 1, 2022, for provisions in current law that prohibit a toll from being imposed on the passage of a pedestrian or bicycle over any toll bridge that is part of the state highway system.	4/5/16	Assembly Transportation Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
AB 2796 (Bloom) Active Transportation Program	Requires a minimum of 5 percent of available funds in each of the following three distribution categories under the Active Transportation Program to be awarded for planning and community engagement for active transportation in disadvantaged communities: (1) metropolitan planning organizations (MPOs) in urban areas with populations greater than 200,000; (2) small urban and rural regions with populations of 200,000 or less; and (3) the California Transportation Commission (CTC). Requires a minimum of 10 percent of all available Active Transportation Program funds to be programmed for non-infrastructure purposes, including activities related to safe routes to school. Provides that if a project contains both infrastructure and non-infrastructure activities, only the portion of funding used for non-infrastructure activities shall contribute to meeting the minimum 10 percent. Specifies that if applications submitted in any funding cycle are not sufficient to exceed the minimum percentages required by this bill, the funds may be expended for other authorized purposes.	4/4/16	Assembly Appropriations Committee	
AB 2847 (Patterson) California High-Speed Rail Authority: Reporting Requirements	Specifies that the California High-Speed Rail Authority, in each report that it is required to prepare, shall provide an explanation of adjusted costs and schedules in each situation in which the authority has approved a change in the scope or sequencing of the state's proposed high-speed rail project since the issuance of the previous report. With respect to any segment of the high-speed rail project that the authority is proposing to deliver as the current highest priority, requires the explanation to clearly detail the estimated costs for each segment in a manner that allows the current estimated costs for the segment to be directly compared to the cost estimate previously provided by the authority in the immediately prior report for the same segment. In its business plan, requires the High-Speed Rail Authority to identify all estimated financing and administrative costs associated with the construction of the high-speed rail project as contemplated by the authority at the time that the business plan is prepared.	4/11/16	Assembly Transportation Committee	
ACA 3 (Gallagher) Public Employees' Retirement	Calls for placing before the voters an amendment to the California Constitution to make several changes to retirement benefits for public employees. Requires any enhancement to a public employee's retirement formula or benefit adopted on or after the effective date of this constitutional amendment to apply only to serve performed on and after the operative date of the enhancement, and not to any service performed prior to that date. Provides that if a change to a public employee's retirement membership classification or a change in employee, requires that enhancement to the retirement formula or benefit applicable to that employee, requires that enhancement to apply only to serve performed on or after the operative date of the change, and not to service performed prior to that date. Specifies that an increase to a retiree's annual cost-of-living adjustment within existing statutory limits is not considered to be an enhancement to a retirement	As Introduced	Assembly Public Employees, Retirement & Social Security Committee	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
ACA 4 (Frazier) Local Transportation Special Taxes	Calls for placing before the voters an amendment to the California Constitution to allow a city, county or special district to impose, extend or increase a sales and use or a transactions and use tax for the purpose of providing funding for local transportation projects, if approved by a 55 percent majority vote. Defines "local transportation project" to mean the planning, design, development, financing, construction, reconstruction, rehabilitation, improvement, acquisition, lease, operation, or maintenance of local streets, roads and highways; state highways and freeways; and public transit systems. Specifies that this constitutional amendment shall become effective upon approval by the voters, and shall apply to any local measure imposing, extending or increasing a sales and use or transactions and use tax to fund local transportation projects that is submitted at the same election.	8/17/15	Assembly Appropriations Committee	Support
ACA 11 (Gatto) Public Utility Reform Act of 2016	Calls for placing before the voters an amendment to the California Constitution to authorize the Legislature to reallocate and reassign all or a portion of the functions of the California Public Utilities Commission (CPUC) to other state agencies, departments, boards, or others entities that it may create. Requires the Legislature's reallocation or reassignment of the CPUC's functions to be done to further consumer protection, public health, environmental protection, increased transparency, public access, and the preservation of the ability of third parties to advocate for and intervene on behalf of those who need their advocacy. Requires the Legislature to adopt appropriate structures to: (1) provide greater accountability for the public utilities of California; (2) provide the necessary guidance to focus regulatory efforts on safety, reliability and ratesetting; and (3) implement statutorily authorized programs for reducing greenhouse gas emissions	As Introduced	Assembly Utilities & Commerce Committee	
ABX1-1 (Alejo) Transportation Funding	Retains the revenues generated by vehicle weight fees in the State Highway Account, and requires the General Fund to pay debt service on transportation general obligation bonds. With regard to the revenues derived from increases in the state gasoline excise tax resulting from the transportation funding swap initially enacted in 2010 and reaffirmed in 2011, requires all of the money to be allocated in the following manner: (1) 44 percent to the State Transportation Improvement Program (STIP); (2) 44 percent to cities and counties for local streets and roads; and (3) 12 percent to the State Highway Operation & Protection Program (SHOPP). With respect to any loans made to the General Fund from the State Highway Account, the Public Transportation Account, the Bicycle Transportation Account, the Motor Vehicle Fuel Account, the Highway Users Tax Account, the Pedestrian Safety Account, the Transportation Investment Fund, the Traffic Congestion Relief Fund, the Motor Vehicle Account, and the Local Airport Loan Account with a repayment date of January 1, 2019, or later to be repaid to the account from which the loan was made by December 31, 2018. Recaptures revenues generated by Caltrans through the rental or sale of property, the sale of documents and other miscellaneous services to the public for transportation purposes.	As Introduced	Assembly Desk	Support
ABX1-2 (Perea) Public-Private Partnerships	Extends existing statutory authority for Caltrans and regional transportation agencies, including the Santa Clara Valley Transportation Authority (VTA), to utilize public-private partnerships for transportation infrastructure projects indefinitely.	As Introduced	Assembly Desk	Support

State Assembly Bills	Subject	Last Amended	Status	VTA Position
ABX1-3 (Frazier) Transportation Funding: State Highways and Local Roadways	Declares the intent of the Legislature to enact a bill to establish permanent, sustainable sources of transportation funding to maintain and repair highways, local roads, bridges, and other critical transportation infrastructure.	9/3/15	Conference Committee	
ABX1-4 (Frazier) Transportation Funding: Trade Corridors and Local Transportation Infrastructure	Declares the intent of the Legislature to enact a bill to establish permanent, sustainable sources of transportation funding to improve the state's key trade corridors, and support efforts by local governments to repair and improve local transportation infrastructure.	As Introduced	Senate Rules Committee	
ABX1-6 (R. Hernandez) Cap-and-Trade: Affordable Housing and Sustainable Communities Program	Requires 20 percent of the cap-and-trade auction proceeds provided to the Affordable Housing and Sustainable Communities Program to be allocated to rural areas. Requires half of these funds to be allocated to eligible affordable housing projects. Requires the Strategic Growth Council to amend its guidelines for the Affordable Housing and Sustainable Communities Program to be consistent with the provisions of this bill.	As Introduced	Assembly Desk	
ABX1-7 (Nazarian) Cap-and-Trade: Public Transit Funding	Increases the amount of cap-and-trade auction proceeds continuously appropriated from the Greenhouse Gas Reduction Fund to the Low Carbon Transit Operations Program from 5 percent to 10 percent, and to the Transit and Intercity Rail Capital Program from 10 percent to 20 percent.	As Introduced	Assembly Desk	Support
ABX1-8 (Chiu) Diesel Sales Tax	Increases the sales and use tax rate on diesel fuel by 3.5 percent. Dedicates the revenues derived from this increase to the State Transit Assistance Program (STA).	As Introduced	Assembly Desk	Support
ABX1-9 (Levine) Richmond-San Rafael Bridge	By September 30, 2015, requires Caltrans to implement an operational improvement project that does the following: (1) temporarily restores to automobile traffic the third eastbound lane on I-580 that existed prior to 1977 and that was temporarily restored immediately following the Loma Prieta earthquake, from the beginning of the Richmond-San Rafael Bridge in Marin County to Marine Street in Contra Costa County; and (2) temporarily converts the existing one-way bicycle lane along the north side of westbound I-580 from the Marine Street Interchange to Stenmark Drive and the toll plaza in Contra Costa County into a bidirectional bicycle and pedestrian lane. Requires Caltrans to keep the temporary third automobile lane and the temporarily bidirectional bicycle lane in place until the department has completed the Richmond-San Rafael Bridge Access Improvement Project.	As Introduced	Assembly Desk	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
ABX1-10 (Levine) Public Works Contracts: Mega- Infrastructure Projects	Prohibits a state entity in a mega-infrastructure project contract from providing for the payment of extra compensation to the contractor until the project has been completed, and an independent third party has verified that the project meets all architectural or engineering plans and safety specifications of the contract. Applies to contracts entered into or amended on or after the effective date of the bill. Defines "mega-infrastructure project" to mean the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind that exceeds \$1 billion in cost.	As Introduced	Assembly Desk	
ABX1-12 (Nazarian) LA Metro: Public- Private Partnerships	Authorizes the Los Angeles County Metropolitan Transportation Authority (LA Metro) to enter into agreements with private entities for transportation projects in Los Angeles County, including on the state highway system, subject to various terms and requirements. Allow LA Metro to impose tolls and user fees for use of those projects. Requires LA Metro to implement such projects on the state highway system in cooperation with Caltrans pursuant to an agreement that addresses all matters related to design, construction, maintenance, and operation of state highway facilities in connection with the project. Authorizes LA Metro to issue bonds to finance any costs necessary to implement such a project, payable from revenues generated from the project or other available resources.	As Introduced	Assembly Desk	
ABX1-13 (Grove) Cap-and-Trade: State Highways and Local Streets/Roads	For FY 2016, reduces the amount of cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund that are continuously appropriated to the Affordable Housing and Sustainable Communities Program from 20 percent to 10 percent. Beginning in FY 2017, continuously appropriates 50 percent of the cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund to the State Highway Operation and Protection Program (SHOPP), and 50 percent to cities and counties for local streets/roads.	As Introduced	Assembly Desk	
ABX1-14 (Waldron) General Fund Appropriations: State Highways and Local Streets/Roads	Continuously appropriates \$1 billion from the General Fund to be distributed as follows: (1) 50 percent to the State Highway Operation and Protection Program (SHOPP); and (2) 50 percent to cities and counties for local streets/roads.	As Introduced	Assembly Desk	
ABX1-15 (Patterson) Caltrans: Capital Outlay Support	Reduces the FY 2016 appropriation to Caltrans for capital outlay support by \$500 million and, instead, distributes this money as follows: (1) 50 percent to the State Highway Operation and Protection Program (SHOPP); and (2) 50 percent to cities and counties for local streets/roads.	As Introduced	Assembly Desk	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
ABX1-16 (Patterson) Pilot Program: Transferring State Highways to Local Agencies	Establishes a five-year pilot program under which two counties, one in Northern California and one in Southern California, would be selected to operate, maintain and make improvements to all state highways within their respective jurisdictions. For the duration of the pilot program, requires Caltrans to convey all of its authority and responsibility over state highways in a participating county to the applicable county or regional transportation agency. Requires the pilot program to begin no later than January 1, 2017. Requires the California Transportation Commission (CTC) to administer and oversee the pilot program, and to select the counties that will participate in the program from applications received by the commission. For the duration of the pilot program, requires funding to be appropriated as block grants in the annual Budget Act to the participating counties in an amount equivalent to federal and state dollars otherwise to be expended by Caltrans on state highways in those counties, including money for operations, maintenance, capital outlay support, the State Highway Operation and Protection Program (SHOPP), and the State Transportation Improvement Program (STIP). In consultation with Caltrans, requires the CTC to determine the applicable grant amounts for each participating county, and to submit its recommendations to the Governor and the Legislature. Provides that any cost savings realized by a participating county, compared to comparable expenditures that otherwise would have been undertaken by Caltrans on state highways in the county in the absence of the pilot program, may be used by the county for other transportation priorities consistent with eligible expenditures for the funding sources involved, subject to approval by the CTC.	As Introduced	Assembly Desk	
ABX1-17 (Achadjian) Cap-and-Trade: State Highway Operation and Protection Program	Beginning in FY 2017, continuously appropriates 25 percent of the cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund to the State Highway Operation and Protection Program (SHOPP).	As Introduced	Assembly Desk	
ABX1-18 (Linder) Vehicle Weight Fee Revenues	Beginning January 1, 2016, prohibits vehicle weight fee revenues from being used to pay debt service on transportation-related, general obligation bonds.	As Introduced	Assembly Desk	Support
ABX1-19 (Linder) California Transportation Commission	Excludes the California Transportation Commission (CTC) from the California State Transportation Agency (CalSTA), and establishes it as a separate and independent entity in state government.	As Introduced	Assembly Desk	
ABX1-20 (Gaines) State Government: Elimination of Vacant Positions	Requires the Department of Human Resources to eliminate 25 percent of the vacation positions in state government that are funded by the General Fund. Continuously appropriates \$685 million from the General Fund, with 50 percent to be made available to Caltrans for maintenance of the state highway system or for projects funded under the State Highway Operation and Protection Program (SHOPP), and 50 percent to be made available to cities and counties for local streets/roads.	As Introduced	Assembly Desk	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
ABX1-21 (Obernolte) Environmental Quality: Highway Projects	Prohibits a court in a judicial action or proceeding under the California Environmental Quality Act (CEQA) from staying or enjoining a project related to constructing or improving a highway unless the court finds either of the following: (1) the project presents an imminent threat to the public health and safety; or (2) the project site contains unforeseen important Native American artifacts, or unforeseen important historical, archaeological or ecological values that would be materially, permanently and adversely affected by the project unless the court stays or enjoins the project.	As Introduced	Assembly Desk	
ABX1-22 (Patterson) Design-Build Contracting: Highway Projects	Authorizes Caltrans to utilize design-build contracting for an unlimited number of state highway projects, and requires the department to contract with consultants to perform construction inspection services related to those projects. For design-build contracts for state highway projects administered by regional transportation agencies, including the Santa Clara Valley Transportation Agency (VTA), eliminates the requirement in existing law that Caltrans perform construction inspection services related to those projects.	As Introduced	Assembly Desk	
ABX1-23 (E. Garcia) Transportation Projects: Disadvantaged Communities	By January 1, 2017, requires the California Transportation Commission (CTC) to establish a process whereby Caltrans and local agencies receiving funding for highway capital improvement projects from the State Highway Operation and Protection Program (SHOPP), or from the State Transportation Improvement Program (STIP) prioritize projects that provide meaningful benefits to the mobility and safety needs of disadvantaged community residents, as identified by the community through strong public participation. In this regard, requires the CTC to do all of the following: (1) establish a funding floor where no less than 35 percent of rehabilitation and reconstruction projects are located in urban and rural disadvantaged communities, and provide meaningful benefits to the residents of those communities; (2) include robust public stakeholder engagement with regard to the development of guidelines relating to the prioritization of projects in disadvantaged communities; and (3) prioritize projects that recruit, hire and train low-income, formerly incarcerated, or disconnected youth and adults, as well as other individuals with barriers to employment. Specifies that a "disadvantaged community" means a community with any of the following characteristics: (1) an area with a median household income that is less than 80 percent of the statewide median household income based on the most current census-tract-level data from the American Community Survey; (2) an area identified as among the most disadvantaged 25 percent of public school students are eligible to receive free or reduced-price meals under the National School Lunch Program. Requires \$125 million to be appropriated annually from the State Highway Account to the Active Transportation Program, with these additional funds to be used for network grants that prioritize projects in underserved areas.	As Introduced	Assembly Desk	

State Assembly Bills	Subject	Last Amended	Status	VTA Position
ABX1-24 (Levine) Bay Area Transportation Commission	Effective January 1, 2017, redesignates the Metropolitan Transportation Commission (MTC) as the Bay Area Transportation Commission. Requires commissioners to be elected by districts comprised of approximately 750,000 residents, based on the 2010 Census. Declares the intent of the Legislature that the district boundaries should be drawn by a citizen's redistricting commission. Requires each district to elect one commissioner, except that a district with a toll bridge within its boundaries would elect two commissioners. Requires the initial elections for commissioners to occur in 2016. Requires the elected commissioners to take office on January 1, 2017. Declares the intent of the Legislature that campaigns for commissioners should be publicly financed. Specifies that each commissioner's term of office is four years. Effective January 1, 2017, deletes the Bay Area Toll Authority's status as a separate entity from MTC and merges the authority into the Bay Area Transportation Commission.	Introduced	Assembly Desk	

State Senate Bills

State Senate Bills	Subject	Last Amended	Status	VTA Position
SB 3 (Leno) Minimum Wage	Increases the minimum wage for all industries as follows: (1) to \$11 per hour beginning January 1, 2016; and (2) to \$13 per hour beginning July 1, 2017. Commencing on January 1, 2019, requires the Industrial Welfare Commission to automatically adjust the minimum wage each year to maintain employee purchasing power diminished by the rate of inflation that occurred during the previous year. Requires the automatic adjustment to be calculated using the California Consumer Price Index. Prohibits the Industrial Welfare Commission from adjusting the minimum wage if the average percentage of inflation for the previous year was negative. Specifies that the provisions of the bill apply to all industries, including public and private employment.	3/11/15	Assembly Appropriations Committee	
SB 32 (Pavley) Greenhouse Gas Emissions Limit	Requires the California Air Resources Board (CARB), based on the best available scientific, technological and economic assessments, to approve a statewide greenhouse gas emissions limit that is equivalent to 40 percent below the 1990 level to be achieved by 2030. Requires CARB to make recommendations to the Governor and the Legislature on how to continue reductions of greenhouse gas emissions beyond 2030. Provides that the Legislature and appropriate state agencies should adopt complementary policies ensuring that long-term emissions reductions advance all of the following: (1) job growth and local economic benefits; (2) public health benefits for California residents, particularly in disadvantaged communities, that result from direct onsite reductions of greenhouse gas emissions; (3) innovation in technology, as well as in energy, water and resource management practices; and (4) regional and international collaboration to adopt similar greenhouse gas emissions reduction policies. Specifies that CARB shall not take any action to implement the next update of its scoping plan for reducing greenhouse gas emissions unless it has conducted an evaluation of both of the following: (1) the current and projected actions that other jurisdictions within the United States and around the world are taking to reduce greenhouse gas emissions, and how those actions compare to and complement California's efforts; and (2) the cost effectiveness of the various emissions limit. Requires CARB to submit the next update of its scoping plan to the Legislature. Allows the Legislature to modify, reject or delay some or all of the scoping plan to the Legislature a report that contains both of the following: (1) a detailed list of regulatory policies that have been adopted and implemented by state agencies in furtherance of achieving the statewide greenhouse gas emissions limit; and (2) the amounts, sources and locations of greenhouse gas emissions limit; and (2) the amounts, sources and locations of greenhouse gas emissions limit on disad	9/10/15	Assembly Natural Resources Committee	

State Senate Bills	Subject	Last Amended	Status	VTA Position
SB 39 (Pavley) HOV Lanes: Low- Emission and Fuel- Efficient Vehicles	Increases the number of green stickers that can be issued by the Department of Motor Vehicles (DMV) to allow certain low-emission and fuel-efficient vehicles to use high-occupancy vehicle (HOV) lanes regardless of the number of occupants from 70,000 to 85,000.	4/8/15	Assembly Transportation Committee	
SB 122 (Jackson) CEQA: Record of Proceedings	At the request of a project applicant, requires the lead agency for California Environmental Quality Act (CEQA) purposes to prepare a record of proceedings concurrently with the preparation of a negative declaration, mitigated negative declaration, environmental impact report (EIR), or other environmental documents for the project, as specified. Requires the Office of Planning and Research to establish and maintain a database for the collection, storage, retrieval, and dissemination of environmental documents, notices of exemption, notices of preparation, notices of determination, and notices of completion provided to the office. Requires a lead agency to submit a sufficient number of copies, in either a hard copy or electronic form as required by the Office of Planning and Research, of its draft environmental document, proposed negative declaration or proposed mitigated negative declaration to the State Clearinghouse for review and comment by state agencies. Requires a lead agency to accept comments on these documents through electronic mail and to treat such comments as equivalent to written comments.	6/1/15	Assembly Appropriations Committee	
SB 189 (Hueso) Clean Energy and Low-Carbon Economic and Jobs Growth Blue Ribbon Committee	Creates the Clean Energy and Low-Carbon Economic and Jobs Growth Blue Ribbon Committee within the California Environmental Protection Agency (CalEPA) to be comprised of seven members appointed by the Governor, the Speaker of the Assembly and the Senate Rules Committee. Requires the committee to consist solely of persons with expertise in economic, financial or policy aspects of clean energy, economic growth, job creation, workforce standards, or employment opportunities for disadvantaged workers. Requires the committee to advise state agencies on the most effective ways to: (1) expend funds related to clean energy and the reduction of greenhouse gas emissions; and (2) implement policies in order to maximize California's economic and employment benefits. In addition, requires the committee to do all of the following: (1) develop guidance for tracking, reporting and evaluating jobs outcomes for state clean energy and low-carbon investments; (2) develop guidance to measure the quantity and quality of jobs created by state clean energy and low-carbon investments, as well as the geographic and demographic distribution of those jobs; (3) advise state agencies on the most effective ways to require responsible contractor standards, as applicable, and minimum training and skill certifications for workers to ensure high-quality work for state clean energy and low-carbon investments; (4) advise state agencies on the most effective ways to connect disadvantaged communities to good quality jobs and career pathways created by state clean energy and low-carbon investments; and (5) advise state agencies on the most effective ways to align state clean energy and low-carbon training funds with existing state workforce development investments and strategies.	8/17/15	Assembly Appropriations Committee	
SB 207 (Wieckowski) Greenhouse Gas Reduction Fund: State Agency Reporting	Requires any state agency expending cap-and-trade auction proceeds from the Greenhouse Gas Reduction Fund to post on its Internet Website a record describing each expenditure and how that expenditure would reduce greenhouse gas emissions.	3/24/15	Assembly Natural Resources Committee	

State Senate Bills	Subject	Last Amended	Status	VTA Position
SB 321 (Beall) Variable Gas Tax Rate	In calculating adjustments to the variable gas tax rate to be made for FY 2017 and each fiscal year thereafter in order to ensure that the same amount of revenue is generated as by the former state sales tax on gasoline pursuant to the 2010-2011 transportation funding swap, requires the Board of Equalization to use a combined average based on an estimate of fuel prices for the current fiscal year and the actuals for the four previous fiscal years, rather than using projections of fuel prices for only the upcoming fiscal year.	8/18/15	Senate Floor: Concurrence	Support
SB 344 (Monning) Commercial Driver's License: Education	Beginning January 1, 2018, requires a person, in addition to a written and driving test, to successfully complete a course of instruction from either a commercial driver training institution or a program offered by an employer that has been certified by the Department of Motor Vehicles (DMV) before he or she is issued an original commercial driver's license. Provides an exemption to this course of instruction requirement in the following cases: (1) a commercial motor vehicle driver with military motor vehicle experience who is currently licensed with the U.S. Armed Forces; (2) a commercial motor vehicle driver who presents a valid certificate of driving skill from an approved employer-testing program that includes a course of instruction that meets the minimum standards set by the DMV; (3) a commercial motor vehicle driver who presents a certificate issued by the California Highway Patrol (CHP) or a Transit Driver Training Record DL 260 form signed by an employer trainer certified by the Federal Transit Administration's "Train-the-Trainer" Program; or (4) a commercial motor vehicle driver who has received and documented training in compliance with the Education Code.	6/23/15	Assembly Appropriations Committee	
SB 398 (Leyva) Green Assistance Program	Establishes the Green Assistance Program to be administered by the California Environmental Protection Agency (CalEPA). Requires the Green Assistance Program to provide technical assistance to small businesses, small non-profit organizations and disadvantaged communities in applying for an allocation of cap-and-trade auction proceeds from the Greenhouse Gas Reduction Fund. Specifies that the Green Assistance Program may include the following: (1) basic information on available programs funded with cap-and-trade auction proceeds, and the eligibility requirements and deadlines for those programs; and (2) referrals to designated contact people in public agencies administering programs funded with cap-and-trade auction proceeds. Requires CalEPA to use existing resources appropriated by the Legislature in the annual Budget Act to administer the Green Assistance Program.	6/2/15	Assembly Appropriations Committee	
SB 400 (Lara) Cap-and-Trade: High-Speed Rail	Requires not less than 25 percent of the cap-and-trade auction proceeds continuously appropriated to the California High-Speed Rail Authority from the Greenhouse Gas Reduction Fund to be allocated for projects that either reduce or offset greenhouse gas emissions directly associated with the construction of the high-speed rail project and provide a co-benefit of improving air quality. Requires priority to be given to measures and projects in communities that are located in areas designated as extreme non-attainment. Provides that measures and project eligible for funding may include the following: (1) public transit improvements that reduce congestion; (2) transportation improvements that reduce congestion, including network improvements that support clean transportation, facilitate bicycle and pedestrian use, and connect bicycle and pedestrian routes to public transit facilities; (4) natural systems, including rural and urban forests, that reduce greenhouse gas emissions or increase the sequestration of carbon to mitigate the impacts of greenhouse gas emissions, and create greater climate resiliency; and (5) the use of low- and zero-emission equipment for transportation and construction.	6/1/15	Assembly Appropriations Committee	
State Senate Bills	Subject	Last Amended	Status	VTA Position
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SB 433 (Berryhill) Variable Gas Tax Rate: Department of Finance	For FY 2017 through FY 2021, requires the Department of Finance, rather than the Board of Equalization, to calculate any adjustments to the variable gas tax rate that would be needed to ensure that the same amount of revenue is generated as by the former state sales tax on gasoline pursuant to the 2010 transportation funding swap. Similarly, for FY 2017 through FY 2021, requires the Department of Finance, rather than the Board of Equalization, to adjust the diesel excise tax rate to maintain revenue neutrality with the increase in the state sales tax rate on diesel fuel that was enacted as part of the 2010 transportation funding swap.	5/7/15	Assembly Revenue & Taxation Committee	
SB 564 (Cannella) Traffic Violations: School Zones	Adds \$35 to the base fine for certain traffic violations that occur: (1) when passing a school building or grounds contiguous to a highway; or (2) when passing any school grounds not separated from the highway by a fence, gate or other physical barrier while in use by children. Requires the revenues from these additional fines to be deposited in the State Transportation Fund for school zone safety projects in the Active Transportation Program.	As Introduced	Assembly Transportation Committee	
SB 773 (Allen) Vehicle Registration Fraud Study	Requests the University of California to conduct a study on motor vehicle registration fraud and failure to register a motor vehicle. If conducted, requires the study to include all of the following: (1) quantification of the magnitude of the problem; (2) the strategies being used by motorists to commit motor vehicle registration fraud; (3) the reasons for the behaviors of motorists who commit motor vehicle registration fraud or who fail to register their motor vehicles; (4) the costs to the state and local governments in lost revenues; (5) increases in air pollution; (6) other costs and consequences of these behaviors; and (7) recommended strategies for increasing compliance with registration requirements. Requires the Department of Motor Vehicles (DMV) to enter into an agreement with the University of California to share its vehicle registration information with university researchers for purposes of conducting the study. Requests the University of California to post a report regarding the study on its Internet Web site by January 1, 2017.	6/23/15	Assembly Transportation Committee	

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Subject	Last Amended	Status	VTA Position
Makes a number of changes to the structure of the Low Carbon Transit Operations Program (LCTOP). Eliminates certain restrictions in current law to maximize flexibility with regard to the types of expenditures that are eligible to be funded under LCTOP to ensure that recipient transit agencies are able to use their funding shares for the broadest array of projects and services that reduce greenhouse gas emissions. Clarifies that a recipient transit agency may continue to use its LCTOP funding share to support new or expanded service beyond the first year in which the service is implemented, so long as the agency can demonstrate that additional greenhouse gas emissions reductions will be realized. For capital projects, requires a recipient transit agency to do all of the following: (1) specify the phases of work for which the agency is seeking an allocation of funding from LCTOP; (2) identify the sources and timing of all funding required to undertake and complete any phase of a project for which the agency is seeking an allocation from the program; and (3) described intended sources and timing of funding to complete any subsequent phases of the project through construction or procurement. Allows a recipient transit agency to specify the number of years that it intends to retain its funding share and the expenditure for which the agency intends to use these dollars. Prohibits a limit being placed on the number of fiscal years that a recipient transit agency may retain its funding share to another recipient transit agency within the same region for any identified eligible expenditure. Allows a recipient ransit agency within the same region for any identified eligible expenditure. Allows a recipient transit agency within the same region for any identified eligible expenditure. Allows a recipient transit agency within the same region for any identified eligible expenditure. Allows a recipient transit agency within the same region for any identified eligible expenditure. Allows a recipient transit agency within the s	4/11/16	Senate Transportation & Housing Committee	Sponsor

	to retain its funding share and the expenditure for which the agency internast agency may retain its funding share and the expenditure for which the agency intends to use these dollars. Prohibits a limit being placed on the number of fiscal years that a recipient transit agency may retain its funding share. Allows a recipient transit agency, in any particular fiscal year, to loan or transfer its funding share to another recipient transit agency within the same region for any identified eligible expenditure. Allows a group of recipient transit agencies, in any particular fiscal year, to enter into an agreement to pool their funding shares for any identified eligible expenditure. Allows a recipient transit agency (1) reassign any savings of LCTOP funding allocated for a completed project to another eligible project; or (2) reassign to another eligible project any LCTOP funding previously allocated to a project that the agency has determine is no longer a high priority. Allows for the use of Letters of No Prejudice (LONPs), so that recipient transit agencies can advance their projects or services with local money and then get reimbursed with LCTOP dollars when that funding becomes available.		
SB 876 (Liu) Homelessness: Use of Public Spaces	Provides that persons experiencing homelessness shall be permitted to use public space at any time that the space is open to the public without discrimination based on their housing status, and without being subject to criminal, civil or administrative penalties. Allows persons experiencing homelessness to use public space for all of the following: (1) free movement without restraint; (2) sleeping or resting, and protecting oneself from the elements while sleeping or resting, in a non-obstructive manner; (3) eating, sleeping, accepting, or giving food in a space in which food is not otherwise generally prohibited; and (4) praying, meditating, worshipping, or practicing religion. Defines "public space" to mean any property that is owned by a government entity or upon which there is an easement for public use, and that is held open to the public, including plazas, courtyards, parking lots, sidewalks, public transportation facilities and services, public buildings, shopping centers, and parks. Provides that the ability to rest does not apply to a space during a time when it is closed to all persons or when a fee is required for entry or use.	Senate Transportation & Housing Committee	

State Senate Bills

Low Carbon Transit

Operations Program

SB 824

(Beall)

State Senate Bills	Subject	Last Amended	Status	VTA Position
SB 879 (Beall) Housing Bond Act	Declares the intent of the Legislature to enact a bill that would authorize the issuance of bonds for financing housing-related programs that would serve the homeless, as well as extremely low-income and very low-income Californians over the course of the next decade.	3/30/16	Senate Appropriations Committee	
SB 882 (Hertzberg) Fare Evasion: Minors	Prohibits a public transit agency from charging a minor with an infraction or misdemeanor for acts of fare evasion.	As Introduced	Senate Public Safety Committee	
SB 885 (Wolk) Design Professionals: Claims	Commencing with contracts entered into on or after January 1, 2017, provides that a design professional shall only have the duty to defend claims that arise out of, pertain to or relate to the negligence, recklessness or willful misconduct of the design professional. Provides that a design professional shall have no duty to defend claims against other persons or entities.	As Introduced	Senate Judiciary Committee	
SB 901 (Bates) Advanced Mitigation Program	Requires Caltrans to establish an Advanced Mitigation Program to accelerate project delivery and improve the outcomes of environmental mitigation for transportation infrastructure projects. Allows the program to utilize mitigation instruments, including mitigation banks and conservation easements. Allows Caltrans to use advanced mitigation credits to fulfill mitigation requirements of any environmental law for a transportation project eligible for the State Transportation Improvement Program (STIP), or the State Highway Operation and Protection Program (SHOPP). Beginning with FY 2017, requires Caltrans to set aside at least \$30 million per year from the annual appropriations for the STIP and the SHOPP for the planning and implementation of projects in the Advanced Mitigation Program.	As Introduced	Senate Transportation & Housing Committee	
SB 902 (Cannella) Federal Environmental Review Process	Extends indefinitely the statutory authorization for Caltrans to participate in a federal program that allows states to assume the responsibilities of the Federal Highway Administration (FHWA) under the National Environmental Policy Act (NEPA). In addition, extends indefinitely provisions in existing law that authorize Caltrans to consent to the jurisdiction of the federal court's with regard to the assumption of FHWA's responsibilities under NEPA and that waive the state's Eleventh Amendment protection against NEPA-related lawsuits brought in federal court for as long as Caltrans participates in the program.	As Introduced	Senate Transportation & Housing Committee	
SB 903 (Nguyen) Transportation Loans	Acknowledges that as of June 30, 2015, there is \$879 million in loans of certain transportation revenues still outstanding, and requires this amount to be repaid by the General Fund from the Budget Stabilization Account no later than June 30, 2016. Requires the loan repayments to be distributed as follows: (1) \$148 million to be allocated by the California Transportation Commission (CTC) to fund construction and associated support costs for projects that are programmed in the Traffic Congestion Relief Program (TCRP), but which have not received their full allocations pursuant to current law; (2) \$334 million to the Trade Corridors Improvement Fund; (3) \$265 million to the Transit and Intercity Rail Capital Program; and (4) \$132 million to the State Highway Operation and Protection Program (SHOPP).	As Introduced	Senate Transportation & Housing Committee	

State Senate Bills	Subject	Last Amended	Status	VTA Position
SB 940 (Vidak) High-Speed Rail: Selling of Property	Prior to selling property that is no longer necessary for the state's high-speed rail project, requires the California High-Speed Rail Authority to offer the person, or his or her next of kin, from whom the property was acquired the right of first refusal to purchase the property at fair market value.	4/12/16	Senate Transportation & Housing Committee	
SB 951 (McGuire) Golden State Patriot Passes Program	Creates the Golden State Patriot Passes Program as a pilot program to provide veterans with free access to public transit services, thereby reducing greenhouse gas emissions and increasing veteran mobility. Requires Caltrans to administer the program. For FY 2018 through FY 2021, appropriates \$3 million per year in cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund for the pilot program. By January 1, 2018, requires Caltrans to select three transit operator applicants to receive funding under the pilot program. If there are sufficient applicants, requires Caltrans to do all of the following: (1) not select a transit operator applicant that is currently providing veterans with free access to public transit services; (2) select applicants that serve entirely different counties; (3) select one application that primarily serves an urban area, one that primarily serves a suburban area, and one that primarily serves a rural area. Requires a transit operator selected to participate in the pilot program to match any state money that it receives with local funds. In selecting applicants, requires Caltrans to ensure that benefits are provided under the pilot program to disadvantaged communities. Sunsets the pilot program on January 1, 2022.	3/17/16	Senate Environmental Quality Committee	
SB 998 (Wieckowski) Bus-Only Lanes: Motorist Violations	Prohibits a person from operating, parking, stopping, or leaving standing a motor vehicle in a highway or roadway lane that has been designated for the exclusive use of public transit buses.	4/6/16	Senate Transportation & Housing Committee	Co- Sponsor
SB 1051 (Hancock) AC Transit: Automated Enforcement of Parking Violations	Authorizes the Alameda-Contra Costa Transit District (AC Transit) to install automated forward-facing parking control devices on its public transit vehicles for the purpose of video imaging of parking violations occurring in transit-only traffic lanes or at bus stops.	4/6/16	Senate Transportation & Housing Committee	
SB 1066 (Beall) STIP Fund Estimate: FAST Act Apportionments	Requires the fund estimate for the State Transportation Improvement Program (STIP) prepared by Caltrans and the California Transportation Commission (CTC) to identify and include federal funds derived from apportionments made to the state under the Fixing America's Surface Transportation (FAST) Act.	As Introduced	Senate Appropriations Committee	

State Senate Bills	Subject	Last Amended	Status	VTA Position
SB 1128 (Glazer) Bay Area Regional Commute Benefit Ordinance	Eliminates the January 1, 2017, sunset date, and indefinitely extends provisions in current law that authorize the Bay Area Air Quality Management District (BAAQMD) and the Metropolitan Transportation Commission (MTC) to jointly adopt a regional commute benefit ordinance requiring certain employers to offer their employees one of three specified commute benefits. Deletes bicycle commuting as a pretax option under the ordinance and, instead, allows an employer covered by the ordinance, at its discretion, to offer commuting by bicycle as an employer-paid benefit. If the covered employer chooses to offer a subsidy to offset the monthly cost of commuting by bicycle, requires such subsidy to be either the monthly cost of commuting by bicycle or \$20, whichever is lower. Deletes provisions in current law that require BAAQMD and MTC to jointly report to the Legislature regarding the implementation of the regional commute benefit ordinance.	As Introduced	Assembly Desk	
SB 1141 (Moorlach) Pilot Program: Transferring State Highways to Local Agencies	Establishes a five-year pilot program under which two counties, one in Northern California and one in Southern California, may be selected to operate, maintain and make improvements to all state highways within their respective jurisdictions. For the duration of the pilot program, requires Caltrans to convey all of its authority and responsibility over state highways in a participating county to the applicable county or regional transportation agency that has jurisdiction in the county. Requires the California Transportation Commission (CTC) to administer and oversee the pilot program, and to select the county or counties that will participate no later than January 1, 2018, from applications received by the commission. Provides that participation of a county in the pilot program is voluntary. Specifies that if the CTC is unable to select at least one county to participate in the pilot program by January 1, 2018, because no county has submitted an application, the provisions of the bill shall become inoperative on January 15, 2018. For the duration of the pilot program, requires funding to be appropriated as block grants in the annual Budget Act to the participating counties in an amount equivalent to federal and state dollars otherwise to be expended by Caltrans on state highway operation and Protection Program (SHOPP), and the State Transportation Improvement Program (STIP). In consultation with Caltrans, requires the CTC to determine the applicable grant amounts for each participating county, and to submit its recommendations to the Governor and the Legislature. Provides that any cost savings realized by a participating county, compared to comparable expenditures that otherwise would have been undertaken by Caltrans on state highways in the absence of the pilot program, may be used by the county for other transportation priorities consistent with eligible expenditures for the funding sources involved, subject to approval by the CTC.	4/5/16	Senate Transportation & Housing Committee	
SB 1197 (Cannella) Intercity Rail Corridors: Extensions	At any time after an interagency transfer agreement for an intercity rail corridor between Caltrans and a joint powers board has been executed, allows the agreement to be amended to extend the affected rail corridor to provide intercity rail service beyond the defined boundaries of the corridor. Requires a proposed extension to be recommended and justified in the business plan for the intercity rail corridor by the joint powers board, and to be approved by the California State Transportation Agency (CalSTA).	As Introduced	Senate Transportation & Housing Committee	
SB 1259 (Runner) Toll Facilities: Veterans	Exempts vehicles occupied by a veteran and displaying a specialized veterans license plate from the payment of tolls or other charges on a toll road, high-occupancy toll (HOT) lane, toll bridge, toll highway, vehicular crossing, or any other toll facility.	As Introduced	Senate Transportation & Housing Committee	

State Senate Bills	Subject	Last Amended	Status	VTA Position
SB 1320 (Runner) California Transportation Commission and SHOPP Projects	Excludes the California Transportation Commission (CTC) from the California State Transportation Agency (CalSTA) and, instead, establishes the commission as a separate entity in state government to act in an independent oversight role. Requires Caltrans to submit its proposed program of projects for the State Highway Operation and Protection Program (SHOPP) to the CTC. Requires Caltrans to program capital outlay support resources for each project included in the SHOPP. Requires Caltrans to provide the CTC with detailed information for all programmed SHOPP projects, including cost, scope and schedule. Specifies that the CTC is not required to approve the SHOPP in its entirety, as submitted by Caltrans, and may approve or reject individual SHOPP projects programmed SHOPP project's cost, scope or schedule.	As Introduced	Senate Transportation & Housing Committee	
SB 1397 (Huff) Highway Changeable Message Signs: Advertising	Authorizes Caltrans, subject to federal approval, to enter into an agreement pursuant to a best value competitive procurement process with a contractor to construct, upgrade, reconstruct, and operate a network of changeable message signs within the rights-of-way of the state highway system. Requires the contractor, subject to certain standards established by Caltrans, to contract and receive funds for the placement of advertising on these changeable message signs when they are not being used by the department. Requires revenues derived from advertising on these changeable message signs to be allocated between Caltrans and the contractor. Requires the revenues received by Caltrans to be deposited into the State Highway Account, subject to appropriations by the Legislature. Authorizes Caltrans to adopt guidelines and procedures relative to advertising on changeable message signs.	As Introduced	Senate Transportation & Housing Committee	
SB 1464 (De Leon) Greenhouse Gas Emissions Reduction Programs: Consultation	In addition to other states, the federal government and other nations, requires the California Air Resources Board (CARB) to consult with local agencies to identify the most effective strategies and methods to: (1) reduce greenhouse gas emissions; (2) manage greenhouse gas control programs; and (3) facilitate the development of integrated and cost-effective regional, national and international greenhouse gas emissions reduction programs.	4/11/16	Senate Environmental Quality Committee	
SCA 7 (Huff) Motor Vehicle Fees and Taxes: Restrictions on Expenditures	Calls for placing before the voters an amendment to the California Constitution to prohibit the Legislature from borrowing revenues derived from fees and taxes imposed by the state on motor vehicles or their use or operations, and from using these revenues other than for state highways, local streets and roads, and fixed guideway mass transit as specified in Article 19 of the Constitution. Also prohibits these revenues from being pledged or used for the payment of principal and interest on bonds, or for other indebtedness. Requires the revenues derived from that portion of the vehicle license fee that exceeds 0.65 percent of the market value of a vehicle to be used for street and highway purposes. Prohibits these revenues from borrowing these revenues and from using them other than as specifically permitted. Also prohibits these revenues from being pledged or used for the payment of principal and interest on bonds, or for other indebtedness.	5/28/15	Senate Transportation & Housing Committee	

State Senate Bills	Subject	Last Amended	Status	VTA Position
SBX1-1 (Beall) Transportation Funding	Proposes to generate between \$4 billion and \$5 billion per year in new revenues for transportation purposes from the following sources: (1) an increase in the gasoline excise tax of 12 cents per gallon; (2) an increase in the diesel excise tax of 22 cents per gallon; (3) a registration surcharge of \$35 per year imposed on all motor vehicles; (4) a registration surcharge of \$100 per year imposed on zero- emission vehicles; and (5) a road access charge of \$35 per year imposed on all motor vehicles to be collected by the Department of Motor Vehicles (DMV) as part of the annual vehicle registration process. Requires the repayment over the next three years of approximately \$879 million in outstanding loans owed by the General Fund to the State Highway Account, the Motor Vehicle Fuel Account, the Highway Users Tax Account (HUTA), and the Motor Vehicle Account. Beginning July 1, 2019, and every three years thereafter, indexes the gas tax and the diesel excise tax to inflation. Calls for 12 cents of the 22-cent increase in the diesel excise tax to be deposited into the Trade Corridors Improvement Fund and used for goods movement projects programmed by the California Transportation Commission (CTC). Requires the balance of the new revenues generated from the five ax and fee increases, as well as the one-time revenues from the General Fund loan repayments, to be deposited into a new Road Maintenance and Rehabilitation Account. Requires the revenues in the account to be used for the following purposes: (1) road maintenance and rehabilitation; (2) safety projects; (3) railroad grade separations; (4) active transportation and pedestrian/bicycle safety projects in conjunction with any other allowable project; or (5) wildlife crossings. Every year, requires 5 percent of the funds in the Road Maintenance and Rehabilitation Account to be set aside for allocation to counties that currently do not have a local transportation sales tax, but gain voter approval for one affer July 1, 2015. Requires the CTC to develop guidelines to d	9/1/15	Senate Appropriations Committee	Support

State Senate Bills	Subject	Last Amended	Status	VTA Position
SBX1-2 (Huff) Cap-and-Trade: State Highways and Local Roadways	Requires the Legislature to appropriate cap-and-trade auction proceeds generated from the transportation fuels sector for transportation infrastructure, including public streets and highways, but excluding high-speed rail.	As Introduced	Senate Transportation & Infrastructure Development Committee	
SBX1-3 (Vidak) High-Speed Rail: Bond Funding	Specifies that no further bonds shall be sold for high-speed rail purposes pursuant to the Safe, Reliable High-Speed Passenger Train Bond Act for the 21 st Century (Proposition 1A), except as specifically provided with respect to an existing appropriation for early improvement projects related to the Phase I blended system. Upon appropriation by the Legislature, requires the unspent proceeds received from outstanding bonds issued and sold for high-speed rail purposes prior to the effective date of the provisions of this bill to be redirected to retiring the debt incurred from the issuance and sale of those outstanding bonds. Allows the remaining unissued bonds, as of the effective date of the provisions of this bill, that were authorized for high-speed rail purposes to be issued and sold. Upon appropriation by the Legislature, requires the net proceeds from the sale of these remaining unissued bonds to be made available as follows: (1) 50 percent to Caltrans to fund repair and new construction projects on local streets and roads, with each county receiving a base amount of funding, and any additional funding being allocated based on a county's population. Makes no changes to the authorization under Proposition 1A for the issuance of \$950 million in bonds for rail purposes other than high-speed rail.	8/17/15	Senate Transportation & Infrastructure Development Committee	
SBX1-4 (Beall) Transportation Funding: State Highways and Local Roadways	Declares the intent of the Legislature to enact statutory changes to establish permanent, sustainable sources of transportation funding to maintain and repair the state's highways, local roads, bridges, and other critical transportation infrastructure.	9/4/15	Conference Committee	
SBX1-5 (Beall) Transportation Funding: Trade Corridors and Local Transportation Infrastructure	Declares the intent of the Legislature to enact a bill to establish permanent, sustainable sources of transportation funding to improve the state's key trade corridors, and support efforts by local governments to repair and improve local transportation infrastructure.	As Introduced	Assembly Desk	
SBX1-6 (Runner) Cap-and-Trade: High-Speed Rail	Prohibits the use of cap-and-trade auction proceeds for the state's high-speed rail project. Requires 65 percent of the cap-and-trade auction proceeds deposited into the Greenhouse Gas Reduction Fund to be distributed to the California Transportation Commission (CTC) for allocation to high-priority transportation projects, as determined by the commission. Requires the CTC to allocate these funds as follows: (1) 40 percent to state highway projects; (2) 40 percent to local street/road projects, equally divided between cities and counties; and (3) 20 percent to public transit projects.	As Introduced	Senate Transportation & Infrastructure Development Committee	

State Senate Bills	Subject	Last Amended	Status	VTA Position
SBX1-7 (Allen) Diesel Sales Tax	Increases the sales and use tax rate on diesel fuel by 3.5 percent. Dedicates the revenues derived from this increase to the State Transit Assistance Program (STA). Restricts the expenditure of these revenues to transit capital projects, or services to maintain or repair a public transit agency's existing vehicle fleet or facilities, including the following: (1) rehabilitation or modernization of existing vehicles or facilities; (2) design, acquisition and construction of new vehicles or facilities that improve existing public transit services or that enable the implementation of future planned services; or (3) services that complement local efforts for repair and improvement of local transportation infrastructure.	9/3/15	Senate Appropriations Committee	Support
SBX1-8 (Hill) Cap-and-Trade: Public Transit Funding	Increases the amount of cap-and-trade auction proceeds continuously appropriated from the Greenhouse Gas Reduction Fund to the Low Carbon Transit Operations Program from 5 percent to 10 percent, and to the Transit and Intercity Rail Capital Program from 10 percent to 20 percent.	As Introduced	Senate Appropriations Committee	Support
SBX1-9 (Moorlach) Caltrans: Architectural and Engineering Services	Prohibits Caltrans from using any non-recurring funds, including loan repayments, bond funds or grant funds, to pay the salaries or benefits of any permanent civil service position within the department. Beginning on July 1, 2016, requires Caltrans to contract with qualified private entities for a minimum of 15 percent of the total annual value of architectural and engineering services with respect to public works projects undertaken by the department. Increases this percentage each year to a minimum of 50 percent by July 1, 2023.	As Introduced	Senate Transportation & Infrastructure Development Committee	
SBX1-10 (Bates) State Transportation Improvement Program	Revises the process for programming and allocating the 75-percent share of federal and state funds available for regional transportation improvement programs (RTIPs). Requires the California Transportation Commission (CTC) to compute the annual county share amounts for each county for programming and allocation under the RTIPs. Requires these funds, along with an appropriate amount of capital outlay support dollars, to be appropriated annually through the Budget Act. Upon the enactment of the Budget Act, requires Caltrans to apportion the RTIP county shares for each county as block grants to the applicable regional transportation planning agency (RTPA). Requires the RTPAs to identify the transportation capital improvement projects to be funded with these dollars in their RTIPs. Requires the CTC to incorporate the RTIPs into the State Transportation Improvement Program (STIP). Eliminates the role of the CTC in programming and allocating funding for RTIP projects, but retains certain oversight roles of the commission with respect to the expenditure of these dollars. Repeals provisions in current law governing the computation of county shares over multiple fiscal years.	As Introduced	Senate Transportation & Infrastructure Development Committee	

State Senate Bills	Subject	Last Amended	Status	VTA Position
SBX1-11 (Berryhill) CEQA: Exemption for Certain Transportation Projects	Exempts from the California Environmental Quality Act (CEQA) a project that consists of the inspection, maintenance, repair, restoration, reconditioning, relocation, replacement, or removal of existing transportation infrastructure, including highways, roadways, bridges, tunnels, public transit systems, and paths and sidewalks serving either bicycles or pedestrians, if the project meets all of the following conditions: (1) the project is located within an existing right-of-way; (2) any area surrounding the right-of-way that is altered as a result of construction activities that are necessary for the completion of the project will be restored to its condition before the project; and (3) the project applicant agrees to comply with all conditions otherwise authorized by law or imposed by a city or county as part of any local agency permit process that are required to mitigate potential impacts of the project. Prohibits a court in a judicial action or proceeding under CEQA from staying or enjoining a transportation infrastructure project that is included in a regional sustainable communities strategy (SCS) or alternative planning strategy unless the court finds either of the following: (1) the project presents an imminent threat to the public health and safety; or (2) the project site contains unforeseen important Native American artifacts, or unforeseen important historical, archaeological or ecological values that would be materially, permanently and adversely affected by the project unless the court stays or enjoins the project.	9/4/15	Senate Transportation & Infrastructure Development Committee	
SBX1-12 (Runner) California Transportation Commission	Excludes the California Transportation Commission (CTC) from the California State Transportation Agency (CalSTA) and, instead, establishes the commission as a separate entity in state government to act in an independent oversight role. Requires Caltrans to submit its proposed program of projects for the State Highway Operation and Protection Program (SHOPP) to the CTC for review by January 31 of each even-numbered year. Requires Caltrans to program capital outlay support resources for each project included in the SHOPP. Requires Caltrans to provide the CTC with detailed information for all programmed SHOPP projects, including cost, scope and schedule. Specifies that the CTC is not required to approve the SHOPP in its entirety, as submitted by Caltrans, and may approve or reject individual SHOPP projects programmed by the department. Requires Caltrans to submit to the CTC for approval any changes in a programmed SHOPP project's cost, scope or schedule.	8/20/15	Senate Appropriations Committee	

State Senate Bills	Subject	Last Amended	Status	VTA Position
SBX1-13 (Vidak) Office of the Transportation Inspector General	Creates the Office of the Transportation Inspector as an independent state government entity to ensure that Caltrans; the California High-Speed Rail Authority; and all other state agencies expending state transportation funds are operating efficiently, effectively, and in compliance with applicable federal and state laws. Requires the Governor to appoint a transportation inspector general, subject to confirmation by the Senate, to a six-year term. Provides that the transportation inspector general cannot be removed from office during that term, except for good cause. Requires the transportation inspector general to review policies, practices and procedures, and to conduct audits and investigations of activities involving state transportation funds in consultation with all affected state agencies. Specifically, requires the transportation inspector general to do all of the following: (1) examine the operating practices of Caltrans, the High-Speed Rail Authority and all other state agencies expending state transportation funds to identify fraud and waste, opportunities for efficiencies, and opportunities to improve the data used to determine appropriate project resource allocations; (2) identify best practices in the delivery of transportation projects, and develop policies or recommend proposed legislation enabling state agencies to adopt these practices when practicable; (3) provide objective analysis of, and when possible, offer solutions to, concerns raised by the public or generated within agencies involving the state's transportation projects. Prohibits the Office of the Transportation agencies with state-funded transportation projects. Prohibits the Office of the Transportation agencies with state-funded transportation of programs and operations of all state transportation agencies with state-funded transportation projects. Prohibits the Office of the Transportation Inspector General from conducting any audit or investigation that would be redundant to or concurrent with any audit or investigation of the s	9/3/15	Senate Appropriations Committee	
SBX1-14 (Cannella) Public-Private Partnerships	Extends existing statutory authority for Caltrans and regional transportation agencies, including the Santa Clara Valley Transportation Authority (VTA), to utilize public-private partnerships for transportation infrastructure projects indefinitely.	As Introduced	Senate Transportation & Infrastructure Development Committee	Support
SCAX1-1 (Huff) Motor Vehicle Fees and Taxes: Restrictions on Expenditures	Calls for placing before the voters an amendment to the California Constitution to prohibit the Legislature from borrowing revenues derived from fees and taxes imposed by the state on motor vehicles or their use or operations, and from using these revenues other than for state highways, local streets and roads, and fixed guideway mass transit as specified in Article 19 of the Constitution. Also prohibits these revenues from being pledged or used for the payment of principal and interest on bonds, or for other indebtedness. Requires the revenues derived from that portion of the vehicle license fee that exceeds 0.65 percent of the market value of a vehicle to be used for street and highway purposes. Prohibits the Legislature from borrowing these revenues and from using them other than as specifically permitted. Also prohibits these revenues from being pledged or used for the payment of principal and interest on bonds, or for other indebtedness.	As Introduced	Senate Appropriations Committee	



Date:	April 21, 2016
Current Meeting:	May 12, 2016
Board Meeting:	June 2, 2016

BOARD MEMORANDUM

TO:	Santa Clara Valley Transportation Authority Policy Advisory Committee
THROUGH:	General Manager, Nuria I. Fernandez
FROM:	Director of Planning and Program Development, John Ristow
SUBJECT:	Development Review Quarterly Report for Jan-March 2016

FOR INFORMATION ONLY

BACKGROUND:

VTA's Development Review Program encompasses two separate, yet interrelated efforts to review and comment on development and transportation projects occurring in and adjacent to Santa Clara County: 1) the review of environmental documents and development proposals submitted by Member Agencies; and 2) the review of Transportation Impact Analysis (TIA) reports for proposed projects meeting the Congestion Management Program (CMP) TIA Guideline requirements.

The objectives of the Development Review Program include improving land use/transportation coordination, promoting alternative travel modes, and encouraging a balanced approach to addressing congestion. To share information and foster an open dialogue on land use and development matters with Member Agencies, VTA produces quarterly reports highlighting two sets of projects and types of information:

- **Projects Reviewed by VTA:** For projects or environmental documents reviewed by VTA staff under the Congestion Management Program and Development Review Program in the past quarter, relevant VTA comments are summarized.
- **Projects Approved by Local Agencies:** For projects or environmental documents approved by local agencies in the past quarter, relevant VTA comments and agency responses or conditions of approval are summarized.

DISCUSSION:

The following discussion provides a summary of the January through March 2016 Development Review Quarterly Report. The summary highlights key projects and topics contained in the report, which is provided as Attachment A. The report includes a table summarizing all of the reviewed and approved projects, a reference map showing the locations of these projects, and a glossary of common acronyms and abbreviations.

- VTA commented on 37 projects between January and March 2016. The city with the most activity was San José with 11 projects followed by Sunnyvale with 7 projects and Morgan Hill with 6 projects.
- Twelve of the 37 projects that VTA commented on involved environmental documents such as an Environmental Impact Report (EIR), Notice of Preparation (NOP), or Mitigated Negative Declaration. Eight of the projects involved stand-alone TIA documents, and 17 consisted of site plan reviews.
- Thirty four of the 37 items that VTA commented on were private development projects. The remaining items consisted of two public charter schools and a city-led General Plan Update.
- Ten projects which VTA previously commented on were approved by local agencies during this quarter. The City of San José saw the greatest number with three approvals, followed by Mountain View, Santa Clara and Sunnyvale with two approvals each.

Key plans and documents that VTA reviewed and commented on during the past quarter included the following:

- **730-750 Capitol Avenue Residential Project, City of Milpitas:** The City of Milpitas circulated site plans for 580 residential units on a 9.38-acre site at 730-750 East Capitol Avenue, across the street from the future Milpitas BART station and existing Montague Light Rail Transit (LRT) station. VTA submitted a comment letter supporting the land use intensification near existing and planned transit services, but noting that a previous proposal on the site was at a higher density and encouraging the City to maximize densities in the Transit Area Specific Plan (TASP) to generate transit ridership; commending the project applicant for providing 10-foot sidewalks and 24-foot planted buffers between pedestrians and automobiles, but requesting that sidewalks also be provided along all internal public streets in the development; inviting the City to coordinate with VTA, the City of San José and the Santa Clara Valley Water District to provide a bicycle/pedestrian connection from Capitol Avenue to Lundy Place; and recommending that the project include transportation demand management (TDM) measures such as parking management and transit incentives.
- Diridon Transit Oriented Development, City of San José: The City of San José circulated a Traffic Operations Analysis for up to 1 million square feet of office space, 325 residential units and 40,000 square feet of retail on an 8.93-acre site bounded by West Santa Clara Street, the Guadalupe River, VTA Light Rail tracks and the Los Gatos Creek. VTA submitted a comment letter supporting this land use intensification adjacent to the San Fernando Light Rail Transit (LRT) station and in close proximity to abundant transit services

at Diridon Station; noting that vehicle queues from project driveways could potentially disrupt light rail service and degrade transit speed and reliability, and recommending project design changes to avoid these impacts; recommending that the project include exceptional pedestrian accommodations along all frontages and place active uses, building entrances and transparent facades facing West Santa Clara Street and the San Fernando Light Rail station; recommending active coordination between VTA, the City and the developer regarding the proposed alignment of the VTA BART Silicon Valley Extension underneath the site; noting that VTA permits and California Public Utilities Commission (CPUC) approval will be required for project modifications to roadways with light rail tracks; and recommending TDM measures to reduce project vehicle trips.

• **Moffett Towers II, City of Sunnyvale:** The City of Sunnyvale circulated a DEIR and TIA Report for the redevelopment of a 47.4-acre site bounded by 5th Street, E Street, 11th Street and G Street in Moffett Park for a net increase of 727,448 square feet of office space. VTA submitted a comment letter recommending that the project provide exceptional pedestrian and bicycle connections to transit given that the majority of the site is outside a quarter-mile walking distance from light rail; commending the City for identifying voluntary contributions to regional transportation improvements as a mitigation measure for significant freeway impacts; recommending that the City work with the applicant to provide a financial contribution to offset increased transit delay disclosed in the DEIR; and commending the City and applicant for including a commitment to a TDM program including a specific trip reduction target, monitoring program and enforcement mechanism.

As noted above, 10 items that VTA previously provided comments on were approved during this past quarter. The following is a brief summary of key VTA comments and the local agency responses or conditions of approval on three of these items.

- **1050 Page Mill Office Project, City of Palo Alto:** The City of Palo Alto circulated a DEIR and TIA Report for 265,895 square feet of office space and 10,745 amenity space replacing a vacant R&D/warehouse building of the same size at 1050 Page Mill Road. VTA submitted a comment letter recommending that the project improve pedestrian and bicycle access through the site; encouraging the City and project applicant to adopt a TDM program including a trip reduction target, monitoring program and enforcement mechanism; and requesting improvements to a bus stop adjacent to the site. The project was approved by City Council on January 13, 2016, with conditions for the project to provide a landscape reserve for a future bicycle and pedestrian spine along the project boundary and include a TDM program to reduce single occupancy vehicle trips by 20% during the AM and PM peak hours.
- **Mission Town Center, City of Santa Clara:** The City of Santa Clara circulated a DEIR and TIA Report for 385 residential units and 27,000 square feet of ground floor retail replacing a self-storage facility, 10 residential units and 13,000 square feet of office/retail uses on a 5.7-acre site bounded by Benton Street, The Alameda, Harrison Street and El Camino Real. This was a reduction from the project description in the previous Notice of Preparation (NOP) for the project of 450 residential units and 27,000 square feet of retail. VTA submitted a comment letter supporting the proposed land use intensification at this important location

across the street from the Santa Clara Transit Center, served by several VTA bus lines, the future BART Silicon Valley Extension, Caltrain, Altamont Corridor Express (ACE) and the Capitol Corridor; commending the City and project applicant for including high quality pedestrian accommodations in the project but recommending that the project include further safety improvements by straightening existing angled crosswalks adjacent to the site; requesting further information about proposed bicycle improvements; and recommending TDM measures to reduce automobile trips. The Final Environmental Impact Report (FEIR) included a commitment to a TDM program achieving a 10% reduction in vehicle miles traveled (VMT) with an annual monitoring program and included additional details regarding proposed bicycle improvements. The project was approved by the City Council on February 23, 2016, with a reduction in density to 318 residential units and 22,000 square feet of ground floor retail. Subsequently, the developer terminated the ground lease for the property, reporting that the reduced density made the project uneconomical to develop (Silicon Valley Business Journal, March 16, 2016).

• Winchester Reserve Mixed Use, City of San José: The City of San José circulated a DEIR and TIA Report for 641 residential units and 13,000 square feet of retail space on a 7.68-acre site located northwest of the intersection of Winchester Boulevard and Williams Street. VTA submitted a comment letter supporting the land use intensification at this infill location; recommending pedestrian improvements along the project's Winchester Boulevard frontage; noting that increased congestion along Stevens Creek Boulevard identified in the DEIR could result in delay to transit vehicles and recommending that the City work with VTA to implement transit priority measures as a mitigation measure; recommending transit incentives as a TDM measure for residents of the development; and requesting improvements to a VTA bus stop on Winchester Boulevard. The project was approved on February 23, 2016 with a \$2.24 Million contribution toward potential transportation projects identified in the Transportation Development Policy being developed for the Winchester and Santana Row/Valley Fair Urban Villages and a \$50,000 contribution towards a parking permit program for the area adjacent to the proposed project.

Prepared By: Rob Cunningham Memo No. 5550



VTA Development Review Program

Quarterly Report January, February and March of 2016

Development Review Projects Summary

January to March 2016

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Map No.	CMP ID	Lead Agency	Project Name/Location	Project Description	Document Type	Comments this quarter?	Approved this quarter?	VTA Comment Topics
	G11 (02		Hampton Inn - 5955	100 hotel rooms totaling	Initial Study,			Pedestrian and Bicycle
1	GI1603	City of Gilroy	Travel Park Circle	65,120 s.f.	TIA	У		Accommodations
2	LG1502	Town of Los Gatos	401-409 Alberto Rd - Northeast of the intersection of Los Gatos-Saratoga Road and SR 17	92,800 s.f. office building replacing existing 30,000 s.f. office building	NOP	у		Transportation Impact Analysis (TIA) Report; Trip Generation Assumptions; Pedestrian Accommodations; Bicycle Accommodations; Alberto Way / SR 9 / SR 17 Ramp Improvement
3	MH1005	City of Morgan Hill	Condit Evergreen - Northeast corner of San Pedro Avenue and Condit Road	180 multi-family residential units on 10.2-acre site	Site Plans	у		Transportation Demand Management/Trip Reduction; Pedestrian Accommodations
4	MH1203	City of Morgan Hill	The Village - Southeast corner of Cochrane Road and Butterfield Blvd	136,300 s.f. retail and 60,000 s.f. medical office on 20-acre site	Site Plans	у		Pedestrian Accommodations; Bus Service
5	MH1501	City of Morgan Hill	Morgan Hill 2035 General Plan Update	Morgan Hill's comprehensive update to the General Plan	Draft EIR	V		Land Use and Alternatives Analysis; VMT Analysis; Freeway Analysis; TIA Report; Transportation Demand Management; Roadway Connectivity
6	MH1601	City of Morgan Hill	Monterey Dynasty - West side of Monterey Road, 500 feet south of Vineyard Boulevard	Two retail buildings totaling 19,717 s.f. of commercial space	Site Plans	y		Pedestrian Accommodations and Access to Transit; Bicycle Accommodations; Transportation Demand Management - Transit Incentives
7	MH1602	City of Morgan Hill	Cochran Browman - Northeast corner of DePaul Drive and Cochrane Road	New gas station and 3,200 s.f. convenience store replacing an existing gas station	Site Plans	y		Pedestrian Accommodations and Access to Transit; Bicycle Accommodations
			Hilton Garden Inn -			2		
8	MH1603	City of Morgan Hill	Madrone Parkway and Lightpost Way	149-room hotel	Site Plans	у		TIA Report
9	ML1403	City of Milpitas	Montague Self Storage - 985 Montague Expressway at S Milpitas Blvd	97,523 s.f. self-storage on 4.6 acres	Initial Study	у		VTA Construction Coordination

Development Review Quarterly Report

Map No.	CMP ID	Lead Agency	Project Name/Location	Project Description	Document Type	Comments this quarter?	Approved this quarter?	VTA Comment Topics
10	ML1601	City of Milpitas	625 N McCarthy Blvd - West side of N. McCarthy Boulevard, north of Ranch Drive	810,502 s.f. industrial on 44.17 acres	Site Plans	у		Pedestrian Accommodations; Bicycle Accommodations; Transportation Demand Management (TDM) and Trip Reduction; Project Impacts and Mitigation Land Use; Pedestrian and Bicycle
11	ML1602	City of Milpitas	730-750 E Capitol Ave Residential Project	580 residential units on a 9.38-acre site	Site Plans	у		Accommodations; Transportation Demand Management (TDM) and Trip Reduction
12	ML1603	City of Milpitas	1980 Tarob Court Residential - East side of Tarob Court, near intersection of Lundy Place and E Capitol Ave	61 residential units on a 2.6- acre site	Site Plans	у		Land Use; Pedestrian and Bicycle Accommodations; Transportation Demand Management (TDM) and Trip Reduction
13	ML1604	City of Milpitas	1316 Main Street	18 residential units on 0.4 acre	Site Plans	у		Land Use; Pedestrian and Bicycle Accommodations; Transportation Demand Management/Trip Reduction
14	MV1502	City of Mountain View	Mora Drive Residential - East side of Ortega Avenue, on both sides of Mora Drive	75 townhomes replacing 15 industrial buildings on a 5.13-acre site	Initial Study		y	Land Use; Pedestrian Accommodations
15	MV1504	City of Mountain View	Moffett Gateway - Bounded by Moffett Boulevard, US 101, and Stevens Creek	200,000 s.f. office and 180,000 s.f. hotel uses on a 9.7-acre site	Revised NOP	у		TIA Report; CMP Facilities; Transportation Demand Management; Pedestrian and Bicycle Accommodations; Drainage Changes to US 101
16	MV1601	City of Mountain View	779 E Evelyn Residential - SW corner of E Evelyn Ave and S Bernardo Ave	116 residential units replacing existing office and retail uses on a 1.9-acre site	Initial Study, TIA	у	У	Pedestrian and Bicycle Accommodations
17	PA1402	City of Palo Alto	1050 Page Mill Rd Office Project	265,895 s.f. office space and 10,745 s.f. amenity space	DEIR, TIA		У	Pedestrian and Bicycle Accommodations; Transit Incentives; Transportation Demand Management; Bus Service
18	PA1501	City of Palo Alto	2747 Park Boulevard	33,323 s.f. R&D building	Initial Study	у		Pedestrian Accommodations and Access to Transit; Transit Analysis; Transportation Demand Management

Development Review Quarterly Report

Map No.	CMP ID	Lead Agency	Project Name/Location	Project Description	Document Type	Comments this quarter?	Approved this quarter?	VTA Comment Topics
19	SC1503	City of Santa Clara	Mission Town Center - Between Benton, El Camino Real and The Alameda	385 residential apartments and 27,000 s.f. ground floor retail	DEIR, TIA	у	у	Land use; Pedestrian Accommodations and Site Design; Bicycle Accommodations; Potential Impacts on Transit Travel Times; Transportation Demand Management (TDM) and Trip Reduction
20	SC1509	City of Santa Clara	3607 Kifer Road Office Project - NW corner of Kifer Road and Lawrence Expressway	177,134 s.f. office building	Initial Study, TIA	v	v	Land Use; Pedestrian Accommodations and Access to Transit; Bicycle Accommodations; Transportation Demand Management (TDM)/Trip Reduction.
21	SC1601	City of Santa Clara	Franklin and Alviso Streets Partial Vacation Project	Conversion of public roadway segments into a landscaped pedestrian mall.	Initial Study, Traffic Operations Analysis	у	<u> </u>	Bus Service; Pedestrian Accommodations
22	SJ1323	City of San Jose	Bay 101 Casino - Bounded by First Street, Fourth Street, and Matrix Boulevard (US 101 frontage road)	125,000 s.f. casino and two hotels totaling 470 rooms	Site Plans	v		Metro / First Street Intersection Design
23	SJ1407	City of San Jose	Samaritan Medical Offices - Both sides of Samaritan Drive at Samaritan Court	365,000 s.f. net increase medical office use on 10.96 acres	TIA	y		Freeway Impacts and Voluntary Contributions; Pedestrian and Bicycle Accommodations; Transportation Demand Management/Trip Reduction; Auto Trip Reduction Statement (ATRS); Transit Analysis; Bus Service
24	SJ1412	City of San Jose	Winchester Reserve Mixed Use - 863-917 S. Winchester Blvd	641 residential units and 13,000 s.f. retail on a 7.68- acre site	DEIR, TIA		у	Land Use; Pedestrian Accommodations; Congestion Impacts to Transit Service; Transit Incentives; Bus Service
25	SJ1505	City of San Jose	777 West San Carlos Mixed Use - Bounded by W. San Carlos Street, Sunol Street, and McEvoy Street	110 multi-family residential units and 2,990 s.f. commercial uses on 1.3 acres	Initial Study, TIA		у	Land Use; Pedestrian Accommodations; Transit Incentives; Bus Service
26	SJ1521	City of San Jose	Saratoga-Williams Bus Stop - Southwest corner of Saratoga Avenue and Williams Road	Public improvements involving bus stop on commercial development at Saratoga-Williams Page 3 of 6	Site Plans	у		Bus Stop Relocation; Pedestrian Accommodations

Development Review Quarterly Report

Page 3 of 6

Map No.	CMP ID	Lead Agency	Project Name/Location	Project Description	Document Type	Comments this quarter?	Approved this quarter?	VTA Comment Topics
27	SJ1523	City of San Jose	Diridon Transit Oriented Development- Bounded by Santa Clara, Los Gatos Creek, Guadalupe River and LRT tracks	1.04 million s.f. office/commercial and 325 residential units	Traffic Operations Analysis	У		Land Use; Vehicular Access and Transit Operations; Pedestrian Accommodations and Access to Transit; Site Circulation; Bicycle Accommodations; Coordination with VTA BART Silicon Valley; VTA and CPUC Permits; Transportation Demand Management; Bus Service
28	SJ1601	City of San Jose	William Street Plaza - Southeast corner of McLaughlin Ave and E William Street	20,000 s.f. commercial/retail, relocation of bus stop	Site Plans	у		Bus Service
29	SJ1603	City of San Jose	470 S. Market Street Mixed Use - Northwest corner of Williams Street and First Street	24-story, 292-unit, 5,880 s.f. retail mixed-use development on 0.50 acres	Site Plans	у		VTA Transit Service; Land Use; Pedestrian Accommodations and Site Design; Bicycle Accommodations
30	SJ1604	City of San Jose	Residences and Fairfield Inn - East side of northerly terminus of America Center Court	261 room hotel	TIA	у	у	Pedestrian and Bicycle Accommodations & Access to Transit; Transportation Demand Management
31	SJ1605	City of San Jose	1096 Lincoln Avenue Retail Project - Northeast corner of Lincoln Avenue and Willow Street	9,552 s.f. retail building on 1/2-acre site	Site Plans	у		Bus Service
32	SJ1606	City of San Jose	955-987 First Street Bus Stop	Bus stop relocation	Site Plans	у		Bus Service
33	SJ1607	City of San Jose	Garden City Site Mixed Use - Bounded by Stevens Creek Blvd, Saratoga Ave, Kiely Blvd and Northlake Dr	871 residential units, 400,000 s.f. office space, 15,214 s.f. retail space and a 1.5-acre park	TIA Notification Form	y		Land Use; Pedestrian and Bicycle Accommodations; TIA Report; Congestion Impacts on Transit Travel Times; Transportation Demand Management; Intersection and Freeway Analysis & Mitigation Measures
34	SJ1608	City of San Jose	Downtown College Prep - Southeast corner of Monterey Highway and Alma Avenue	Reoccupation of former 80,800 s.f. building for 1,237-student public charter middle & high school	TIA Notification Form	у		TIA Report; Pedestrian and Bicycle Accommodations; Transportation Demand Management

Map No.	CMP ID	Lead Agency	Project Name/Location	Project Description	Document Type	Comments this quarter?	Approved this quarter?	VTA Comment Topics
35	SU1504	City of Sunnyvale	Moffett Towers II - Bounded by 11th St, G St, 5th St and E St	1,651,795 s.f. office campus replacing 924,347 s.f. office on 47.4-acre site	DEIR, TIA	у		Land Use, Pedestrian and Bicycle Accommodations and Access to Transit; Freeway Impacts; Transit Delay; Transportation Demand Management
36	SU1506	City of Sunnyvale	Stratford Middle School - 1500 Partridge Avenue at Dunford Way	520-student private middle school	DEIR		у	Pedestrian Accommodations; Transit Analysis; Auto Trip Reduction Statement
37	SU1512	City of Sunnyvale	Hilton Garden Inn - 767 N Mathilda Ave	320 room hotel	TIA	у		Pedestrian Accommodations; Transportation Demand Management
38	SU1516	City of Sunnyvale	1250 Lakeside Drive Hotel/Residential	250 multifamily residential units and 263 hotel rooms	NOP	у		Pedestrian Accommodations
39	SU1517	City of Sunnyvale	Summit School - 539 E. Weddell Drive	300 max. capacity public charter middle school	TIA, TIA Notification Form	у		Pedestrian and Bicycle Accommodations
40	SU1601	City of Sunnyvale	460 Persian Drive	66-unit affordable housing project	Site Plans	у	У	Land Use; Pedestrian Accommodations; Transportation Demand Management
41	SU1602	City of Sunnyvale	1240 Crossman Avenue	332,970 s.f. office/R&D uses	TIA Notification Form	y		Land Use; Pedestrian and Bicycle Accommodations; Transportation Analysis; Freeway Analysis; Transportation Demand Management
42	SU1603	City of Sunnyvale	Hilton Homewood - 830 East El Camino Real	130 hotel rooms	Site Plans	у		Bus Service



Development Review Quarterly Report

DEVELOPMENT REVIEW QUARTERLY REPORT GLOSSARY

ABAG	Association of Bay Area Governments	MTC	Metropolitan Transportation Commission
ABC	Across Barrier Connections	ND	Negative Declaration
AC	Acre(s)	NOI	Notice of Intent
ACE	Altamont Corridor Express	NOP	Notice of Preparation
ATRS	Auto Trip Reduction Statement	PCC	Portland Concrete Cement
BART	Bay Area Rapid Transit	PDA	Priority Development Area
BMPs	Best Management Practices	PDP	Planned Development Permit
BRT	Bus Rapid Transit	PDR	Planned Development Rezoning
BTG	Bicycle Technical Guidelines	PE	Preliminary Engineering
CDT	Community Design & Transportation	PTG	Pedestrian Technical Guidelines
CMP	Congestion Management Program	PUD	Planned Urban Development
CSA	Construction Staging Area	QOS	Quality of Service
CUP	Conditional Use Permit	R&D	Research & Development
CWC	Citizen Watchdog Committee	RES	Residential
DASH	Downtown Area Shuttle	ROW	Right-Of-Way
DEIR	Draft Environmental Impact Report	SAR	Site and Architectural Review
DU/AC	Dwelling Units Per Acre	SCVWD	Santa Clara Valley Water District
EIR	Environmental Impact Report	SDP	Site Development Permit
ER	Environmental Review	SF	Square Foot
FAR	Floor Area Ratio	SF RES	Single-Family Residential
FEIR	Final Environmental Impact Report	SOV	Single-Occupant Vehicle
GHG	Greenhouse Gas	SPA	Specific Plan Amendment
GPA	General Plan Amendment	SPRR	Southern Pacific Railroad
HCM	Highway Capacity Manual	SWPPP	Storm Water Pollution Prevention Program
HOV	High-Occupancy Vehicle	TCE	Temporary Construction Easement
HSR	High-Speed Rail	TDM	Transportation Demand Management
IS	Initial Study	TIA	Transportation Impact Analysis
ITS	Intelligent Transportation System	TIA NF	Transportation Impact Analysis Notification Form
LOS	Level of Service	TM	Tentative Map
LRT	Light Rail Transit	TMA	Transportation Management Association
LU/TD	Land Use/Transportation Diagram	TOD	Transit-Oriented Development
MF RES	Multi-Family Residential	TPA	Transit Priority Area
MM	Mitigation Measure	UPRR	Union Pacific Railroad
MMRP	Mitigation Monitoring & Reporting Program	VMT	Vehicle Miles Traveled
MND	Mitigated Negative Declaration	VTP	Valley Transportation Plan



Date:	April 29, 2016
Current Meeting:	May 12, 2016
Board Meeting:	June 2, 2016

BOARD MEMORANDUM

Santa Clara Valley Transportation Authority Policy Advisory Committee
General Manager, Nuria I. Fernandez
Director of Planning and Program Development, John Ristow
2015 Regional Pavement Condition Summary Report

FOR INFORMATION ONLY

BACKGROUND:

The Metropolitan Transportation Commission (MTC) releases an annual Bay Area regional pavement condition report, broken down by county and each jurisdiction within a county. The current summary reflects information from MTC's 2015 StreetSaver pavement management system. This system evaluates the regional arterials, collector roadways and residential streets.

The weighted pavement condition index (PCI) assigned to each jurisdiction ranges between zero and one hundred. PCI scores of 90 or higher are considered "excellent." These are newly built or resurfaced streets that show little or no distress. Pavement with a PCI score in the 80 to 89 range is considered "very good," and shows only slight or moderate distress, requiring primarily preventive maintenance. The "good" category ranges from 70 to 79, while streets with PCI scores in the "fair" (60-69) range are becoming worn to the point where rehabilitation may be needed to prevent rapid deterioration. Major repairs in the "fair" range cost five to 10 times more than routine maintenance; therefore these streets are at an especially critical stage.

MTC established a regional target for roadway quality at PCI of 75 or better. However, persistent funding shortages and unpredictable revenue streams hinder the local jurisdictions from reaching and maintaining this goal. Additionally, there are the competing priorities to either address the needs of growth or the needs of aging systems. And the systems not only include the roadway surface, but also curbs and gutters, sidewalks, storm drains, traffic signs, signals and lights that are necessary for functioning roadways.

DISCUSSION:

For 2015, MTC determined the region's average pavement condition index (PCI) score to be 67 out of a maximum possible 100 points. This is calculated on a three-year moving average basis,

and marks a one point improvement from the prior six years.

For 2015, all Santa Clara County jurisdictions' network average PCI scores fall between the low "fair" (61) and "very good" (82) categories, as shown in Attachment A. Of the sixteen county agencies, six have network PCI averages between 70 and 79. This is a decrease from nine agencies in 2014, three agencies previously ranked "good" have slipped into the "fair" range.

The change in PCI from 2014 to 2015 for each jurisdiction and the slow downward trend of county-wide weighted average scores can be found in Attachment A. Of note, Palo Alto's pavement condition improved to "very good." Cupertino, Los Altos Hills, and Sunnyvale had positive changes from 2014 to 2015. However, the remaining twelve agencies showed negative changes between the same years.

Further details are found on Attachment B-Santa Clara Countywide Pavement Conditions Statistics, regarding PCI by functional class, historical network PCI, and 2014/2015 comparisons of percentage of pavement by categories. Notably, none of the four functional classes have improved since 2012. Additionally, between 2014 and 2015, the "excellent/very good" percentage has decreased, while the "poor/failed" increased.

Prepared By: Celeste Fiore Memo No. 5510

Attachment A 2015 Pavement Condition Index Scores Santa Clara County

		Annual	Network P	CI Scores	3-Year	Moving A	verage
Jurisdiction	Total Lane Miles	2014	2015	Change, 2014 to 2015	2013	2014	2015
VERY GOOD (PCI = 80-89)							
Palo Alto	415	79	82	3	77	78	79
GOOD (PCI = 70-79)							
Los Altos Hills	120	76	79	3	77	76	77
Sunnyvale	637	76	77	1	77	77	77
Milpitas	298	74	73	-1	69	72	72
Santa Clara	590	73	72	-1	75	74	73
Los Altos	227	77	71	-6	79	78	76
Cupertino	298	67	70	3	66	65	67
FAIR (PCI = 60-69)							
Mountain View	331	70	69	-1	73	72	70
Campbell	230	73	68	-5	74	73	72
Santa Clara County	1,456	70	68	-2	74	72	70
Gilroy	258	68	66	-2	73	73	69
Los Gatos	226	68	66	-2	70	70	68
Morgan Hill	256	68	66	-2	74	71	68
Saratoga	283	67	65	-2	72	70	67
San Jose	4,304	63	62	-1	62	62	62
Monte Sereno	25	63	61	-2	67	65	63
MTC County-wide Weighted Av	verage	68	67	-1	69	68	68

VERY GOOD (PCI = 80-89)

Pavement shows only slight or moderate distress, requiring primarily preventive maintenance.

GOOD (PCI = 70-79)

Pavement requiring mostly preventive maintenance and showing only low levels of distress.

FAIR (PCI = 60-69) Pavement at the low end of this range is significantly distressed and may require a combination of rehabilitation and preventive maintenance.

Attachment B

Santa Clara Countywide Pavement Condition Statistics





Historical Network Annual PCI, 2001 - Present





Percentage of Pavement Area in "Excellent" or "Very Good" Condition and Percentage of Pavement Area in "Poor" or "Failed" Condition

Reflects area weighted average of all jurisdictions located in county



Date:	May 2, 2016
Current Meeting:	May 12, 2016
Board Meeting:	N/A

BOARD MEMORANDUM

TO:	Santa Clara Valley Transportation Authority Policy Advisory Committee
THROUGH:	General Manager, Nuria I. Fernandez
FROM:	Director of Government Affairs, Jim Lawson
SUBJECT:	Update on Caltrain Modernization Program

FOR INFORMATION ONLY

BACKGROUND:

The Caltrain Modernization (CalMod) Program will electrify and upgrade the performance, operating efficiency, capacity, safety and reliability of Caltrain's commuter rail service. The CalMod Program includes three main projects:

- 1) Electrification of the existing Caltrain corridor between San Francisco and San Jose
- 2) Installation of a Communications Based Overlay Signal System Positive Train Control (CBOSS PTC), which is an advanced signal system that includes federally-mandated safety improvements
- 3) Replacement of Caltrain's diesel trains with high-performance electric trains

Casey Fromson from the CalMods Program will be providing the update and soliciting feedback on key elements of the CalMod Program.

Prepared By: Stephen Flynn, Advisory Committee Coordinator Memo No. 5590



Date:	April 21, 2016
Current Meeting:	May 12, 2016
Board Meeting:	N/A

BOARD MEMORANDUM

TO:	Santa Clara Valley Transportation Authority Policy Advisory Committee
THROUGH:	General Manager, Nuria I. Fernandez
FROM:	Director of Planning and Program Development, John Ristow
SUBJECT:	Land Use and Transportation Briefing Series: San Jose Tri-Villages

FOR INFORMATION ONLY

BACKGROUND:

As the Congestion Management Agency (CMA) and transit agency for Santa Clara County, VTA has a role in integrating land use and transportation planning. State legislation requires CMAs to establish "A program to analyze the impacts of land use decisions made by local jurisdictions on the regional transportation system." (Government Code 65089 (b) (4)). In addition, transit agencies typically work with local jurisdictions to review and provide comments on development proposals near transit routes and facilities. However, VTA does not have land use decision-making authority, and it is therefore essential for VTA and Member Agencies to work hand-in-hand to achieve an integrated and thriving land use and transportation system.

The core goal of VTA's land use activities is to strengthen the connection between land use decisions and transportation investments in order to increase walking, biking and transit ridership, manage congestion, and improve the livability and economic vitality of Santa Clara County. VTA has developed several programs and initiatives to coordinate local land use decision-making with countywide transportation planning. These efforts, which VTA refers to as the Land Use and Transportation Integration (LUTI) Partnerships Program, were discussed in presentations to VTA Board Committees in August 2014, January 2015 and January 2016.

The LUTI Partnerships Program builds on existing VTA initiatives to enhance VTA's involvement in land use decision-making. A key objective is to create opportunities for VTA and Member Agencies to work together earlier in the process of planning and development to produce more effective and meaningful collaborative outcomes. This relationship is mutually beneficial; VTA's transportation investments greatly influence many aspects of city livability and sustainability, and local land use decisions influence the effectiveness of the various modes of travel (e.g., car, walk, bike, and transit). Both VTA and local efforts attain greater value by working together through each phase of development.

DISCUSSION:

Building on the LUTI Partnerships objective of creating opportunities for VTA and Member Agencies to work together, VTA staff initiated a series of Land Use and Transportation Briefings at VTA Board Committees in September 2015, which is ongoing. The purpose of this series is to highlight areas around the county where large-scale development is currently occurring, or is planned or proposed in the near future. These briefings will provide an opportunity for VTA and local agency staff to highlight the development projects or plans that are occurring in an area, the transportation opportunities and challenges associated with this growth, and potential strategies to address these issues. Bringing these items to VTA Committees will provide a forum for multijurisdictional discussions about land use decisions that are likely to have implications for the regional transportation system - fulfilling one of VTA's roles as a CMA.

At the May Technical Advisory Committee (TAC), Policy Advisory Committee (PAC), and Congestion Management Program & Planning Committee (CMPP) meetings, VTA and City of San Jose staff will provide a brief presentation on area planning efforts and major development projects occurring within West San Jose in the Santana Row/Valley Fair, Winchester Boulevard, and Stevens Creek Boulevard Urban Village areas, also known as the 'Tri-Villages.' The City's General Plan designated approximately 70 Urban Villages to channel the City's projected jobs and housing growth, each to determine its land use and urban design, infrastructure and implementation through a robust community planning process. Among the areas staff will highlight are current and in-process transportation initiatives such as the I-280 Winchester Project, Rapid 523, and long-term transportation strategies such as Transportation Demand Management (TDM) and funding/value capture from development. The briefing will also describe the ongoing planning coordination between VTA, City of San Jose, and neighboring jurisdictions.

VTA staff's intent is to bring these briefings to the TAC, PAC and CMPP on a regular basis, based on the timing of major development projects and proposals, and interest from VTA Committee members and Member Agency staff. VTA welcomes suggestions for other areas of the county to cover, or ways to enhance and further this dialogue.

Prepared By: Melissa Cerezo Memo No. 5552



Date:	May 10, 2016
Current Meeting:	June 2, 2016
Board Meeting:	June 2, 2016

BOARD MEMORANDUM

TO:	Santa Clara Valley Transportation Authority Bicycle & Pedestrain, Citizens, Policy and Technical Advisory Committees
THROUGH:	General Manager, Nuria I. Fernandez
FROM:	Director of Planning and Program Development, John Ristow
SUBJECT:	Potential ¹ / ₂ -cent 30-year Sales Tax Measure

Policy-Related Action: Yes

Government Code Section 84308 Applies: No

ACTION ITEM

RECOMMENDATION:

Recommend the VTA Board of Directors adopt the framework for a ¹/₂-cent 30-year sales tax measure and place measure on the November 2016 ballot.

BACKGROUND:

Based on the input received over the past 18 months, the analysis staff conducted by comparing the board adopted goals to projects and the polling conducted by the Silicon Valley Leadership Group, VTA presented a recommendation for a ¹/₂-cent, 30-year Sales Tax Measure at the April 22 Board Workshop. The Board requested staff to consider the following:

1. Increase the funding level for Transportation Operations from \$450 million to \$500 million.

2. Work with the Technical Advisory Committee (TAC) regarding match requirement(s) for projects in the measure.

Based on the Board's recommendations, staff (a) increased the Transportation Operations category to \$500 million for a total estimated program of \$6.3 billion; and (b) will be discussing the match requirements for the grant programs with the TAC at their May meeting. Furthermore, staff made adjustments to the highway, bicycle/pedestrian, Caltrain Capacity and Caltrain grade separation programs based on feedback from cities and Board Members.

It should be noted that the Sales Tax Measure will help fund projects and programs but will not be the sole funding source for a project. Transportation projects, especially larger projects, are typically built using a variety of funding sources. One significant advantage of a countywide sales tax is that it provides a local revenue source for obtaining additional funds through regional, state and federal fund sources. Per the discussions with the TAC, staff will bring forward recommended match policies for the program/project categories.

DISCUSSION:

BART Phase II - 23.81% (\$1.5 Billion in 2017 Dollars)

BART Phase II will create a new regional rail connection by extending BART from the Berryessa Station in San Jose to Santa Clara with stations at Alum Rock, downtown San Jose, San Jose Diridon Station and Santa Clara. It will ring rail around the south bay by connecting BART with Caltrain at Diridon and Santa Clara. The projected ridership for Phase II is approximately 55,000 average weekday ridership in the year 2035.

This project scored "high" or "medium high" for many of the Board's adopted goals including:

- Congestion relief and improve efficiency
- Expand transportation choices
- Actively promote healthy communities, environmental sustainability and plan for the next generation
- Improve System Financial Sustainability and Maintenance

The funding raised by the proposed tax will be used for the capital construction costs of the BART Phase II extension and will serve as the local match, allowing VTA to compete for an additional \$1.5 billion from the Federal New Starts Program and \$750 from the State's Cap and Trade Program.

Bicycle/Pedestrian Program - 3.97% (\$250 Million in 2017 Dollars)

This program will help fund bicycle and pedestrian projects identified by the cities, county and VTA. The program will complete gaps in the Cross County Bicycle Corridors and construct Across Barrier Connections throughout the County. The project will help construct a "Bicycle Superhighway" which will connect jobs, residents and transit services. The corridors will have a uniform design, provide superior bicycle infrastructure and showcase innovative treatments that prioritize bicycle safety.

The Countywide Bicycle and Pedestrian Program and Bicycle Superhighway Program scored "high" or "medium high" on several of the Board's adopted goals including

- Congestion relief and improve efficiency
- Expand transportation choices
- Actively promote healthy communities, environmental sustainability and plan for the next generation
- Improve system financial sustainability and maintenance

Staff is recommending a competitive grant program to fund capital projects. Bicycle and pedestrian educational programs, such as Safe Routes to School will be eligible for funding and will be allocated to cities on a formula basis. It should also be noted that the Complete Streets Requirement staff is proposing on all roadway-related categories will result in better pedestrian and bicycle facilities and safer access throughout the county. Attachment A contains the list of candidate projects.

Caltrain Capacity Improvements - 4.76% (\$300 Million in 2017 Dollars)

This program will fund Caltrain capacity improvements and increased service in Santa Clara County including:

- Station Improvements
- Level Boarding
- Extended Platforms
- Service Enhancements

Caltrain ridership continues to break records as more and more people are realizing the benefits of the system. As a result, capacity is becoming an issue. The Caltrain Modernization Program, which will electrify the system and add positive train control, is fully funded and moving forward. The Caltrain Capacity Improvements program will take the next step by helping Caltrain expand capacity and serve more riders through enhanced service and improved operations.

This project scored "high" on the following Board-adopted goals:

- Expand transportation choices
- Actively promote healthy communities, environmental sustainability and plan for the next generation

With BART connecting Santa Clara County with the eastern part of the bay, it is essential that Caltrain be improved and the two systems work together to serve residents throughout the county with connections to the peninsula and San Francisco.

Caltrain Grade Separations - 11.11% (\$700 Million in 2017 Dollars)

This program will fund grade separations along the Caltrain corridor in the cities of Sunnyvale, Mountain View and Palo Alto. Separating the Caltrain tracks from roadways provides increased safety benefits for drivers, bicyclists and pedestrians. These projects also reduce congestion at the intersection.

Grade Separations scored "high" on the following Board-adopted goals:

- Enhance Safety
- Expand Transportation Choices

The grade separation program will require close coordination and cooperation with both High Speed Rail Authority, Caltrain, as well with local cities.

County Expressways - 11.9 % (\$750 Million in 2017 Dollars)

This program will fund the Tier 1 improvement projects contained in the County's Expressway Plan. The County of Santa Clara conducted a very robust planning study and outreach process to determine the highest priority projects for the expressway system. These improvements will increase the effectiveness of the expressway system throughout the county. While the two Caltrain Grade Separations projects listed in Tier 1 are not included in staff's proposed funding level, these two projects will be eligible to apply for the Grade Separation Program. The list of Tier 1 projects staff is recommending is included in Attachment B. The County of Santa Clara will administer this program. A Complete Streets requirement will be included to maximize opportunities for bicycle and pedestrian access.

The Tier 1 County Expressways scored "high" or "medium high" for the following Boardadopted goals:

- Expand Transportation Choices
- Congestion Relief and Improve Efficiency
- Enhance Safety

Highway Interchanges - 11.9 % (\$750 Million in 2017 Dollars)

This program would fund highway projects throughout the valley. VTA will administer a competitive grant program to ensure that the best projects are moved forward. It will also have a Complete Streets requirement to maximize opportunities for bicycle and pedestrian access.

Attachment C provides a list of candidate projects that staff has identified as providing significant congestion relief. However other candidate projects may emerge over the life of the 30-year measure and these projects will also be eligible candidates for this funding. Additionally, staff modified the list to make noise abatement, overcrossings, and Intelligent Transportation Systems (ITS) projects eligible.

The analysis on the freeway/highway interchanges vary by location, however several projects scored well for the following board-adopted goals:

- Expand Transportation Choices
- Enhance Safety

Local Streets and Roads - 19.05% (\$1.2 Billion in 2017 Dollars)

These funds will be returned to the cities and the county on a formula basis. The recommended distribution formula mirrors the existing formula VTA uses for the Vehicle Registration Fee. The formula is contained in Attachment D.

These funds will be used to repair streets and include a Complete Streets requirement to improve bicycle and pedestrian elements of the street system. Cities and the county will be required to demonstrate that these funds will be used to enhance and not replace their current investments for road system maintenance and repair. Should a city or the County have a Pavement Condition Index score of at least 70, they could use the funds for other transportation projects and programs.

Because the Local Streets and Roads program is a maintenance program it was not included in the model evaluation. However, better road conditions result in a safer and more comfortable transportation experience for all users including drivers, transit passengers, bicyclists and pedestrians.

SR 85 Corridor - 5.56% (\$350 Million in 2017 Dollars)

This category will provide funds for a project or projects in the Highway 85 corridor. Currently the Highway 85 Policy Advisory Board (PAB) is studying this corridor and working to identify the most effective and efficient transportation projects for this corridor. Because the PAB is not yet finished its work in identifying a project(s), staff cannot provide any analysis at this time. However, it should be noted that State Route 85 is one of the most congested corridors in Santa Clara County. Staff will provide an update once the PAB has made a recommendation.

Transit Operations - 7.94% (\$500 Million in 2017 Dollars)

This category will provide additional funding for bus operations. Currently, VTA is conducting a major study of its operations and routes. These funds will help fund the recommendations that result from this study including:

- Increased service frequency along high-ridership corridors
- Improved amenities at bus stops to improve safety, security and access including shelters, sidewalks and lighting
- Support new service models to address first/last mile connections
- Develop programs and services for students, seniors, disabled and low-income riders

VTA modeled several transit expansion programs for bus service. Increasing transit service frequencies in the core network scored "high" or "medium high" for the following board-adopted goals:

- Expand transit ridership and promote quality transit for everyone
- Expand transportation choice.
- Actively promote healthy communities, environmental sustainability and plan for the next generation

If the Board elects to move forward with a Ballot Measure, and the Measure is approved by the voters, staff will prepare detailed administrative process and timelines for the Board's consideration. VTA will also establish the parameters for a Public Oversight Committee to

ensure the funds are allocated in accordance with the Measure language.

ALTERNATIVES:

The Board of Directors may elect not to place the Sales Tax Measure on the ballot. The Board may also decide to change any or all of the project categories, funding amounts and program policies.

FISCAL IMPACT:

If the Board of Directors decides to ask the voters to consider the sales tax in November, VTA would be responsible for the cost of placing the measure on the ballot. Previous ballot measure election costs in 2010 were approximately \$867,000. Appropriation for this expenditure is included in the FY17 Transit Fund Operating Budget. If voters approve the measure, it would generate an estimated \$6.3 billion (2017). VTA adminstration costs of the program would be recovered through direct charges to programs and projects and through VTA's administrative overhead charges.

Prepared by: Scott Haywood Memo No. 5577

ATTACHMENTS:

- Bike Superhwy Final (PDF)
- Tier 1 Expwy List Final (PDF)
- Envision Hwy Recommended List Final_050916 (PDF)
- LSCR Percentages (PDF)
ATTACHMENT A - ENVISION BICYCLE PROGRAM LIST

Project Title	Location
Implementation of Santa Clara Countywide Bicycle Plan	VTA
Trails in Expressway Rights-of-Way	County
Coyote Creek Trail Completion	County-San Jose
Lions Creek Trail	Gilroy
Miramonte Ave Bikeways	Los Altos
Fremont Road Pathway	Los Altos Hills
Los Gatos Creek Trail Connector to SR 9	Los Gatos
Berryessa Creek Trail	Milpitas
West Llagas Creek Trail	Morgan Hill
Gualadupe River Trail-Extension to south	San Jose
Five Wounds Trail from William Street to Mabury Road/Berryessa	San Jose
Hwy 237 Bike Trail: Great America Parkway to Zanker (Class I , II, and IV)	San Jose
Lower Gudalupe River Access Ramps	San Jose
Los Gatos Creek Trail Gap Closure	San Jose-Campbell- County
Calabazas Creek Trail	Santa Clara
San Tomas Aquino Trail Extension to South & Campbell Portion	Santa Clara-Campbell
Union Pacific Railroad Trail	Saratoga-Cupertino

ATTACHMENT A - ENVISION BICYCLE PROGRAM LIST

Stevens Creek Trail extension	Sunnyvale-Los Altos- Cupertino
Bike/Ped Bridges or Undercrossings	
Hamilton Avenue/Highway 17 Bicycle Overcrossing	Campbell
Ped/Bike Bridge over SR 17 from Railway/Sunnyside to Campbell Technology Pkwy	Campbell
Stevens Creek Trail grade separation at Stevens Creek Blvd	Cupertino
UPRR Bike/Ped Bridge Crossing: Stevens Creek Boulevard to Snyder Hammond House/Rancho San Antonio Park	Cupertino
Montague Expwy Bike/Ped Overcrossing at Milpitas BART Station	Milpitas/VTA
Shoreline/101 Bike Ped Bridge	Mountain View
Mayfield Tunnel Ped/Bike under Central Expressway connecting to San Antonio Caltrain station	Mountain View
South Palo Alto Caltrain Bike/Ped Crossing	Palo Alto
Matadero Creek Trail Undercrossing	Palo Alto
Caltrain Capitol Undercrossing	San Jose
Phelan Avenue Pedestrian & Bike Bridge over Coyote Creek	San Jose
Newhall Street Bike/Ped Overcrossing over Caltrain Tracks	SanJose
Kiely Bicycle & Pedestrian Overcrossing	Santa Clara
Winchester Bicycle and Pedestrian Overcrossing	Santa Clara
Bernardo Caltrain Undercrossing	Sunnyvale-Mountain View
San Tomas Aquino Creek Trail Underpass at 49er Stadium	Santa Clara
Safe Routes to School Educational Program	
Bike & ped safety education at approximately ~200 schools.	Countywide

ATTACHMENT A - ENVISION BICYCLE PROGRAM LIST

First-Last Mile Transit Connection	
Implementation of Pedestrian Access to Transit Plan (VTA)	Countywide
Bike amenities at transit stops and on transit vehicles	Countywide
Vision Zero/Safety	
Countywide Vision Zero Program (VTA)	Countywide
Highway 9 Pedestrian Safety Improvements	Saratoga-Los Gatos

ATTACHMENT B - ENVISION COUNTYWIDE EXPRESSWAY TIER 1 LIST

Project Title	Desctiption
Almaden Expressway at SR-85 - Interim Improvements	Interim improvement: add left-turn lane from southbound Almaden Expressway to SR 85 in San Jose
Almaden Expressway at Branham Lane Intersection Improvement	Extend 4th southbound lane to begin north of intersection at the intersection of Almaden Expressway and Branham Lane in San Jose
Almaden Expressway at Camden Ave intersection improvements	Add 2nd left turn lane from Almaden Expressway onto Camden Avenue in San Jose; provide for three through lanes at the intersection; and close sidewalk gaps
Capitol Expressway Widening from I-680 to Capitol Avenue	Widen Capitol Expressway from 6 to 8 lanes: includes ramp realignments and sound wall and sidewalk gap closures in San Jose
Central Expressway at Thompson	Remove uncontrolled median opening (either signalize or close median) in Mountain View
Foothill Expressway widening between El Monte and San Antonio	Widen from 4 to 6 lanes by extending right turn lanes (auxiliary lanes) and make intersection improvements at El Monte and San Antonio in Los Altos
Lawrence Expressway at Homestead Road Interim Improvements	Interim improvement: Add eastbound through lane on Homestead Road through Lawrence Expressway intersection in Santa Clara
Lawrence Expressway at Homestead Road Grade Separation	Grade separation of Lawrence Expressway at Homestead Road, including HOV lanes and class I bike/ped trail (Part of ultimate plan to make Lawrence freeway-like between I-280 and US 101 by removing all signals).
Lawrence Expressway from Reed/Monroe to Arques Grade Separation	Grade separation of Lawrence Expressway from Reed/Monroe to Arques including HOV lanes and class I bike/ped trails on both sides of expressway (Part of ultimate plan to make Lawrence freeway-like between I-280 and US 101 by removing all signals).
Montague Expressway widening between Main/Oakland and McCarthy/O'Toole	Widen Montague Expressway from 6 to 8 lanes (HOV lane in westbound only) including modifications to I-880 interchange and closing sidewalk gaps
Montague Expressway widening between Trade Zone and Main/Oakland	Widen Montague Expressway between Trade Zone Boulevard and Main Street/Oakland Avenue to add eastbound auxiliary lane in Milpitas
Montague Expressway Widening Between Great Mall to Trade Zone	Widen Montague Expressway from 6 to 8 lanes (HOV lanes) including closing sidewalk gaps in San Jose and Milpitas
Oregon-Page Mill widening between I-280 and Foothill Expressway	Widen Oregon-Page Mill Expressway from 4 to 6 lanes between I-280 and Foothill Expressway with intersection improvements at Junipero Serra Blvd-Foothill intersection, including a bike/pedestrian trail extension from Deer Creek Road to I-280 and enhanced bicycle connection from easterly Old Page Mill Road access to Junipero Serra Blvd
Oregon-Page Mill intersection improvements	Intersection improvements include - extend/add left turn lanes at various intersections between Porter Drive and north of Hansen, and convert Hanover intersection to 8-phase signal operations
Oregon-Page Mill/El Camino Real	Intersection improvements: extend double left turn from westbound Page Mill to southbound El Camino and modify southwest and southeast corners for improved pedestrian crossings

ATTACHMENT B - ENVISION COUNTYWIDE EXPRESSWAY TIER 1 LIST

San Tomas Expressway Widening between Homestead and Stevens Creek	Widen San Tomas Expressway from 6 to 8 lanes, including extending San Tomas Aquino Spur Trail along west side of Expressway, from Homestead to Stevens Creek Blvd and add sidewalks along east side consistent with pedestrian route plan
Santa Teresa-Hale Corridor Extension	Build 2-lane road connection with trail on Santa Teresa Blvd from DeWitt to Main in Morgan Hill
Santa Teresa-Hale Corridor widening	Widen Santa Teresa Boulevard to 4 travel lanes and add trail between Long Meadow and Fitzgerald Avenue
SR 17/San Tomas Expressway Interim Improvements	Interim improvement: northbound SR 17 off-ramp improvements to include signal at White Oaks with interconnect at San Tomas/Camden signal and lane reconfigurations (Tier 1 Exp Plan 2040)
I-280/Foothill Expressway Interchange Modifications	Add signal at the southbound I-280 off-ramp intersection and intersection improvements at northbound I-280 off-ramp, including pedestrian crossing enhancements, potential Stevens Creek Trail and northbound auxiliary lane on Foothill to Homestead
I-280/Oregon-Page Mill Road Interchange Improvements	Modify interchange: Proposed concept is roundabout west of interchange, park-and ride lot reconfiguration, signal at northbound I-280 off-ramp, frontage road from Christopher Lane to Old Page Mill, and signal at Old Page Mill. Plus bicycle and pedestrian improvements throughout.
Expressway ITS/Signal System	Intelligent Transportation System (ITS) Short Term: Replace/upgrade/add fiber optic lines; upgrade equipment for new technologies; systemwide pedestrian sensors; enhance/replace bicycle and vehicle detection with new technologies on the County expressways

Project Title (Location)	Description
US 101 Improvements to address regional connectivity and circulation between San Antonio	US 101/San Antonio to Charleston/Rengstorff Improvements
and Charleston (Palo Alto and Mountain View)	US 101/Shoreline Improvements
SR 85/SR 237 Area Improvements to address	SR 85/SR 237 Connector Improvements
mainline congestion and regional connectivity	SR 85/EI Camino Real Improvements
(Mountain View)	SR 237/EI Camino Real/Grant Rd Improvement
SR 237/US 101/Mathilda Area Improvements to address local roadway congestion (Sunnyvale)	Improve Mathilda Ave and the interchanges at SR 237/US 101/Mathilda
SR 237 Corridor Improvements to address mainline congestion and regional connectivity (San Jose, Santa Clara and Milpitas)	SR 237 WB/EB Aux Lane (Zanker to N. First /N. First to Zanker)
	SR 237/Great America WB off-ramp Improvements
	Calaveras Boulevard Replacement/Widening over UPRR tracks
I-280 West County Improvements to address mainline congestion (Los Altos, Los Altos Hills, Cupertino and Palo Alto)	I-280 Mainline and Interchange Improvements (Magdalena to San Mateo County Line)
SR 85/I-280 Area Improvements to address regional	NB I-280/Foothill Braided Ramp
Connectivity (Cupertino, Los Altos, and Sunnyvale)	NB I-280/Foothill off-ramp Improvements
US 101/Trimble to Zanker Area Improvements to	US 101/SR 87/Trimble/De La Cruz Improvements
address local roadway connectivity and mainline congestion (San Jose and Santa Clara)	US 101/SB SR 87 Connector Improvements
	US 101/Zanker Overcrossing
US 101/Mabury Improvements (San Jose)	US 101/Mabury New I/C to address regional access

ATTACHMENT C - ENVISION HIGHWAY PROGRAM CANDIDATE LIST

I-680 Corridor Improvements to address mainline	I-680/Alum Rock Improvements	
congestion and regional connectivity (San Jose and Milpitas)	I-680/McKee Improvements	
I-280/Winchester Area Improvements (San Jose and Santa Clara)	I-280/Winchester Area Improvements to address regional connectivity	
SR 87 Technology-based Corridor improvements (San Jose)	SR 87 Technology-based Corridor improvements to address mainline congestion and system reliability	
SR 17 Corridor Improvements (Los Gatos)	SR 17/ SR 9 Interchange Improvements to enhance safety and bike/ped mobility	
US 101/Blossom Hill I/C (San Jose)	US 101/Blossom Hill I/C to address local roadway congestion and connectivity including for bicyclists and pedestrians	
US 101 Improvements to address mainline	US 101/Buena Vista I/C	
congestion and regional connectivity (Gilroy)	US 101/SR 152 10th Street Ramp and Intersection Improvement	
SR 152 Corridor Improvements (Gilroy)	SR 152 Corridor including US 101/SR 25 interchange to address regional connectivity and goods movement network improvements.	
I-280/Wolfe I/C Improvments (Cupertino)	I-280/Wolfe I/C Improvement to address mainline congestion and improve local traffic circulation.	
I-880/Charcot Avenue (San Jose)	New Charcot Avenue overcrossing over I-880 to address local relief circulation and adjacent I-880 interchanges congestion relief.	
All Freeways (Countywide)	Noise Abatement projects to implement treatments to address existing freeway noise levels.	
All Freeways (Countywide)	ITS (Intellingent Transportation Systems) projects such as integrated corridor management systems, traffic operations systems, ramp metering, managed lanes, and local traffic signal control systems to address freeway mainline congestion and local roadway congestion caused by cut-through traffic.	

* Working assumption is that Tax Measure would fund at most 80% of Total Needed Cost of any project selected for Tax Measure

ATTACHMENT D - ENVISION LOCAL STREETS AND ROADS FORMULA

City/County	Percentage
Campbell	2.0%
Cupertino	2.8%
Gilroy	2.5%
Los Altos	1.4%
Los Altos Hills	0.4%
Los Gatos	1.5%
Milpitas	3.5%
Monte Sereno	0.2%
Morgan Hill	2.0%
Mountain View	3.7%
Palo Alto	3.2%
San Jose	48.3%
Santa Clara	5.8%
Saratoga	1.5%
Sunnyvale	7%
Santa Clara County	14.30%



May 8, 2016
May 11, 2016
June 2, 2016

BOARD MEMORANDUM

TO:	Santa Clara Valley Transportation Authority Policy Advisory Committee	
THROUGH:	General Manager, Nuria I. Fernandez	
FROM:	Director of Planning and Program Development, John Ristow	
SUBJECT:	Measure A Project Funding Recommendation	

Policy-Related Action: Yes

Government Code Section 84308 Applies: No

ACTION ITEM

<u>RECOMMENDATION:</u>

Establish funding commitments for the projected available 2000 Measure A revenue and augment the 2000 Measure A Transit Improvement Program Fund Capital Budget by \$79,000,000 for the Capitol Expressway Light Rail to Eastridge, Vasona Light Rail Extension/Double Track, and Airport People Mover Connection to Mineta SJ Airport projects.

BACKGROUND:

In November 2000, the voters of Santa Clara County passed Measure A, imposing a ¹/₂ cent sales tax for 30 years to fund a list of transit projects outlined in Attachment A. Collection of the new tax began in April of 2006 and will continue until March 2036. The original estimate of total revenue at the time of the 2000 vote was approximately \$14 Billion. Due to two economic recessions and now a more conservative revenue estimate, the current total revenue estimate for the 30 year tax has been revised to \$7.4 Billion. VTA has been working to deliver the program of projects since early 2001 and Attachment A also provides a summary status of the program of projects to date.

Because of the reduced revenue projection, the VTA Board of Directors has made a series of policy decisions to prioritize projects for investment, development and delivery.

September 7, 2000 - M/S/C (Chavez/LeZotte) to adopt Resolution No. 00.09.58 designating the Downtown/East Valley Transit Improvement Program as VTA's next priority after the 1996 Measure A + B Transportation Improvement projects.

August 7, 2008 - M/S/C (Liccardo/Pyle) to reaffirm the VTA Board of Directors support for the

Capitol Expressway Light Rail Extension to Eastridge Mall and recommend the continuation of planning and design activities in coordination with the review and approval of the 2000 Measure A Expenditure Plan Light Rail Systems Analysis.

January 8, 2009 - M/S/C (Gage/Pyle) on a vote of 9 Ayes, 1 No and 1 Abstention, to reaffirm as amended the Board's commitment to the Silicon Valley Rapid Transit Corridor project (BART to Milpitas, San Jose, and Santa Clara); and approve a funding plan for an operable BART segment in Santa Clara County as an assurance for the BART Warm Springs Extension project. Member Kishimoto voted No. Member Reed Abstained.

December 9, 2010 - M/S/C (Herrera/Reed) to Approve the Expenditure Prioritization, Key Financial Principles and Deficit Reduction Targets as recommended by the Ad-Hoc Financial Recovery Committee; include the following language in Principle Number 2: Limit Use of Capital Funding: Revenue collected from the 2000 Measure A Sales Tax shall be dedicated to the delivery of the Measure A Capital Projects maintaining the BART Extension to Santa Clara County as the Board's adopted first priority. The Board policy of committing only a small share of these funds to support transit service should remain unaltered, to uphold the public commitment to the voters to use these funds for highest-priority capital projects; and further, include the italicized language in the first sentence under Guidance on Expenditure Prioritization to read as follows: "In developing VTA's Biennial Operating Budget and associated financial plans, VTA shall prioritize its activities for the expenditure of operating funds in the following order."; 2) Direct staff to prepare the FY 2012 and FY 2013 Biennial Operating Budget according to these recommendations and further direct staff to utilize the Expenditure Prioritization, Key Financial Principles and Deficit Reduction Targets in guiding the Santa Clara Valley Transportation Authority (VTA) to financial sustainability; 3) Convert the deficit reduction targets to percentages; 4) Direct staff to facilitate the creation an internal efficiencies committee comprised of employee representatives; 5) Bring back the recommendations from the Harvey Rose report for consideration during the budget process; and 6) Utilize the Audit Committee for focused engagements.

The actions described above prioritize the BART extension as the highest priority project and Downtown East Valley Project - Capitol Light Rail Extension to Eastridge as the second priority project for the use of 2000 Measure A funds.

This memorandum provides a staff recommendation for commitment and appropriation of 2000 Measure A funds and reaffirms Board prioritization of the 2000 Measure A program of projects.

DISCUSSION:

The staff recommendation for commitment of 2000 Measure A funds is based on previous Board established priority, project readiness, public support and whether the project is dependent on third party actions needed in order to proceed.

VTA has projected a balance of approximately \$1,817 Billion in available 2000 Measure A revenue that can be allocated to projects over the remaining life of the program.

BART Phase II Project

As the first Board priority, staff recommends full commitment of the funds to complete the BART Phase II planned funding.

Total Estimated Cost	\$4,700 Million
Planned Revenue	\$750 Million - State Cap & Trade Funds (Secured Summer 2016)
	\$1,500 Million - New Sales Tax Measure (November 2016 Ballot)
	\$1,500 Million - Federal New Starts (Secured late 2017)
	\$160 Million - Transit Congestion Relief Program (TCRP) Grant
	<u>\$790 Million</u> - 2000 Measure A
	\$4.700 Million

Staff recommends a 2000 Measure A commitment to the BART Phase II project of \$790 Million plus a \$635 Million estimate for debt service financing, potential funding shortfalls from other sources, and cost increase contingency on the project for a total commitment of \$1,425 Million.

2000 Measure A Commitment: \$790 Million Project Funding Plan <u>\$635 Million</u> Debt Service/Funding Shortfall/Cost Contingency **\$1,425 Million Total 2000 Measure A Commitment**

It is important to acknowledge that should funding for BART Phase II not be secured as planned, additional 2000 Measure A funding would need to be programmed to the BART Phase II project to make up for shortfalls in planned funding or cost increases on the project.

Therefore, staff also recommends that until the BART Phase II project has secured all funding required, only funding needed to advance additional projects through pre-construction phases be programmed at this time.

The BART Phase II funding plan schedule is outlined above and is anticipated to be complete by end of 2017 with execution of a federal New Starts Full Funding Grant Agreement.

After full funding commitment to the BART Phase II project, the estimated remaining balance of 2000 Measure A funding is approximately \$390 Million.

Capitol Expressway Light Rail Extension to Eastridge

As the second priority established by the Board of Directors, staff recommends establishing a commitment to fund the Capitol Expressway Light Rail Extension to Eastridge project of \$70 Million to complete design, acquire right of way and relocate utilities in order to prepare the project for construction. This will require an augmentation to the 2000 Measure A Transit Improvement Program Fund Capital Budget of \$50 Million.

Total Estimated Cost:	\$377 Million
Recommended 2016 Commitment:	\$70 Million
Current Available Appropriation:	<u>(\$20 Million)</u>

Additional Appropriation Required:

\$50 Million

Vasona Light Rail Extension to Vasona Junction

The Vasona Extension/Doubletrack Project is the only other 2000 Measure A project that is environmentally approved and ready to advance into final design and right of way acquisition, therefore staff recommends a commitment of \$40 Million to complete final design and acquire right of way. This will require an augmentation to the 2000 Measure A Transit Improvement Program Fund Capital Budget of \$28 Million.

Total Estimated Cost:

LRT Extension Project	\$174 Million
Doubletrack/Platform Extensions	<u>\$173 Million</u>
Total	\$347 Million
Recommended 2016 Commitment:	\$40 Million
Current Available Appropriation:	<u>(\$12 Million)</u>
Additional Appropriation Required:	\$28 Million

Airport People Mover Rail Connection to Airport

The Airport People Mover project has completed a conceptual vehicle technology level analysis to date. Staff is recommending to commit \$3 Million for Conceptual Alternatives Analysis phase in order to further define the route options, type of vehicle technology and to develop a funding/business plan. The Conceptual Alternative Analysis would also include evaluation of a link between Diridon Station and airport facilities. Staff believes that this project will require a partnership between several agencies including the City of San Jose, San Jose Airport, High Speed Rail and likely the private sector in order to develop and fund a fixed rail connection to the airport. This will require an augmentation to the 2000 Measure A Transit Improvement Program Fund Capital Budget of \$1 Million.

Estimated Cost:	\$600-800 Million
Recommended 2016 Commitment:	\$3 Million
Current Available Appropriation	<u>(\$2 Million)</u>
Additional Appropriation Required:	\$1 Million

Other 2000 Measure A Projects

The El Camino Real and Stevens Creek BRT projects still require final approval of project scope through environmental clearance. The VTA Staff recommendation is to maintain the existing 2000 Measure A funding included in the FY16 2000 Measure A Budget for these projects at this time.

The remaining projects in 2000 Measure A require either further development of third party projects such as the Caltrain Modernization Program and High Speed Rail Project in order to

determine any remaining VTA responsibility. Therefore, staff does not recommend any additional 2000 Measure A funding commitment at this time.

The total additional appropriation requested for the 2000 Measure A Transit Improvement Program Fund Capital Budget is as follows:

Capitol Expressway Light Rail Extension to Eastridge:	\$50 Million
Vasona Light Rail Extension to Vasona Junction:	\$28 Million
Airport People Mover Rail Connection to Airport:	<u>\$1 Million</u>
Total Appropriation:	\$79 Million

Following Board of Directors approval of these funding commitments and appropriations, staff will initiate project development work on Capitol Light Rail, Vasona Light Rail and Airport People mover projects and continue work on the BRT projects.

ALTERNATIVES:

The Board of Directors could choose a different priority for allocation of the available 2000 Measure A funding.

FISCAL IMPACT:

This action will add \$79,000,000 to the 2000 Measure A Transit Improvement Program Fund Capital Budget for the Capitol Expressway Light Rail to Eastridge, Vasona Light Rail Extension/Double Track, and Airport People Mover Connection to Mineta SJ Airport projects. The action will also establish a Board commitment of \$1,425 Million for the BART Phase II project.

Prepared by: John Ristow Memo No. 5563

ATTACHMENTS:

• Attachment_A_MT_5563 (PDF)

2000 MEASURE A TRANSIT IMPROVEMENT PROGRAM

STATUS

- · ·	he Santa Clara Caltrain Station
-1 BART SV Program Development, Implementation & Warm Springs	
BART - Silicon Valley Program Development & Implementation	Ongoing
Warm Springs Extension (WSX) - VTA Share	Construction
-2 BART SV Corridor Establishment and Maintenance (CEM)	
Silicon Valley Corridor Establishment and Maintenance	Ongoing
-3 BART Silicon Valley Extension	
Berryessa Extension Project (SVBX Phase I)	Construction
Future Extension to Santa Clara (SVSX Phase II)	Under Development -Awaiting Funding
Newhall Maintenance Facility	Under Development
BART Core Systems Modifications	Construction
-4 BART Other Supporting Projects	
King Road Bus Rapid Transit	Ongoing
Northern Light Rail Express	Completed
Santa Clara Pocket Track	Completed
BART Transit Integration Analysis & Improvements	Ongoing
N. First St. Speed Improvements & First St./Tasman Ave. Modidifications	Ongoing
rovide Connection from Mineta San Jose International Airport to BART,	Caltrain and VTA Light Rail
Mineta San Jose Airport People Mover	Inactive - PRT technology not ready
utand Linkt Dail from Doumtour Can Jose to The Fast Vallau	
xtend Light Rail from Downtown San Jose to The East Valley	
Downtown East Valley Planning & Conceptual Engineering	Completed
Downtown East Valley Environmental & 90% CELR	Ongoing
Capitol Expressway Light Rail - Pedestrian Improvements	Completed
Capitol Expressway Light Rail - Eastridge Transit Center	Completed
Capitol Expressway Light Rail Phase II: Light Rail to Eastridge	Awaiting Funding
ow Floor Light Rail Vehicles	
Low Floor Light Rail Vehicles	Completed
-	•
mprove Caltrain: Double Track to Gilroy & Electrify from Palo Alto to Gili	roy
Caltrain South County Capacity Improvements	Pending CA High Speed Rail
Caltrain Electrification/High Speed Rail	Ongoing
Caltrain Electrification Early Investment Program (VTA Share)	Ongoing
altrain Sorvico Lingrados	
altrain Service Upgrades	
Caltrain Service Upgrades	Ongoing
Caltrain Improvement Plan	Completed
Bike Sharing Pilot Project	Ongoing
Caltrain Mountain View Parking Structure	Pending CA High Speed Rail
Caltrain/Union Pacific Blossom Hill Pedestrian Grade Separation	Completed
Caltrain Safety Enhancements	Next Phase Pending CA High Speed Rail
Santa Clara Station Pedestrian Underpass Extension	Ongoing
Santa Clara & San Jose Diridon Station Upgrades	Completed
alo Alto Intermodal Transit Center	
Palo Alto Intermodal Transit Center	Pending CA High Speed Rail
mprove Bus Service in Major Corridors	
Bus Rapid Transit Strategic Plan	Ongoing
Highway-Based Bus Rapid Transit Alternatives Analysis	Completed
Alum Rock/Santa Clara Bus Rapid Transit	Construction
Stevens Creek Bus Rapid Transit	Planning - Awaiting Funding
El Camino Real Bus Rapid Transit	Environmental - Awaiting Funding
Procurement of 40 Bus Rapid Transit Buses	Ongoing
Bus Rapid Transit Modifications - Chaboya & North Divisions	Ongoing
Money Counting Facility Replacement	Closed - Not needed
DeAnza College Transit Center Improvements	Ongoing
pgrade Altamont Commuter Express (ACE)	
Included in Santa Clara and San Jose Diridon Station Upgrade	Completed
mprove Highway 17 Express Bus Service	
Improve Highway 17 Express Bus Service	Completed
	·
Connect Caltrain with Dumbarton Rail Corridor	
Dumbarton Rail Corridor	Inactive
Purchase Zero-Emission Buses & Construct Service Facilities	
3 Zero-Emission Bus Procurement	Completed
Zero-Emission Bus Facility Improvements	Completed
	and the second sec
Develop New LR Corridors	
Develop New LR Corridors New Rail Corridors Study	Ongoing
✓ Develop New LR Corridors New Rail Corridors Study ✓ Light Rail System Analysis	Ongoing Completed
Develop New LR Corridors New Rail Corridors Study Light Rail System Analysis Southern Light Rail Express	
Develop New LR Corridors New Rail Corridors Study	Completed



Date:	April 14, 2016
Current Meeting:	May 12, 2016
Board Meeting:	April 7, 2016

BOARD MEMORANDUM

TO:	Santa Clara Valley Transportation Authority Policy Advisory Committee
THROUGH:	General Manager, Nuria I. Fernandez
FROM:	Director of Planning and Program Development, John Ristow
SUBJECT:	Transit Ridership Improvement Program Choices Report

FOR INFORMATION ONLY

BACKGROUND:

The Transit Ridership Improvement Program (TRIP) is a two-year policy and planning effort to redesign VTA's transit service network. The Program seeks to accomplish the goals of increasing transit ridership, improving VTA's farebox recovery rate, and integrating VTA's transit network with BART service to Milpitas and San Jose. The program's four major components are an assessment of VTA's current service, development of transit service policies, partner education and involvement, and the development of VTA's next transit network. These efforts will culminate in a redesigned transit network for implementation coincident with the extension of BART service in 2017. Development of that network will rely on policy guidance from VTA's Board of Directors as well as input from VTA's advisory committees, policy boards, municipal partners, and the community. Transit service design specialist Jarrett Walker + Associates has been hired to assist with this effort.

The VTA Board of Directors was introduced to the TRIP in late 2015 and was presented with a project update in February 2016.

DISCUSSION:

The first of TRIP's four major components is an independent assessment of VTA's current transit service, and this memorandum presents the culmination of this work in the form of a draft Transit Choices Report. The Report, written by Jarrett Walker + Associates, contains an analysis of VTA's current transit service and presents a series of policy choices that will need to be navigated during the development of VTA's Next Network. The Transit Choices Report is included as Attachment A.

Purpose of the Program

The need for the TRIP arises from two converging factors -- falling ridership and population growth, both illustrated in the draft Choices Report's assessment of existing service. Highlighting a key challenge for VTA, the report illustrates the amount of transit service provided by VTA has declined 15% over the past 15 years, while the County's population has increased more than 10% during the same period. This means that the quantity of service provided per capita has been shrinking, and presents a policy choice of what level of transit service should be provided into the future as the County continues to grow.

Increasing Ridership through Increased Productivity

The draft Choices Report details the factors that influence transit ridership and presents these factors as policy choices for the VTA Board and community to consider. Because a principal goal of the TRIP is to increase transit ridership, it will be important to understand how policy choices influence transit ridership.

The most obvious way to increase transit ridership is to simply devote more resources to transit and increase the level of service provided. Less obvious is how to increase ridership given a fixed budget; the only way to increase ridership given a fixed budget is to increase productivity, which is the subject of much of the report.

Roles of Transit Service

The report describes transit productivity as a three-legged stool with three factors that work together to produce productive transit service -- street design, land use, and transit service design. Because VTA has little or no control over two of the factors, a key theme of the program is the need for local governments to be aware of their extraordinary control over transit ridership through their role in planning land use and street design.

VTA's role is to provide transit service that is useful. To this end, the program will utilize best practices in transit service design to develop VTA's Next Network. One strategy would be to create an all-day frequent network that makes a wider array of transit trips possible.

Key Choices

The report outlines a number of key policy choices for the VTA Board and the community to navigate during development of the Next Network. Chief among these choices is the purpose of public transit. Transit operators are tasked with achieving two competing goals: productivity (carry the maximum number of riders possible per dollar spent) and coverage (provide some level of transit service to everyone, regardless of productivity). Each transit operator must decide how much in terms of resources to devote to each goal. Therefore, a fundamental policy choice will be to decide the extent to which VTA allocates resources to the ridership goal as opposed to the competing coverage goal.

Assessment of Existing Service

The report details VTA's current transit service performance. Most significantly, service is most

productive where service is most frequent. For example, the high frequency of VTA's Core routes offers riders easy transfers and a diversity of trip purposes for which the network is useful.

routes offers riders easy transfers and a diversity of trip purposes for which the network is useful. This explains why frequent routes tend to be more productive per hour of service, despite their higher cost. A number of other findings are detailed:

- VTA's all-day frequent network (routes with a headway of 15-minutes or less) is comprised of 12 routes.
- The east side of VTA's service area has a very rich network of frequent services, and correspondingly high productivity, which is possible only because of its transit-supportive street network and dense land uses.
- The lower service levels and lower productivity on the west side of VTA's service network can be largely attributed to street design and land uses that are not transit supportive.
- VTA offers significantly more service during the weekday peak commute periods, though VTA's ridership is only slightly higher during the peaks. Productivity is actually higher during the mid-day than during the PM peak.

Service Branding

To attract riders, transit service must be easy to understand and use. To that end, the report discusses the role transit service branding plays in conveying information to the potential rider, because potential riders will need to understand what services are available and how to use them. The key to clear communication about a local bus network is a well-designed system of service classes, manifested across the information system and also in policy. These service classes become transit service brands, conveying key characteristics of the class such as frequency, span, speed, and stop spacing. VTA's transit service types are branded with names such as local, rapid, limited, community and express, though some of these classes do not necessarily convey key service characteristics that are important to transit riders. The report outlines opportunities for VTA to make its services easier to understand and use by strengthening the branding of its services.

Early Deliverables

The draft Transit Choices Report is the first product in the process to develop VTA's Next Network. However, the TRIP encompasses a number of other efforts that will work concurrently to further the goals of TRIP. Among them, the program has identified two efforts that could be completed in the short term to deliver a meaningful improvement in transit information delivery:

- **Real-Time Information.** Urban transit riders today expect to be able to monitor the movement of transit vehicles in real time so that they can know when their bus or train is going to arrive. VTA is currently installing the necessary hardware and software to enable real-time information, which will provide significant benefits for riders.
- **Redesigned Transit Map.** VTA's current system map is a professional piece of graphic

design, but the principles on which it is designed are dated and inconsistent with VTA's current goals. Accordingly, VTA has begun a process to redesign its system map to reflect the modern trend in transit map design. Most importantly, the new frequency-based system map will proudly highlight VTA's core network of frequent services.

Network Concepts

The consulting team is currently working with VTA staff to develop three Santa Clara County transit network concepts that illustrate different points along the ridership-coverage spectrum, and each network concept will be budget neutral (no increase in service hours from the Board-adopted FY17 transit network). The concepts are not proposals, but are intended to serve as a basis for discussion with the community and the VTA Board over the Summer of 2016. The three network concepts will be:

- Network Concept A: Will allocate approximately <u>70%</u> of resources to a ridership goal and <u>30%</u> of resources to a coverage goal. This network will mimic VTA's existing allocation between ridership and coverage services, though the transit routes in this network will be redesigned to increase ridership, connect to BART, and improve farebox recovery where possible.
- Network Concept B: Will allocate approximately <u>80%</u> of resources to a ridership goal and <u>20%</u> of resources to a coverage goal.
- **Network Concept C**: Will allocate approximately <u>90%</u> of resources to a ridership goal and <u>10%</u> of resources to a coverage goal.

Since the ridership goal and coverage goal are both admirable, there is no "correct" choice in terms of the ridership-coverage balance, just a recognition that different points along the spectrum define different goals of the transit service and lead to different ridership and farebox outcomes. Deciding on that balance is a policy choice for the community and Board of Directors to make based on its vision for VTA transit service. As such, these network concepts will form the basis of community and VTA Board discussions over the Summer of 2016. The input received will be instrumental in the development of VTA's draft Next Network plan (early 2017).

Next Steps

This memorandum presents the draft Transit Choices Report and a preview of the transit network concepts, which are the first steps in developing VTA's Next Network. The policy choices as presented in the Choices Report and network concepts will form the basis for discussions by the VTA Board and community over the Summer of 2016.

ADVISORY COMMITTEE DISCUSSION/RECOMMENDATION:

The Citizens Advisory Committee received this item on March 9th and made the following comments:

1) Funding for transit operations is a concern and VTA should consider increasing

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funding levels to be commensurate with population growth.

2) The land use-transportation connection is important for understanding why transit productivity is low in certain parts of Santa Clara County. Furthermore, generating more transit ridership or making transit more productive will rely on cities adjusting their land use planning to consider transit.

3) Street design is an important element of how appealing a transit trip is.

4) Should VTA consider not serving cities (or areas) that are designed in ways that are auto-oriented at the expense of transit?

The Technical Advisory Committee received this item on March 10th and made the following comments:

1) In addition to the discussion on city design, demographics such as income, car ownership and vehicle access per person are important considerations.

2) Consider the transit to Caltrain connection as well as express bus service to Downtown Palo Alto and Stanford University.

The Policy Advisory Committee opted to defer this item at their March 10th meeting.

The Committee for Transit Accessibility received this item on April 13th and made the following comments:

1) VTA should cover as many areas as possible

2) The effect of changing the hours of service or focus on peak period may change travel demand by paratransit users and have financial impacts on the operation of paratransit service.

3) Make sure online interactive components are accessible by screen readers

4) Consider more than frequency in network redesign

STANDING COMMITTEE DISCUSSION/RECOMMENDATION:

The Transit Planning and Operations Committee received this item at its March 17, 2016 meeting and made the following comments:

1) Discussed the importance of the influence of land use on transit ridership.

2) Inquired whether schools would be involved in the community outreach process. Staff responded that they would be involved in multiple ways.

Prepared By: Jason Tyree Memo No. 5472

Transit Choices Report FEBRUARY 3, 2016

Santa Clara Valley Transportation Authority

JARRETT WALKER + ASSOCIATES

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Attachment A

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What is TRIP?

The Transit Ridership Improvement Program is a two-year study of Santa Clara Valley Transportation Authority (VTA) services designed to identify ways to improve ridership. A key output of this study, but not the only one, is the 2017 Next Network Plan, which will review the structure of the VTA network and propose improvements for implementation in 2017. The planned changes will occur in time for the opening of Bay Area Rapid Transit (BART) to Berryessa, including those required to integrate BART into the VTA network.

This report, the first of the study, analyzes the existing system and shows how certain choices will need to be thought about at the policy level.

What is the need for this study?

The need for this study arises from two converging factors-falling ridership and population growth—that pose important new questions for transportation in Santa Clara County. The County is projected to surpass 2 million residents by 2030. Combined with a rapidly growing economy throughout all parts of the Bay Area, this means more people will be traveling to more places throughout the region.

Figure 1 shows a simplified graph of these trends since 2001. Population has grown steadily, but ridership is more than 20% below its year-2001 level. Transit service quantity, measured in revenue hours, is nearly 15% lower, despite an overall level of transit expenditure that has returned to its early-2000s level when adjusted for inflation. (A revenue hour is one transit vehicle operating for one hour.)

This means that the quantity of service, as the average resident would perceive it, has been shrinking. The relevant measure here is revenue hours /capita. A key question to be discussed is what this curve should be doing. Should transit be growing with population, or faster, or slower?

Why focus on local transit?

The main focus of this study is the local transit network and especially the bus network. This network, bus and rail, constitutes 86% VTA's service costs. Other programs, including support for Caltrain/ACE, shuttles to these services, special event services, express services, and intercounty programs, are comparatively small parts of the budget. Paratransit costs, mandated by the Americans with Disabilities Act, are also quite low by industry standards.





VTA Operating Expenses by Mode, FY15





How to get more ridership for a fixed budget?

Ridership means how many people use a transit service, while productivity is ridership divided by the amount of service provided. If you have a fixed budget for providing service, then the only way to increase ridership is to increase producitivity -- that is, growing ridership at a higher rate than the quantity of service grows.

Productivity is not the only purpose of transit, so it is not the only measure of transit's success. Virtually all transit agencies run some service for non-ridership purposes, fully aware that low productivity will result. These "coverage" services, and the arguments for them, are discussed later in this summary. However, increasing ridership is the focus of this study, so it is important to understand how high-ridership services work.

The next sections of this summary review the key elements of high-ridership service. These assertions are confirmed both by experience in other cities and by VTA's own performance data, as Chapter 3, Transit Service and Performance, explores in more detail. The reliability of these insights is not surprising because they arise from simple geometric facts about what a transit line is and how it relates to the geometry of cities.

High productivity transit service has two elements: First, the service is useful for many purposes, and second, this service is focused on places where the geography is favorable for transit to succeed. Four features of the geography matter in particular.

- Density -- There are many residents, jobs, and activity destinations close to each transit stop. Note that because the valley is largely built out, most growth from now on will have the effect of increasing density.
- Walkability -- It is easy to walk between those places and the stop.
- Linearity -- Transit can operate in paths that feel straight and direct • to the customer.
- Proximity -- Distances that transit needs to cover are relatively short.

Another term often mentioned in the literature is the mixture of land uses along a line. Transit is more efficient if jobs, housing, and retail are interspersed, rather than having, say, only jobs at one end and only residents at the other. This diverse mix generates a more even two-way demand pattern that uses transit capacity more efficiently.

As we look look closely at ridership patterns throughout this report, the

each potential transit stop? 🛨 Many people and jobs are within walking distance of transit. is within 1/4 mile, but only 侖 -. **m m m m m** 侖 **m m m m m** 侖 侖 1/4 mile walk. **m m** ŵ 俞 ŵ **m** Fewer people and jobs are within walking distance of transit. **^** i i i i 命命命 ∎∎∎ Destinations located off the straight path force transit to deviate, increasing cost and making trips 命命命 longer. Figure 3: The Ridership Recipe: Density, Walkability, Linearity, and Proximity close link between ridership and these built environment features will be The Municipal Role apparent. All of these factors help explain, for example, why El Camino Real, Stevens Creek and Alum Rock Ave are some of the most productive corridors at VTA. They have all of these features, to an adequate degree, including a mixture of land uses.

Other areas like these will arise as the County continues to grow, and grow more dense, especially if there is a conscious desire for land use to evolve to forms that are more favorable to transit. (This also means fahvorable to cycling and walking. Linearity is the only transit need that does not also benefit cyclists and pedestrians.)

FOUR GEOGRAPHIC INDICATORS OF HIGH RIDERSHIP POTENTIAL





How many people, jobs, and activities are near

DENSITY



WALKABILITY Is it possible to walk between the stop and the activities around it?



The dot at the center of these circles is a transit stop, while the circle is a 1/4 mile radius. The whole area the black-shaded streets are within a



It must also be safe to + cross the street at a stop. You usually need the stops on both sides for two-way travel!

PROXIMITY Does transit have to traverse long gaps?



+ Short distances between many destinations are faster and cheaper to serve.



The key features of the built environment that govern transit demand are obviously not in VTA's control. They are the result of decisions by past generations, and to the extent that they can still be changed, the power to do so lies with the municipal governments within the County.

These local governments -- along with Caltrans -- also control the street environment in which VTA operates, largely determining the travel time and reliability of transit service.

In short, VTA service is only one leg of a three-legged stool that

Transit Choices Report Santa Clara Valley Transportation Authority

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determines transit ridership. The other two are land use and street design, both of which are largely under the control of the cities and towns. A key theme of this study is the need for local governments to be aware of their extraordinary control over transit ridership through their role in planning land use and street design.

VTA's Role: Service

Much is known about how service determines ridership. While many people focus on subjective features such as comfort and aesthetics, these only become relevant if the service is useful. So an understanding of usefulness is critical to deploying transit service productively.

Across the transit industry, when we look at the most productive services in any network, we usually find they are one of two kinds:

- Commuter express service over long distances, bypassing severe • congestion and operating into a dense employment center where parking is difficult and expensive.
- High frequency service -- usually every 15 minutes all day -- running in places where all the built environment conditions are favorable, yielding an intense, two-way, all-day market. VTA's services of this type are called the Core Network, and include major corridors like El Camino Real, Stevens Creek, and Alum Rock Avenue.

The first group is specialized around "nine to five" commuters, but of course the second group serves many such commuters too. The difference between the two is that the second group serves a greater diversity of trip purposes, while the first group is only for commuters traveling at rush hour. BART, for example, belongs to the second group, because its availability and frequency at any time of day is a crucial part of its offering, while Caltrain and ACE, with their low frequency and limited off-peak service, belong to the first group..

Peak Commute Service

The most successful examples of commuter express service in the Bay Area are express buses into San Francisco across the Bay Bridge. Another is Caltrain, especially for travel into San Francisco. Because these services appeal mostly to people who have a car readily available, a very strong disincentive to driving is needed to make these services succeed.

For that reason, VTA express service is less productive than expresses into dense cities like San Francisco or Seattle, as shown in Figure 5. This is because although the levels of congestion are similar, the disincentives to driving into the employment center are not. Santa Clara County's employment is mosty in a business park format with abundant free parking.

However, express service is a tiny share of what VTA does, and is therefore not a major focus of this study. Express service is also a small part of the commuter market; most commuting is over shorter distances and happens on local services. This is why the overwhelming majority of VTA's investment -- including all of its most productive investments, arises from more locallyserving routes, some peak-only but mostly running all day.





High Productivity Express Routes: Transbay, Seattle and VTA





Figure 5: High Productivity Express Routes

Data Sources: VTA (2015), AC Transit 2014 Annual Ridership and Route Performance Report (March 2015),

5

Frequent Service: The Core Network

Because of the geographic limitations on the ridership potential of express service, VTA's most productive services tend to be frequent and all-day. Like most agencies, VTA shows a correlation between frequency and ridership. Where the correlation is weak, it is because of the effects of land use patterns and street design. The same land use factors (density, walkability, linearity, proximity) matter here too.

Frequency is an expensive investment, but the payoff is usually high if land use and street design are sufficiently favorable. Service that is always coming soon -- usually every 15 minutes or better, has not only higher ridership but higher productivity. How can this be? After all, high frequency means a large quantity of service. Productivity is ridership divided by quantity of service, so intense levels of service should pull the ratio down. In fact, though, the correlation between high freguency and high productivity is well established in virtually all of the transit agencies we have studied and it's geometrically obvious why:

- Waiting is the most onerous part of a transit trip, and frequency reduces waiting. (Note that waiting is not just time spent at a bus stop, but more generally time spent not where you want to be. For example, if an hourly bus gets you to work at 7:05 or 8:05, and you must be there at 8:00, then you will wait 55 minutes at your destination.)
- High frequency is the foundation of easy connections. From a ridership perspective, easy connections between lines vastly increase the potential market for each individual transit line, by making it useful to go many more places.
- Frequent service is more reliable, because you are less likely to be stranded during a disruption.

Again, the unusual power of frequency is apparent from VTA's own performance data, as this report explores. This does not mean that any route would be productive if it ran frequently. Rather, it's the combination of high frequency and the built environment factors (density, walkability, etc.) that really gives us the "recipe" for the most productive transit services.

An important thing that frequent services can do is form a high-freguency grid. This pattern, routine in cities like San Francisco, Chicago, and Portland and recently installed successfully in Houston, achieves



Figure 7: VTA Route Productivity by Frequency



an especially high level of usefulness because it is easy to travel between any two points with an L-shaped trip and a single transfer, so a huge range of potential trips are served. VTA operates this kind of network very successfully in eastern San Jose but it is not clear that it should be confined to there. While east San Jose is certainly extremely favorable transit territory, there may be other areas in the Valley that could support high frequency grid services, especially those where urban-style nodes of density and walkability are emerging.

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Radial Network

Most routes lead to and from downtown. Anyone wishing to travel from one non-central location to another must pass through downtown and transfer to another route there.

A radial structure makes sense when one part of a city (typically the downtown) is a dominant destination all day - for work, for play, and for commerce. Often, routes are scheduled to converge at a set time (called a "pulse") to reduce transfer times between routes.

Grid Network

Parallel east-west routes and parallel northsouth routes intersect all across the city, not only downtown.

A grid structure is most suited to a city with multiple activity centers and corridors, where many people are traveling to many different destinations. Grid networks are only effective when intersecting routes operate at high frequencies, generally every 15 minutes or better, so that connections between routes do not require long, inconvenient waits.

Key Choices

In the face of these trends and geometric facts, and with some understanding of possible solutions from a network design perspective, several key choices for VTA become apparent. This report is called a Choices Report because its ultimate goal is to help citizens and leaders think about these choices.

Ridership or Coverage?

As we've seen, some places are better for transit productivity than others, because of their built form. This means that a transit agency that was "thinking like a business," focused on maximizing the number of customers, would focus on the highest ridership places and not serve other places, just as an airline feels no obligation to fly into towns that are too small to fill its planes.

This helps to clarify the critical difference between transit agencies and businesses. Transit is expected to both maximize its riderhip and be available everywhere, but these are conflicting goals. If transit runs into areas where the development pattern implies low ridership potential, then it is doing so for a non-ridership purpose. Let's call this purpose coverage. Coverage encompasses all the reasons that people expect transit to go everywhere in the county, even though the maximum ridership would result from a narrower focus on higher-demand areas.

Most goals for transit imply either a ridership focus or a coverage focus. Goals arising from high ridership include:

- Maximum fare revenue / minimum subsidy.
- All environmental benefits, including vehicle trip reduction, reduced emissions, reduced pollution, reduced parking needs.
- Support for high-density urban styles of development. •
- Other important goals arise from coverage services:
 - » Lifeline access to all residents in need, for reasons of income, age, disability, etc.
 - » upport for lower-density suburban styles of development.
 - » The ability to say that every municipality or electoral district is served.

This is the most fundamental question a transit agency seeking to improve ridership must face: to what extent should we allocate resources towards that ridership goal, as opposed to the competing coverage goal?

The planning of VTA services, and the evaluation of outcomes, will be much clearer if VTA could adopt a policy about the split of its resources between the two goals. To take one example, Houston's recent "System Reimagining," which led to a productive redesign of service implemented in August 2015, began with a Board decision to devote about 80% of the budget to high-ridership services and only 20% to coverage services, a big shift from a previous split of around 60-40. At VTA, the current ratio is about 70% ridership, 30% coverage. This should be reviewed to determine if it still reflects the balance of priorities desired by the community.

Peak or All Day?

Another significant trade-off at VTA is the high expectation that the agency focus intensely on the "rush hour" commute, combined with the fact that this is not always the cost-effective thing to do.

While ridership is certainly much higher during the peak, service that runs only during the peak is much more expensive for VTA to operate, for three reasons:

- The high cost of buying, storing and maintaining vehicles that are used only briefly each day.
- The higher cost of driver time due to short shifts. (VTA's labor contract has no provision for part time drivers, who are the most efficient way to staff peak-only service.)
- The tendency of peak-only service to be busy in only one direction, which requires all the vehicles and drivers to return empty in the other direction.

Another way of saying this is that all-day, evening, and weekend service is relatively cheap to operate compared to peak service, which is why focusing on all-day markets is often the better path to high ridership overall. The key to the all-day market is that it's so diverse. It includes most commuting by lower-income people, whose work and training commitments rarely require them to travel only at rush hour. It also includes a wide array of trip purposes which tend to use capacity more evenly.

In general, then, we expect the study to feature a robust discussion about the relatively importance of peak-only services for the "rush hour" commute as opposed to all-day, all-direction service. (Note, of course, that all-day service is used at rush hour too). While the rush hour is the time of highest demand, that does not necessarily make it the time of highest productivity, because of the high marginal cost of peak-only service.

Resource Level

As we observed above, VTA service quantity per capita has been shrinking for some time, as the agency's resources fail to keep up with population growth. A key question is what this trend should be. Transit demand tends to grow rapidly with density, so as the Valley becomes denser, a transit system that is growing only with population is likely to fail to meet demands.

While the allocation of existing service could be adjusted to increase ridership, this will mostly take the form of shifting resources from coverage service to ridership service, with negative impacts on the people who depend on coverage service. Expanding resources, of course, can make this trade-off less painful, by allowing ridership service to grow even as basic coverage is maintained.

The later phases of this study will consider options for both the current budget and possible quantitative growth, understanding that the latter would require new funding sources.

Overview of this Report

This Transit Choices report covers the topics of a typical existing conditions report, in that it reviews the network in the context of patterns of development and demographics to determine if it is still a good fit.

As we have observed, however, the correct design of a network is not just a technical judgment, as it is often necessary to weigh competing goals of transit service. These "key choices," summarized above, become apparent in the course of this report and are explored in more detail in Chapter 5. The most important choice is the need to balance ridership goals with coverage goals, where "coverage" refers to services designed to provide access to all parts of the County regardless of low ridership.

Chapter 1 provides an overview of VTA service over the last 15 years. It shows that ridership tracks closely with the quantity of service provided. Both fell steeply during 2001-05, remaining relatively stable since, moving in parallel and rising slightly in recent years. Growth in the quantity of service has been limited partly by a lack of growth in the resource base, and by a 15% increase in the average cost per revenue hour of VTA service over the period 2001-2015.

Chapter 2 explores the features of the Santa Clara Valley that indicate transit need or transit demand. In addition to the common barriers of walkability and linearity noted above, we note the primary problem presented by the Valley's development pattern: the centroid of population

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is well south of the centroid of jobs, requiring a general pattern of south to north commuting that uses both road space and transit capacity inefficiently. There is also a general pattern of east to west commuting for lower income persons. While there are low-income areas in many parts of the county, the greatest concentration is in east San Jose where there are relatively few jobs or activity destinations.

Other barriers to high transit ridership include the absence of disincentives to driving other than congestion and the costs of car ownership and operation. Parking is free at most destinations. Urban centers dense and walkable enough to trigger high transit demand are in relatively early stages, though they are now emerging in the form of major projects like Santana Row, and also in the rapidly densifying historic centers such as downtown Sunnyvale.

Chapter 3 explores the fit of current service to the pattern of demand and how this generates ridership or fails to do so. VTA generates its highest productivities (ridership per unit of cost to VTA) when it runs frequent service following existing favorable development patterns (density, walkability, linearity, proximity).

Chapter 4 reviews VTA's system of service categories, which are an important tool for both public information and for policymaking. Existing categories are logical but could benefit from more precise definition. In other agencies, branding of frequent services (generally every 15 minutes or better all day) has been an effective means of calling attention to the most attractive and liberating part of a transit network. Thus, service branding builds ridership around the high level of investment in service. VTA's Core Network category roughly corresponds to this. The growth and refinement of this Core Network will be a key strategy for expanding transit's usefulness and thus its ridership.

Finally, **Chapter 5** expands on the key trade-offs outlined above, which are likely to be key points of discussion during the project.

EXECUTIVE SUMMARY

Transit Choices Report Santa Clara Valley Transportation Authority



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Recent Trends

The Santa Clara Valley Transportation Authority (VTA) is a large transit agency serving San Jose, Silicon Valley, and the other valley communities of Santa Clara County. This Transit Choices Report reviews the transit network's existing performance, market, and potential in order to develop a set of key policy-level questions that VTA may wish to consider in the design and evaluation of its service in the future.

This section provides a brief overview of the broad trends in VTA's service and ridership over the past 15 years. It then dives into a more detailed assessment of VTA's ridership, productivity, and reliability data, including route-level analysis. A market assessment follows in section two, connecting today's existing service and outcomes to the people and places being served.

Recent Historic Context

To get a sense of VTA's current condition, it is instructive to examine past service trends. We examined key indicators of service quantity, productivity, and cost to assess how the agency's service offering has performed since 2000.

Service Quantity – Vehicle Revenue Hours

Annual revenue hours are the basic measure of how much service a transit agency provides. One revenue hour is one bus or train operating and available to customers for one hour. It puts the two requirements of the definition right next to each other. Because a revenue hour is a unit whose object does not change in value year-to-year, it is a useful bellwether to understand the total quantity of service VTA has provided. Simply put, how many hours each year do VTA services spend in service on the road picking up passengers?

VTA operated fewer total revenue hours of service in 2015 than in 2000.

Over the past 15 years, VTA's total quantity of service has declined substantially, from a high of 1.65 million revenue hours in 2001 of combined bus and light rail (LRT) to a low of 1.32 million in 2012-a 20% overall decline. Since 2012, service quantity has steadily increased, and as of 2015 stands at 1.4 million revenue hours, 13% below 2001, but substantially higher than the level coming out of the most recent recession.

Fewer revenue hours means that fewer resources are available for things like frequency, longer hours, or new lines responding to growth of



VTA Annual Revenue Hours - Bus

$$20^{1}20^{1}20^{2}20^{3}20^{4}20^{5}20^{6}20^{1}20^{6}20^{9}20^{9}20^{9}20^{1}20^{$$

Figure 8: VTA Annual Revenue Hours (Bus and LRT) 2000 - 2015

population and employment centers. Ultimately, this results in a limited ability to target high-potential markets and useful coverage services.

Fluctuation in total service quantity is not uncommon among large city transit agencies. They must contend with variable returns from funding sources as they attempt to maintain or grow service year-to-year. Figure 9 compares the cumulative change in annual revenue hours across a range of western and west coast agencies during the same period, using National Transit Database (NTD) data. Currently, this dataset covers only the period up to 2013. While many of these peer agencies exhibit a similar trend, experiencing a major decline in the 2009-2011 period related to the recession, only VTA and AC Transit operated fewer total revenue hours by 2013 than in 2000.



Figure 9: Peer Comparison, change in Revenue Hours 2000 - 2013



VTA Annual Ridership - Bus and

Data Source: Santa Clara Valley Transit Authority

Figure 10: VTA Total Annual Boardings (Bus and Rail) 2000 - 2015

Ridership

We generally count ridership by counting boardings : the event of one person getting on a transit vehicles. This roughly indicates total utilization of the network, though it double counts trips that require transferring. Unfortunately, the ideal measure, total individual journeys, is still too difficult to measure reliably without near-total smartcard adoption.

Total boardings have declined substantially from a high in 2001 of over 57 million annual passenger trips. While the lowest year during this period was 2006, ridership has not fully recovered to its early 2000s level. With a total of 44.1 million trips in 2015, annual passenger trips have dropped 23% from 2001. Since 2011, steady growth in ridership is apparent.



Data Source: Santa Clara Valley Transit Authority

Figure 11: VTA Annual Ridership per Revenue Hour (Bus and Rail) 2000 - 2015

Despite the decline in total network ridership, total annual ridership on VTA's light rail lines increased 22% 2000-2015 as the rail system expanded to new corridors:

- Guadalupe: Opened 1987-1991
- Almaden: Opened 1991
- Tasman West: Opened 1999
- Tasman East/Capitol: Opened 2001, 2004
- Vasona: Opened 2005

Productivity

Productivity is a measure of ridership per quantity of service provided. The usual measure of service quantity is the revenue hour, which is one transit vehicle operating in service for one hour. Productivity is an important metric to gauge how efficiently a transit service generates ridership; simply put, it indicates how many people boarded a bus for every hour a bus was on the road.

The productivity of the bus system displays a similar trend to that of ridership and revenue hours—a decline in the first half of the 2000s, and then a flat line in the period since (for a 21% decline overall). If ridership and revenue hours had declined at the same rate, productivity would be constant from year to year. Declining productivity in the face of declining ridership and service quantity indicates that not only has the overall amount of service dropped, but that the service that remains has

Data Source: Santa Clara Valley Transit Authority Figure 12: VTA Total Operating Expense by Mode 2000 - 2015

Recent Trends





Data Source: Santa Clara Valley Transit Authority

Figure 13: VTA Cost per Revenue Hour by Mode 2000 - 2015

generated ridership less efficiently. LRT productivity, by contrast, has increased (by 14%).

Operating Costs and Expenses

So far, we have examined service outcomes and quantity. But in dollar terms, what is the agency spending to deliver that service and produce those outcomes? Figure 12 on page 11 tracks total operating expenditure from 2000 to 2015 for VTA bus and rail services, adjusted for inflation to 2015-equivalent dollars. Over this span, VTA's total dollar spending has increased, but when adjusted for inflation, the spending level has been relatively stable, dropping through the 2000s before recovering in the period from 2011 onward.

Figure 13 shows VTA's cost per revenue hour, the cost of each unit of service it provides, for bus, rail, and the systemwide average. Again, these numbers have been adjusted to 2015 dollars for better comparability. During this period, the average cost per revenue hour increased by

15%; for the bus network, costs were relatively stable, increasing only 4% over this span, but light rail costs per revenue hour increased substantially, by nearly 50%.

Without a more in-depth forensic accounting, it is impossible to say conclusively what increased costs, but we can discuss some possible related factors.

The chart shown above shows total operating expenditure based on four components: vehicle operations, vehicle maintenance, non-vehicle maintenance (including LRT track and station upkeep), and general administration.

The biggest pieces of the cost per hour, and those that have increased the most over this span, are vehicle operations and vehicle maintenance. Some possible related factors that might be worth further investigation are:

• Changes in traffic speeds which require schedules to be written

Figure 14: VTA Hours, Costs and Ridership since 2000

- headway.

Trend Comparison

JARRETT WALKER + ASSOCIATES

Data Source: Santa Clara Valley Transit Authority

slower (adding vehicles to routes) in order to maintain schedule

• Changes in labor costs for operation and maintenance personnel, largely as required by the labor contract.

• Expansion of more expensive light rail service.

• Increases in types of service that use labor less efficiently, especially services requiring short driver shifts.

When we plot service quantity (annual revenue hours), cost per revenue hour, total annual ridership, and total expenses together, a relationship between these indicators begins to emerge. VTA's average cost per revenue hour increased, and while total operating expenses have

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Recent Trends

recovered to their early-2000s level, the combination of increased cost per revenue hour and a greater fraction of those resources put towards more expensive light rail service have been accompanied by an overall decline in the total quantity of service.

An even greater decline in ridership accompanied the service decline, despite a growing population and employment base. In short, though VTA's operating expenses have been stable when adjusted for inflation, and are now growing, this funding base is buying fewer revenue hours. In turn, it is less able to address the changing travel needs of people in Santa Clara County as the population and economy continue to grow.

In some regards, this tracks with the performance of the economy generally. Tax-funded transit operators typically encounter a need to cut service in difficult economic circumstances. The initial drop in expenditures, revenue hours, and ridership took place in 2002-2004, lagging the early 2000s recession, before climbing through the mid-decade as the economy strengthened.

While VTA's financial situation (in terms of the resources available to it and the cost to provide those services) has been mostly stable in the recent period, the fact remains that the level of service hasn't kept up with population growth, and that ridership has suffered as a result.

Farebox Recovery

VTA's total farebox recovery rate (the percentage of costs that are recovered through fares paid by passengers) has hovered between 14% - 15% in recent years, though it has dropped to 12.2% since 2013. Farebox recovery is an important measure of the overall level of subsidy required to operate a transit system.

Figure 15 shows farebox recovery rates for VTA and western and west coast peers since 2002, the first year for which data is available for all peers. While VTA's farebox rate has been more stable than that of many of the other agencies examined, it is also the lowest by far. Several of the peer agencies have succeeded in increasing their farebox recovery rates over time; for example, Salt Lake City's UTA reported fares equal to nearly 25% of operating expenses in 2013, up from just 15% in 2002.

Two main variables control a transit agency's farebox rate: the cost of each fare, and the quantity of fares sold (ridership). There is a complicated relationship between these variables; for example, an agency may wish to grow its fare revenue by raising the fare, but a higher fare may create a disincentive that leads some riders to choose other travel options, reducing the number of fares collected. On the other hand, an agency may wish to grow ridership (increasing fare revenue), but



VTA and Peer Agency Farebox Recovery Rates, 2002 - 2015

Figure 15: VTA and Peer Agency Farebox Recovery

strategies to do so may increase cost, unless a concerted effort is made to redirect resources away from less efficient low-ridership services.

Over the long term, sustained ridership growth in the context of relatively stable costs will produce a higher farebox ratio, as long as the fare is not substantially outstripped by the growth of costs. This is an outcome of services that are designed to generate ridership as efficiently as possible. However, services operated for purposes other than ridership, such as coverage routes providing lifeline access to low-density areas, typically produce ridership less efficiently. The degree to which a transit agency orients its budget towards either goal can have a major impact on its farebox rate.

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	King County Department of Transportation - Metro Transit Division(King County Metro)
	Santa Clara Valley Transportation Authority(VTA)
	San Francisco Municipal Railway(MUNI)
	Utah Transit Authority(UTA)
	Los Angeles County Metropolitan Transportation Authority dba: Metro(LACMTA)
	Alameda-Contra Costa Transit District(AC Transit)
	Denver Regional Transportation District(RTD)
	Tri-County Metropolitan Transportation District of Oregon(TriMet)
	Data sources: National Transit Database 2013 (peer data), VTA
	Comprehensive peer data unavailable for years more recent than 2013.
-	

Key Chapter Findings

- Over the past 15 years, VTA's total quantity of service declined 20%, from 1.65 million revenue hours in 2001 to a low of 1.32 million in 2011. Because the population has grown during this period, the level of VTA transit service per capita in Santa Clara County has fallen as well. However, the level of service has begun to grow since 2011.
- During this same period, ridership on VTA bus and rail routes dropped substantially as well, with 2015 annual ridership down 23% from 2000 levels, despite a growing population and a similar level of total expenditure.
- When compared to 7 western peer transit agencies, including Portland's TriMet, Oakland's AC Transit and Denver's RTD, VTA has consistently had the lowest level of farebox recovery, hovering between 14% and 15% for most of the past 15 years.
- The average cost per revenue hour for VTA service (bus and rail, adjusted for inflation to 2015 dollars) has increased moderately since 2000, and as of 2015 stood at approximately 15% above the year-2000 level.

RECENT TRENDS

Transit Choices Report 14 Santa Clara Valley Transportation Authority



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Market Assessment

Why Development Patterns Matter

Transit service, ridership, and performance are overwhelmingly governed by the pattern of urban development. This pattern largely determines how many people will be near a stop, whether they can walk to it, and whether transit can follow a path that will be useful to many customers. When designing for high ridership, transit agencies will naturally focus service on places where these conditions are favorable.

The image in Figure 16 offers a simple distillation of the key ways that the built environment governs transit ridership. Four facts about the environment are critical:

- Density: how large is the market for transit within a given distance of each stop? This is the first-order measure of transit potential. The more people or jobs are located in the fixed area around a stop, the larger is transit's potential market.
- Walkability: how easy is it for people near each stop to actually reach it? If there are physical barriers to this access, including poorly connected street patterns or difficulties crossing a major street, the market of people who can reach a stop is smaller.
- Linearity: can transit serve an area in straight, efficient paths, or is time-consuming deviation required to reach destinations? Wherever destinations are set far back from the street, or accessed only from circuitous roadways, it is harder to combine its market with other markets to build strong and durable transit lines.
- Proximity: are there long gaps between destinations and strong markets that transit must traverse? For example, linking Gilroy to San Jose is a less productive market than it would be if Gilroy were closer since the distance determines the cost of providing the service.

In some cases, the diversity of land uses can also matter. This helps to determine whether demand is evenly distributed in both directions and throughout the day, both of which use service more efficiently. Mixtures of housing, retail and jobs are generally much better on this score than large areas that are all residential or all employment.

These factors determine both the costs of providing transit in a particular place and how many people are likely to find the service useful. Density and walkability tell us about the overall potential of the market: are there are a lot of people around, and can they get to the place where the product is available? Linearity and proximity tell us about cost: are we going to be able to serve the market with short, fast, direct line or will our costs be higher as we must design service that uses indirect or



longer paths?

Transit agencies can influence the level of ridership their services generate, and the efficiency at which they do so, by targeting these sorts of favorable land uses appropriately. However, they cannot directly control the urban form of the places they serve. Without dense, walkable places along linear street patterns, where density is continuous along efficient transit paths, transit service alone is unlikely to support a high ridership outcome. Only local governments have the ability to directly effect these

characteristics of urban form; the transit agency can seek to provide a level of service that can be useful and competitive with other modes, but ultimately without a development context that produces transit-oriented places of all types, the ceiling for transit ridership is constrained.

FOUR GEOGRAPHIC INDICATORS OF HIGH RIDERSHIP POTENTIAL

Is it possible to walk between the stop and the





Market Assessment

Population and Employment Growth

Santa Clara County is the heart of one of the country's most dynamic regions. It is California's fastest growing county with an average population growth rate of 1.1% annually since 2010. Figure 17 shows total population estimates from the American Community Survey and projected population from California's Department of Finance indicating continued growth into the future (at a slower rates than has been observed over the past five years).

Transit Abundance and Relevance

By comparing ridership and population, we can get an idea of how relevant transit is to the daily lives of people in the region as it has grown. We can examine how much service there is per person and how many trips per resident of Santa Clara County were made on transit each year.

Figure 19 shows per capita transit ridership (based on Census and American Community Survey annual population estimates) for the same 13 year period. In 2015, this number sat at 23.4—about 2 transit trips per month per person—on average. Figure 20 shows transit abundance as how much service (in terms of revenue hours) there was per resident in the County each year. Based on these indicators, the relevance and abundance of VTA's service has declined from its dot-com-era highs, but mostly held steady at around its current rate since 2010.

Note, however, than when revenue hours per capita are constant, it means that on average people are not seeing significant improvement in their transit service. It means only that the agency is not falling behind the needs of population growth, at least in terms of the quantity of service offered.



VTA Ridership per Capita



Data Source: ACS 2013, Santa Clara Valley Transit Authority



Figure 19: Transit Relevance

Figure 20: Transit Abundance

VTA Revenue Hours per Capita

Data Source: ACS 2013, Santa Clara Valley Transit Authority
Residential Density

As mentioned earlier, density is one of the most critical indicators for transit's ability to generate high ridership. Where there are more people of all sorts, there are more people who may choose to use transit for their travel needs.

Residential density is the simplest measure of this. While not all trips start or end at home, nearly everybody makes at least one trip starting or ending at their place of residence every day.

Residential density in the VTA service area is concentrated in central and near eastern San Jose along the Santa Clara Street / Alum Rock corridor. Important secondary pockets of density exist west of downtown San Jose along the Stevens Creek corridor and generally throughout the eastern portion of the service area. Densities are lower across the southwest area than on the east side, but there are pockets of more concentrated development along Bascom, east of Saratoga between Campbell and Stevens Creek, and in central Cupertino.



Figure 21: Population Density

RESIDENTIAL DENSITY

Residential Density is the number of people who live in a given area. Since most trips begin or end at a place of residence, this is one of the basic indicators of whether an area is likely to be a strong transit market.



outside Santa Clara Co.

Employment Density

While most people will travel to and from a place of residence in a given day, employment density provides an indicator for other trips to destinations such as workplaces, stores, and restaurants. The more people who work in a place, the more work trips must be made to and from that location each day. Likewise, commercial areas will generate trips made by their employees and their customers. This is part of why employment density tends to be slightly more powerful than residential density in predicting ridership.

Employment concentrates more than population, as businesses tend to agglomerate into downtown cores, commercial strips, industrial parks, or large campuses. The development pattern of Santa Clara County includes a traditional dense downtown core in San Jose. Apart from that location, considerable concentrations of employment exist all along the El Camino Real and 1st St corridors, as well as throughout north San Jose.

Comparing this map to the previous one reveals a basic transportation challenge created by the pattern of development. The centroid of jobs in the County is further north than the centroid of residences, generating a heavy south-tonorth commuting pattern often involving considerable distances. This pattern is a key limiting factor on transit productivity. People flow mostly one direction at a time. Buses and trains tend to be empty when moving in the reverse-peak direction, as they must to return to base or begin another trip. Where demand flows two-way, as along the Caltrain line and El Camino Real, ridership is easier to generate efficiently.







Employment Density is the number of people who work in a given area. Employment Density is an important measure for transit. Places with more workers generate more commute trips, as well as trips from customers.



natural area

outside Santa Clara Co.

Total Employment

Total Employment looks at current job distribution without taking density into consideration. This view shows us the total distribution of jobs, particularly in places where density is low but overall quantity is high. However, because zone sizes vary (typically based on population), larger zones sometimes have many jobs within them, but which are distributed across a larger area.

Where many jobs are dispersed across a large area, fewer people will be near to any given stop than if they were more concentrated. Additionally, low pedestrian connectivity within these zones reduces their overall walkability, while superblocks and lack of traditional street grids extends the distance transit must travel to provide services, often requiring less direct and more circuitous paths.

Many of these transit challenges are unintentionally created by land-use choices and can be addressed through foresight in design. For example, by orienting office campuses around central nodes, a single transit stop can serve multiple buildings. Additionally, locating office parks in a more traditional street grid can increase walkability and allow transit more direct access.

Transit supportive employment land-uses such as mixed use areas, and traditional main streets allow for higher quality service at lower costs. In turn businesses gain access to larger transit access for employees and customers.



Figure 23: Total Employment

MARKET ASSESSMEN

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Activity Density

Activity density maps help us see residential and employment density all at once, and calls out places where there's a high degree of mixture.

Figure 24 combines them together to provide an indication of total activity. Higher population density is shown in red and employment density in blue. Shades of purple identify areas of mixture. The highest mixed densities are highlighted in yellow, and appear only in very small zones in downtowns. (As always, small zones make it easier for a small high density area to stand out.)

Places with a high density of both population and employment are likely to be some of the strongest markets for transit, since they combine residential, employment, commercial, and service destinations. These areas are also more likely to have large shares of people commuting by walking or cycling.



Figure 24: Activity Density



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MARKET ASSESSMEN

Zero-Vehicle Households

While the sheer quantity of people and jobs, as well as their physical configuration, tend to be the biggest determinants of transit demand, some demographic factors are also of interest.

One of these is the number of people with little or no access to a personal motor vehicle (car or motorcycle). Since the census produces estimates of the number of households in each area with access to no vehicles, we can use this information to make maps of the density of these households. Obviously people with limited access to personal vehicles must find alternative methods of traveling, be they ridesharing, cycling, or transit. Which of these they choose has everything to do with availability and convenience. Obviously, if transit is of limited use for the trips a person needs to make, they are less likely to use it, even if they don't have access to an automobile in their household. This person is not transit-dependent; we might say that they have a greater propensity towards transit use by virtue of their constrained set of options.

The VTA area displays large areas of persons without access to cars concentrated in downtown San Jose and in Mountain View, apart from the expected concentrations at universities. Scattered concentrations in east and southeast San Jose, where walking and cycling are not as easy, indicate some extreme needs for transit.





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ZERO-VEHICLE HOUSEHOLD DENSITY

Households with zero vehicles must find alternative methods of getting around, be it ridesharing, transit, cycling, or walking. Thus, transit may be more competitive among areas where zero-vehicle households are more concentrated.



Data Source: US Census American Community Survey 5-year Summary File, 2009-2013 By Census Block Group

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Poverty

One goal that transit is often tasked with serving is the provision of affordable transportation for lower-income people. As such, we want to understand where lower-income people are located. One way to do this is by mapping the density of people in poverty. (Some reports show what *percentage* of each zone's residents are in poverty, but this can be misleading because it calls out large percentages of tiny populations.)

The largest concentration of people in poverty is found on San Jose's east side, with secondary concentrations along the Monterey and Senter corridors to the south, and between Stevens Creek and Hamilton west of downtown. In addition, small pockets of high concentrations of people in poverty are located further west especially in Campbell, Mountain View, and northern Sunnyvale. Poverty is often a feature of relatively isolated zones.

It is also important to note the degree to which poverty is *not* concentrated. Apart from the most affluent communities such as Saratoga, Los Altos, and Los Altos Hills, all parts of the service area have people who may come to rely on transit for reasons of income.



Figure 26: Density of People in Poverty

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POVERTY DENSITY

Density of people in poverty measures the number of people per area unit who reported an annual income below the federal poverty level (\$20,090 for a family of 3 in 2015).



Data Source: US Census American Community Survey Survey 5-Year Summary File, 2009-2013 By Census Block Group

natural area

outside Santa Clara Co.

Median Household Income

While mapping the density of people in poverty can inform the process of ensuring that the most urgent needs are met, transit is competitive across a range of incomes based on a range of choices that people may make.

A common misconception is that transit, especially all-day transit, is just for very low income people who cannot afford a car. This is a simplistic take on a complex matter. People at many points on the income spectrum make choices about how to travel. They may have disincentives to driving depending on their situations and tastes.

What is true is that people with fewer resources on the whole have fewer resources to devote to each of life's costs: housing, food, and transportation. The more carefully a person must manage money, the more attractive transit's value proposition will be.

This doesn't mean that lower-income people will automatically choose transit because it's the cheapest option. The service available to them must be useful and reliable for the kinds of trips they need to make. Nor does it mean that a person further up the income spectrum is impossible to attract to transit. Not everyone likes driving, and increasing numbers of people are choosing to own fewer cars, creating voluntary transit dependence.





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Median Household Income

Median Household Income measures the median annual income of households in each block group.



Data Source: US Census American Community Survey 5-year Summary File, 2009-2013

natural area

outside Santa Clara Co.

Transit Commuting

Despite the fact that only about 3% of people in Santa Clara use transit as their primary means of transportation to work, in small areas where transit is available and useful, usage rates are much higher as shown in Figure 28. This is true across the inner eastern area of San Jose where the bulk of VTA's frequent services are located, as well as along the El Camino Real corridor in Sunnyvale and Mountain View.

It is important to remember that the work commute is only one type of trip, albeit the one that is most measured. But this data source can't tell us anything about the other trips people are making using transit to go shopping, visit friends, see a movie, and all the other possible reasons that exist that someone might have to make a trip.

On the other hand, for many people, the work trip is the most important, time-sensitive trip they make each day, and the one that must be the most reliable. In select areas of the County, especially those near VTA's most frequent, most reliable services, transit is a realistic choice for more than 5%, and in more limited cases 10%, of commuters.

More information on commute share by mode is available in Figure 29 on page 26.



Figure 28: Transit Commute Rate

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TRANSIT COMMUTING

This map shows the percentage of commuters in each block group who used transit as their primary commute mode. It does not show the general use of transit for types of trips other than the journey to work.



Data Source: US Census American Community Survey Survey 5-Year Summary File, 2009-2013 By Census Block Group

natural area

outside Santa Clara Co.

Market Factor Comparison

How do these market indicators relate to each other and to transit demand? By comparing plots of each factor, we can start to tease out ways in which different factors relate, and improve our overall understanding of the market for transit in Santa Clara County. Each of the factors we have discussed previously has an important relationship to transit; for instance, density of people and jobs signals the size of the total travel market around any given transit stop, while poverty, median income and zero-vehicle households tell us about additional motivations to use transit that certain people may have. Of course, these choicedriving features (poverty, low vehicle ownership) do not indicate transit markets by themselves, but only when they appear together with favorable development patterns (density, assessed here, but also walkability and linearity).

Transit Commuting and Density

While no single land use factor is solely responsible for people's travel choices, we can begin to observe a connection between transit commuting and population density.

Figure 30 shows population density and transit commute rate (from the 2013 American Community Survey (ACS)) for block groups within 1/4 mile of a local transit stop. We've selected only places where the opportunity to commute by transit actually exists. Here, we can see a clear, moderate correlation between population density and transit. Despite the fact that across the County, only 3% of commuters are using transit to get to work according to 2013 ACS data¹, limited areas have much higher rates, something we observed when examining the map on the last page. These areas of higher transit commute rates also tend to be denser; for example, among block groups with greater than 10% transit commute share, the average population density is slightly greater than 14,000 people per square mile.

The match is not stronger in part because of varying levels of walkability and different types of development patterns, as well as the level and usefulness of transit service in each place. For instance, a very dense block group that is only served by 1 trip per hour isn't going to have a very high level of transit commuting as long as its transit options are so limited.

We can also examine transit use in terms of employment density, although this requires the use of a slightly different measure. The census measures transit commuting rates, and attaches this information to the location of a respondent's home. However, places with dense

Mode	Santa Clara County	Cupertino	Milpitas	Mountain View	Palo Alto	San Jose	Sunnyvale
Drove alone	76%	79%	79%	71%	65%	77%	77%
Carpool	10%	9%	13%	10%	6%	11%	10%
Public Transportation	3%	2%	3%	5%	5%	4%	4%
Bicycle	2%	1%	0%	5%	9%	1%	2%
Walked	2%	1%	1%	3%	6%	2%	1%
Other means	1%	1%	1%	1%	0%	1%	1%
Worked at home	5%	6%	4%	5%	9%	4%	4%

Figure 29: Means of Transportation to Work by Mode (ACS 5-Year Summary File, 2008-2013)

Transit Commute Rate and **Population Density**



Figure 30: Transit Commuting and Population Density (ACS 5-Year Summary File, 2008-2013)

employment are often not places where many people live, and if a strong mixture of uses is present, there is a good chance that walking and cycling will be attractive options as well.

Instead, we compare the density of boardings in each block group to the density of jobs. Density of boardings is measured by assigning each stop's boardings to nearby block groups within 1/4 mile of the stop



Figure 31: Boarding Density and Employment Density (ACS 5-Year Summary File, 2008-2013, VTA 2015)

location, based on the fraction of the area of the walk radius within each block group. A stop entirely within one block group would be assigned 100% of its ridership, while if it were 50% within one group, it would receive half of the ridership.

Figure 31 plots these factors together. A moderate correlation similar to that between transit commute rate and population density is visible.

Boarding Density and Employment Density

¹ ACS commuting data includes only work trips, and does not include school trips.

Furthermore, among the top 25% of block groups by boarding density, the average density of employment is 12,000 jobs per square mile.

Population Density and Income

A common misconception about transit held by many people with less experience riding or thinking about it is that transit is a service for and primarily used by low-income people. This is tied to a social-service understanding of transit, in that its purpose is to provide a basic travel option for people who can't afford a private automobile, and to a conception about where people live that assumes that people with higher incomes don't live at transit-supportive densities.

Density, however, is a better predictor of ridership than income, because people who choose to live at high densities are choosing places where driving is more of a nuisance and more alternatives to it exist. So it is important to note, first of all, that density and income are less strongly correlated than many people would assume. This is shown in Figure 32.

While very high income people mostly live at low densities, there are relatively high density places (i.e., greater than 10,000 people per square mile) with median incomes well over \$100,000/year, an indicator that some relatively wealthy people are looking for urban lifestyles that require less car dependence. For average incomes below that level, there appears to be no correlation between income and density at all, indicating that for a large spectrum of the population, people are choosing to live at high or low density for many reasons that may or may not be directly connected to their income level.

For a large spectrum of the population, people are choosing to live at high or low density for many reasons that may or may not be directly connected to their income level.

Correspondingly, the lower left of this plot shows numerous zones where very poor people live at very low density. These are the most difficult markets for transit, places where ridership potential is low but socialservice expectations for transit may be high.

Zero-Vehicle Households and Income

Choosing not to own a car tends to make you more likely to use transit. Once the car isn't available, you will consider other options for every trip. It is helpful to note how this is or is not related to income, as shown in Figure 33.







Median Income and Zero-Vehicle Household %

Median Income and Population Density



60000 90000 70000 80000

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Zero vehicle households are generally low in Santa Clara County, amounting to less than 10% of the overwhelming majority of block groups. Extremely high rates of carlessness (over 25% of households) seem to correlate with relative low income, but rates of 10% are found at incomes up to approximately \$150,000.

It is worth noting that zero vehicle households, a measure provided by the census, is not an ideal metric; a better one would be "cars per person of driving age" in a household. Many people rely on transit and other non-car modes not because their household has no cars but because it has fewer cars than people who could potentially drive them.

Zero-Vehicle Households and Density

The strongest correlation of all is between zero-vehicle households and density, shown in Figure 34. Density predicts carlessness much better than income does, which makes sense because people at many incomes live at many densities. You must live at high density for a no-car lifestyle to be practical, since high density means both (a) that good transit is probably viable and (b) that many other destinations of interest are likely to be in walking or cycling distance.

The Bottom Line

People choose transit as a result of other choices they've made, notably the choice of whether to live near good transit (usually at higher density) and whether to own a car (or own enough cars for everyone in the household). These choices have many motivations other than income, as the broad spread of these scatter plots indicates.

Rather than thinking of transit as being for low income people, it is more precise to say that it's for people who have made certain choices within the framework of their economic circumstances. These choices, notably the interlocking choices of location and vehicle ownership, are the real drivers of transit demand. This can help to counter the misleading notion that only more affluent riders are "choice" riders. Lower income people also make choices about car dependence that are very consequential for both transit ridership and congestion, as well as for their own economic prospects.

As we outlined at the beginning of this chapter, the location of a residence or job governs how viable transit can be, with the four critical variables being density, walkability, linearity, and proximity. Density is the only one of these that's easy to describe demographically, but it's also the most important of the four. High density zones are usually (though not always) favorable for the other conditions and thus places where high quality transit is viable. High density also makes parking more of a hassle



Figure 34: Population and Zero-Vehicle Household Density (ACS 5-Year Summary File, 2008-2013)

and cars less necessary; thus low vehicle ownership naturally correlates with it. This further enhances transit's potential in those places.

The next chapter explores these relationships further, using VTA's ridership data. Note again that this data is only about VTA and thus under-counts ridership where other transit agencies are present.

Key Chapter Findings

- Key land use factors governing transit are density, walkability, linearity and proximity.
 - Density and walkability tell us about the overall potential of the market: are there are a lot of people around, and can they get to the place where the product is available?
 - Linearity and proximity tell us about cost: are we going to be able to serve the market with short, fast, direct line or will our costs be higher as we must design service that uses indirect or longer paths?
- Santa Clara County is California's fastest growing county with an average population growth rate of 1.1% annually since 2010.
- Most growth in the county will increase density, as there is little room for horizontal growth. This density will increase traffic and also increase transit needs.
- The county's job/housing distribution is unbalanced, with a majority of housing located to the south and east while the majority of jobs are to the north and west. By contrast, transit is most cost-effective and productive where jobs and housing are more mixed, e.g. along El Camino Real and Stevens Creek.
- While transit is used as a commute mode by only 3% of commuters countywide, the rate is much higher in some locations, typically those served by highly useful transit.
- Density is a better predictor of ridership than income, because people living at high densities are more apt to seek alternatives to driving. For the same reason, car ownership is lower in high density places, to a degree not fully explained by income alone.

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17.a

Service Overview

VTA operates 3 light rail lines and 77 bus lines of various types, across a service area of 346 square miles inhabited by 1,889,638 people. In fiscal year 2015, more than 32 million trips were made on VTA bus routes, and more than 11 million on light rail. On an average weekday, over 140,000 boardings occur on VTA services.

VTA classifies its bus services into one of five categories: Core, Local, Community, Express, and Limited Stop. Chapter 4 explores these categories in greater detail.

Core routes are generally higher-ridership, more frequent routes in the central part of Santa Clara County. The Local and Community routes are often less frequent lines serving areas where densities are lower. The Express and Limited routes offer long-distance, limited-stop connections often using freeways and expresswaysh between regional destinations.

The two charts shown in Figure 35 display daily weekday vehicle hours² and ridership by route type. Core services, the most productive, make up 2/3 of VTA's bus service but account for 3/4 of daily boardings on the bus system. All of the other service types represent a smaller share of boardings than of service quantity. This helps to illustrate the higher ridership potential of Core services, which arises from their high frequency, easy connections, and the diversity of purposes for which they are useful.

Frequency

Figure 36 on page 32 displays VTA's network categorized by the prevailing midday frequency of each route. Frequency is critical to focus on because it is an expensive investment that should pay off in much higher ridership, because frequency makes service so much more useful.

We define frequent service as any transit service operating at 15-minute or better headways. Industry experience has shown that this is a threshold at which riders start to trust the service to arrive within a reasonable waiting time without consulting a schedule. Frequency reveals where a transit system is focusing its resources. Showing midday frequency points to where those resources and level of convenience are available all day long-places where people can choose to rely on it for all kinds of trips.



Figure 35: VTA Bus Service Quantity (Vehicle Hours) and Ridership by Route Type

From this map, we can make a few key observations:

- VTA operates a frequent network of 12 major all-day routes (including segments where multiple routes are overlaid to produce a higher frequency).
- The east side of the service area, particularly within San Jose, boasts a very rich network of frequent services. Many of these routes connect to light rail as well, creating a frequent network grid through the area that enables multidirectional travel with short waiting times.
- The low frequency across the western 2/3 of the county is very striking, especially given the known pockets of density, low car ownership, and low income that can be found here near El Camino Real and Caltrain. (Caltrain, it must be remembered, is not frequent at all, rarely coming more than once an hour at most stations.) Only two major frequent corridors extend far west of downtown San Jose -- El Camino Real and Stevens Creek.

There are two separate issues here, the coherence or connectivity of the

frequent network and its fit with density.

² We use vehicle hours rather than revenue hours to understand the total resource split, because vehicle hours include deadhead, which is the time spent running empty to and from the ends of the run. It is important to use vehicle hours whenever doing comparisons that involve Express service, because these long one-way runs have dramatically higher deadhead than other services, since the bus and driver must deadhead the entire way in the reverse-peak direction before or after each one-way trip. When dealing with local services the difference between vehicle hours and revenue hours matters less, because deadhead does not differ so much across different service types.

Coherence or Connectivity

A basic question about transit networks is not just where they go but where you can get to along them. Transit is useless unless it connects you to many possible destinations, and we use the terms coherence or connectivity to describe how well it does that.

Whatever transit line you live on, you need to get to places that are not on that line. This requires that connections be easy. That is only possible where frequencies are high -- i.e. where red lines intersect on this map -- or where connections can be timed, as is done between some feeders and the commuter rail schedules. Timing of connections, however, only works with relatively short and specialized routes. Most VTA network are too long, and too hard to run reliably, for precise timing of connections to be viable.

This is why a frequent grid pattern of services, such as east San Jose has, is so powerful. Where red lines cross on this map, you can connect in any direction, so you can travel from many possible origins to many possible destinations.

By contrast, where less frequent blue or green lines cross on this map, the connection is very difficult, and may introduce substantial delay.

Across the western half of the county there are three frequent lines (counting LRT to Mountain View) but they do not touch each other, so no frequent connections are possible.



Figure 36: VTA Frequent Network Map After Planned 2016 Changes

Fit of Frequency with Density

The map in Figure 37 shows the Frequent Network (those routes operating at 15-minute headway or better for the peak and midday) overlaid on the map of activity density presented in Chapter 2.

VTA's present network aims to concentrate frequency in its strongest markets, an appropriate design strategy given its imperative from the 2010 Transit Sustainability Policy to "increase transit mode share by focusing resources to target markets where transit can compete effectively"³. However, apart from the issues of connectivity outlined above, the fit of the network to density is also not ideal.

If we compare this map to the map of poverty density, (see Figure 26 on page 23), we can observe that the current pattern of frequent service seems to be tracking poverty more closely than density. This matters to ridership, because density is a better predictor of ridership than poverty, but it also matters to meeting the needs of low income riders.

Frequent services currently concentrate where poverty is highest, in eastern San Jose, but this is an area with many residences but few jobs or activity destinations. The frequent network does not appear adequate to connect East San Jose residents to a sufficiently wide range of opportunities such as jobs, school, retail, and other activity centers. (Note that lower income people are more likely to need to travel at all times of day, so peak-only services have little relevance to them.)





³ VTA Transit Sustainability Policy, 2010, p. 3.



Peak Frequency Map

Does the issues with the frequent network improve much during rush hour? While the peak service level is substantially higher, the availability of frequent service doesn't expand dramatically.

Figure 38 shows the frequency of service during the AM peak period, when several routes' and segments of routes' frequencies increase for the rush hour.

Comparing this map to the previous one, peak frequency increases consist mostly of 20-minute services rising to every 15 minutes, (orange lines turning red). Most of these are in San Jose, though they include the line to Gilroy and some service in Milpitas.

Meanwhile, in the west half of the county, only a small area of northern Sunnyvale gains high frequency service during the peak period. All of the issues of connectivity and fit with density addressed above continue to exist.

Again, this map does not show the full picture of peak-only service, especially in the main employment areas, because other operators provide significant peak service there. These include the Caltrain and ACE shuttles, Stanford's shuttle system, and extensive private sector services for specific employers.









Geographic Pattern of Ridership

Figure 39 displays VTA's weekday ridership pattern by stop. Each stop in the network is shown, sized by the total cumulative number of average daily boardings that happen at that stop across all routes that provide service there. The data on this map was collected in March 2015.

Note that major transfer points, identifiable on the previous map as places where frequent lines (including rail) intersect, will show high boardings that may not reflect local area demand.

Note how strongly ridership follows frequency by comparing this map to the previous one.

Each of the light rail lines exhibits quite high average daily ridership, with nearly 2/3 of light rail stations seeing over 250 average daily boardings per day. Since light rail investments typically target strong target markets, and generally feature high frequency service, a high quantity of total ridership is to be expected on those corridors.

The areas with the most high ridership stops are in downtown and the eastern side of San Jose, west along El Camino Real, and west along Stevens Creek. These areas, which together make up the bulk of the area served by VTA's frequent network, have the greatest number of stops with over 100 and over 250 average daily boardings. This holds true along the length of both west side corridors and along Alum Rock, King, McKee, and Story in the east.





There are also several secondary

corridors not presently part of the all-day frequent network (though they do have 15-minute service during peak periods) but which have numerous stops in the 10-50 and 50-100 average daily boardings ranges:

- Winchester, particularly the segment south of Stevens Creek
- Bascom between Stevens Creek and Curtner
- Monterey St.
- Senter Rd.
- Oakland Rd. from central Milpitas south to downtown San Jose

Apart from the major frequent network corridors, other important nodes pop out as more isolated locations of high-ridership stops, including:

- Bus stops near the airport, connecting to El Camino Real services and LRT served by route 10.
- Transit centers where many routes connect, such as Great Mall and Winchester.
- Historic downtowns with dense mixed use, such as Sunnyvale, which also include Caltrain connections.
- Light rail stops connecting to bus routes, such as Lockheed Martin, Capitol Ave, and Santa Teresa.
- Shopping centers, including Westgate at Saratoga and Prospect.
- Community colleges that attract commuter students from a distance, such as De Anza College, Evergreen Valley Community College, Mission College, and Foothill College.

Also of note are areas where we don't see many high ridership stops on this map, but there are sources of transit demand.

- Palo Alto, Stanford, and the Shoreline area of Mountain View show low boardings, but this partly reflects the abundance of local transit not directly provided by VTA. Stanford has its own extensive shuttle system. Palo Alto and Shoreline are also served by Caltrain shuttles and by SamTrans, apart from frequent services on El Camino Real.
- Infrequent corridors (like Sunnyvale-Saratoga, Wolfe, or Curtner), typically do not have the sustained pattern of high-ridership (50 average daily boardings or above) stops found on the frequent network, and their highest-ridership points are likely to be transfer points or major nodes, rather than long segments where a strong market is matched with a high level of service.



Figure 40: Route Productivity and Frequency- Data from VTA and 16 transit agencies

Transit Productivity

Productivity, or boardings per revenue hour, is essentially ridership per unit of service cost, i.e. "bang for the buck." We discussed this measure briefly for the entire network in Chapter 1. For every hour a transit vehicle is in service, how many people board the bus? Productivity reveals how effective a revenue hour is at generating ridership when invested in one service relative to another.

Productivity is strictly about the goal of ridership. Services that are designed for other goals, like coverage or congestion mitigation, may not perform well on the productivity metric. This does not mean that these services are failing or that the transit agency should cut them. It just means that they are not serving a ridership goal. Further sections of this report will discuss VTA's performance relative to other goals.

Productivity by Frequency

What do routes that generate ridership efficiently have in common? In examining transit systems in cities around the country, we have found a general correlation between transit route frequency and productivity, as shown in Figure 40. (Note that this chart excludes peak-only routes and extremely infrequent routes).

The chart in Figure 41 displays the productivity (boardings per revenue hour) of each VTA route on the y axis, with frequency on the x axis. Each point is colored based on which of VTA's route categories it falls within.

Since this displays productivity data based on ridership and revenue

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hour numbers from 2015, the 181 is shown in the 30-minute group here. In addition split frequency routes, such as route 25, are grouped into their highest frequency segment. Note that high frequency, which is described as a low number of minutes between consecutive trips, is to the left on the x axis. Services that operate only during limited periods of the day are grouped together in the peak-only pane of the chart.

Frequent services tend to produce more ridership per revenue hour, even though they also have the highest cost.

As observed before, more frequent services tend to produce more productivity (ridership per revenue hour), even though, on the surface, high frequency means more revenue hours which should pull the ratio down. This happens because frequent service is the most useful and convenient service for riders and transit agencies target this most expensive service towards their strongest markets. Most of the highest-productivity services fall into VTA's Core Network, which includes the majority of its high -frequency routes.

It is important to note that no fare is charged on routes 201 (downtown San Jose shuttle) and 10 (serving the airport), two of the higher productivity routes.

There are other high productivity services that do not operate at high frequency. Among the 30-minute routes, six operate at better than 30 boardings per revenue hour, and three 60-minute routes meet this standard. These routes, which may support higher frequency, are investigated more closely in the next section.

Where are VTA's most productive services?

Figure 42 shows VTA's most and least productive local routes broken out by productivity quartile (the same number of routes in each category). The upper quartile are VTA's most productive routes. The lower quartile are VTA's lowest-productivity routes. Routes are colored based on which of VTA's service categories they fall into.

The match between VTA's frequent network and its most productive services is immediately evident, as the major frequent corridors (22,23,72) all show up in the top quartile, as do several routes which are either near-frequent (as in the case of the 66 and





Figure 41: VTA Route Productivity Chart



Figure 43: 73-Snell & Capitol - Downtown San Jose Route Profile

73) or have shorter frequent segments (as in the case of the 64 and 25).

Several of the westside crosstown corridors also appear in the upper guartile, particularly those flowing through Sunnyvale and Cupertino.

In the third and lower quartiles, the absolute lowest performers tend to be highly duplicative infrequent routes or circuitous local coverage routes like the 88, 34, and 35. Note how these routes, or the areas served, tend to be unfavorable on two or more of the key built environment factors: density, walkability, or linearity. Even setting aside the issue of frequency, a long, straight route is more likely to be useful for a wide range of purposes, compared to a small and squiggly one. No long, straight routes are in the bottom quartile.

Productivity Outliers

20-minute routes

Among the four 20-minute routes, the 73 along Senter Road in southern San Jose stands apart, achieving better that 40 boardings per revenue hour-the second highest productivity among all routes in the network. A detailed map of the 73 is shown above.

Route 73 offers a relatively high level of service (20 minute during the midday, with 15 minute peak service) to a short direct corridor



Route

Span	AM freq	Mid freq	PM freq	Night freq	Late freq
630a-7p	45	45	45		

Figure 44: 42- Kaiser-Evergreen Valley College Route Profile

with pockets of high density housing and employment at both ends and along the route. The southern portion of the route along Senter passes through zones with population densities in excess of 15,000-20,000 people per square mile. Further northwest along Senter, the route serves a dense employment area at Tully before proceeding into downtown San Jose.

The 73 provides a useful example of how routes serving the same area can generate very different ridership outcomes. Compare the map of the 73 to route 42 in Figure 44 . In terms of the ridership recipe:

of southeast San Jose.

TRANSIT

Points of interest hospital university 🛤 high school 📹 shopping Data Source: ACS 2013, Santa Clara Valley Transit Authority

• The 73 and 42 both serve some of the same relatively dense terrain

- While the 73 operates in a straight line on Monterey for nearly its entire length, the 42 turns east towards its eastern terminus at Evergreen Valley Community College, an important destination and the busiest stop on its route. To get there, it traverses a long stretch of very low density along Yerba Buena Road with only a single-digit number of boardings.
- The 73 stays with Monterey, while the 42 makes two long (one-totwo mile) deviations in this segment. Deviations add time to the route, making it more expensive, but it also means that it can provide direct service to destinations like the Edenview Community Center on Branham (the northeast corner of the northern deviation off Monterey).

Simply put, the 73 is a highly productive route, generating ridership in a way we would expect with the ridership recipe in mind: a decent level of service to dense locations in close proximity to one another, operating on a very linear path. On the other hand, the 42 serves a dense market for its southern half and is anchored by a strong destination (the college) at its northeast end, but it runs a serpentine path in order to serve some destinations away from the straightest route. It must also traverse a gap in development to get to the college. The lack of linearity means a weak market with weak ridership.

Infrequent Crosstown Routes

Earlier, in our initial examination of the network frequency map, we noted that an interesting characteristic of VTA's network is the lack of frequent north-south crosstown service in the western portion of the service area. Of note, nearly all of the crosstown services fitting this role in the network are high-ridership, despite running only hourly or half-hourly and often being so close together that their service areas overlap.

Routes 26, 53, 54, 55, and 57 all generate over 30 boardings per revenue hour and fall within the highest guartile of local services operated by VTA. These routes are shown by their productivity in the productivity chart in page 16.

One of VTA's most productive corridors is El Camino Real, consisting of Local route 22 and its Rapid overlay, the 522. The routes serving this corridor record more than 21,000 boardings on an average weekday, operating at high frequencies very productively. The agency's ongoing work towards BRT on the street further indicates its vital importance for travel in the region. Yet despite this, no all-day frequent connections to the 22 or 522 are available across the entire region west of downtown San Jose other than route 10, which is of limited use for all-direction travel given its focus on the airport.



Figure 45: Westside crosstown corridors

At first glance, the area between these corridors may not appear well suited to high-frequency transit. From the maps in the market analysis section of this report, we can observe that residential and employment density along Hollenbeck, Sunnyvale-Saratoga/De Anza, Wolfe, and Saratoga/Kelly (as well as Winchester or Bascom) is generally lower than in important regional centers like downtown, Sunnyvale, Santa Clara, or Mountain View, or along the two existing radial westside corridors. Some of these street segments, like De Anza, are designed like freeways, hostile to pedestrians, thus difficult to serve with transit.

In isolation from the rest of the network, none of these corridors would seem an ideal choice for frequent transit. However, crosstown segments are a key element of a multidirectional network, and a crucial link for non-radial trips.

Imagine a person located between Wolfe and Saratoga along Stevens Creek who needs to travel to somewhere around Reed and Wolfe. The first stage of their trip would be simple and reliable - wait just a few minutes (never more than 12) for a 323 or 23, and ride to Wolfe. However, the transfer to the 26 means changing to an infrequent route, and the average wait will be 15 minutes, maybe even longer if you just



missed the last bus.

No frequent all-day routes operate north-south in the portion of the network west of Bascom.

Grid transit networks, like that in east San Jose, solve this problem by making sure a bus is always coming on both legs of the trip. While the unique market of some of the segments in question on the west side may not be as strong as in other locations already served by frequent transit, a frequent grid connection across the west side improves the connection to all sorts of destinations along the dense El Camino Real and Stevens Creek corridors.

Catching an infrequent bus from home, you can wait until the last minute before you leave to go to the stop, but with a transfer, it is difficult for to be sure that you are not going to be left out on the street. This uncertainty is a major detriment to the sense of spontaneity transit can provide.

None of the routes intersecting El Camino Real offer an all-day frequent connection running north-south in the western potion of the service area. This means that any trips involving a transfer between the 22 or 23 and a intersecting route will involve at least one long wait, and twoseat trips across the area that don't involve either corridor will definitely require long waits during each leg. If we take half the headway of a route as the average wait before arrival, we can see how frequency improves the speed of trips:

- Trip 1: two 15-minute frequent routes: 15 minute total average wait (7.5 + 7.5)
- Trip 2: one 15-minute frequent route, one 30-minute route: 22.5 minute total average wait (7.5 + 15)
- Trip 3: two 30-minute routes:
 30 minute total average wait (15 + 15)

Regardless of how far we are going, trips involving a transfer will always be faster, more convenient, and more reliable the more frequent each connection is.

The high productivity of several routes may indicate a potential market for such frequent service in future. However, it is difficult to say at this time which route or corridor would be the obvious choice for a new frequent grid element, as many of the routes overlap or run quite close together, cannibalizing each other's markets.



Figure 46: 55-De Anza College - Great America Route Profile

Let's examine one of these routes, the 55 (shown in Figure 46). The 55 runs every 30 minutes throughout the day with a peak frequent segment north of El Camino Real. Looking at the map in Figure 47, we see that the ridership at stops north of the Caltrain station and El Camino Real is not substantially greater than the southern segment. Boardings on the northern segment are largely in the southbound (red) direction, while boardings on the southern segment are generally northbound (blue).

This suggests that the bulk of northward ridership is collected south of El Camino Real, despite the lower level of service in that segment.

Peaking

VTA's bus network serves people making all sorts of trips all day long. While a common assumption is that transit ridership is much higher during morning and evening peaks, VTA's ridership shows a predominantly all-day pattern with only slight increases during the peaks (even when ridership on peak-only express services is included), as shown in Figure 47. Average hourly ridership during the morning peak is only 3% higher than midday, and ridership during the afternoon peak is only 10% higher than midday.

VTA's bus ridership is barely peaked, with average afternoon peak

ridership only 10% higher than midday ridership.

Many of VTA's routes operate at higher frequencies during the peak periods. Many 20- and 30-minute routes run every 15 minutes during the peaks. On average, this increase in service levels does not attract a proportionate increase in ridership. As a result, average productivity is higher in the midday and lower on the p.m. peak.

The lack of big a.m. and p.m. peaks in ridership in a place with so much peak congestion likely arises from the demographics of current VTA bus riders. People go all sorts of places (work, school, home, shopping) throughout the day, no matter their income. Yet low income people have a particularly strong motivation to use transit for these trips, and lowwage jobs are more likely to begin and end at non-peak hours.

Ridership from one hour to the next on any particular route has much to do with the mix of land uses it serves, the types of jobs it provides access to, its midday level of service, and whether it connects with highly peaked services such as Caltrain or ACE. When we look at individual routes, we are able to make specific observations about commonalities among the most heavily- and lightly-peaked routes. Two examples are examined on the following pages.



Average Weekday Boardings

Average VTA Bus Network Boardings by Hour

Figure 47: VTA Weekday Bus Ridership by Hour

Data Source: Santa Clara Valley Transit Authority



Figure 48: 64-Almaden LRT - McKee & White Ridership by Hour

Consider the 64-Almaden LRT - McKee & White, shown in Figure 48. This is a highly productive route operating at 15-minute headways in its northern segment on McKee and 30 minute headways south of San Jose on Lincoln. Its ridership displays essentially no peaking. In fact, during the afternoon commute, ridership drops from the high levels sustained throughout the midday.

The 64 serves relatively few places where peak commutes dominate the market. Downtown San Jose certainly holds some peaked jobs, but it also has the all-day demand of its mixed use and university. Most of the 64 serves areas where all kinds of demand occurs. It makes many connections with other routes to create an even more diverse range of trips possible. This adds up to a route that performs very well despite its small role in rush hour commuting.

Additionally, the northern end of the 64 has a high concentration of people in poverty and low-to-median family incomes. Transit is a more competitive option for all sorts of trips for people with less income to devote to transportation. Many lower-paying jobs start and end at times throughout the day other than the traditional 9-to-5 shift, and many low-income workers have multiple jobs, which they must commute to at different times throughout the day. This relatively dense area has frequent service and all the network effects that entails (easy transfers with short waits to access destinations in all directions), ensuring that transit is a more attractive choice for trips throughout the day.



Figure 49: 64- Almaden LRT - McKee & White Map

Data Source: ACS 2013, Santa Clara Valley Transit Authority



Figure 50: San Antonio Shopping Center - Santa Clara TC Ridership by Hour

On the other hand, the graph for route 32 (San Antonio Shopping Center in Mountain View to downtown San Jose, mainly serving Monroe and Middlefield) reveals a very highly peaked pattern. This route's busiest hours are 7:00 a.m., 8:00 a.m., 4:00 p.m. and 5:00 p.m., during the peak periods when its frequency increases from every 45 minutes to every 30 minutes. The 32 serves less dense, and much less mixed, land uses for most of its extent. Given its poor frequency during the midday and limited span (operating only between 5:00 a.m. and 7:00 p.m.), the route is most useful for people whose commutes fall within those traditional peak commute hours.





Service / Ridership Match

The chart at right shows two lines:

- The quantity of service (bus trips, shown in red) provided during each hour of the day, relative to the average service level across all 24 hours of the day. For example, in the hour starting at 12:00 p.m. VTA provides about 45% more bus service than the average across all hours, and in the hour starting at 4:00 p.m. VTA provides about 95% more bus service than the average.
- Ridership (boardings, shown in blue) during each hour of the day, relative to average ridership across all 24 hours of the day. For example, in the hour starting at 12:00 p.m. boardings are about 65% higher than the average across all hours, and in the hour starting at 4:00 p.m. boardings are about 90% higher than the average.

Comparing service levels and boardings for each hour to a daily average allows us to observe each factor's relative level of peaking, across 24 hours of operations. We can make a few observations about the shapes of these peaks, and their relationship to one another:

- During the a.m. peak period, the ridership line tracks with the service line, instead of rising higher above it. This means that, on average, peak buses are not much more crowded than midday buses.
- Another way of describing this phenomenon is that higher demand during the peaks doesn't result in higher productivity, as it does in most agencies, because VTA adds so much service on the peaks. This suggests that VTA could achieve higher overall productivity by reducing the quantity of peak service. In addition, peak bus trips are more expensive for an agency to provide than midday bus trips, so even if peak bus trips were to achieve the same productivity as midday bus trips, their cost-per-rider would be higher.
- In the mid-afternoon, ridership rises hours before service quantity rises. This is the time of the day when buses are most crowded, as indicated by the blue line being higher than the red line. Some early-afternoon ridership is surely related to school schedules, but ridership grows out of proportion to service quantity starting at 12:00 p.m, long before students get out of school.

This analysis suggests that VTA is offering more service during peaks than it would if maximizing productivity or minimizing cost per rider were the agency's primary goals. In other words, there may be more ridership growth potential in all-day service than in peak service.



Figure 52: Hourly Data (trips and boardings per trip) compared to average

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Data Source: Santa Clara Valley Transit Authority

Coverage & Frequent Network Reach

We use the productivity metric to assess how well a transit route succeeds at the goal of generating high ridership per unit of cost. Transit can be asked to pursue other goals. One of the most common is referred to as the coverage goal: how many people across the agency's service area are able to access the transit system? VTA's Transit Sustainability Policy asks the agency to "balance service productivity and service coverage."4

Coverage is the number of people and jobs near transit stops served by VTA. For this analysis, we considered an area to be served if it is within 1/4 mile of all-day service, a typical industry-standard walk distance. This is a relatively tight standard; some analyses use a longer distance up to 1/2 mile, and others include peak-only services. There is some evidence that people walk further to better service, so being over 1/4 mile from frequent service might still count as being served though this analysis treats such a situation as "no service." We also do not include peak-only services (or peak service levels), because they are only available for a limited number of hours per day and thus do not represent the most

How Coverage is calculated for each zone, block group or other enumeration area



Population × ((Covered Area)/(Total Area)) = Population of Zone Covered

Figure 53: Coverage Analysis methodology diagram

common condition of the network, or the period in which the majority of boardings per day happen (from approximately 10 a.m. until 4 p.m.).

Using 2013 population and employment data from the American



Figure 54: VTA Coverage of Population and Employment (ACS and LEHD, 2013)

Community Survey (ACS) and Longitudinal Employer-Household Dynamics (LEHD) program, we performed a coverage analysis using spatial interpolation to estimate the number of people within a 1/4 mile buffer around each stop, weighted by the portion of each block group within that area. Figure 53 shows how the proportion of the population or jobs of each block group within walking distance to transit is calculated based on the fraction of those areas within each transit stop's walk radius. The population of each zone is multiplied by the fraction of the zone within the walk radius of each stop (shown in green) to estimate the covered population.

We also measured the number of people within 1/4 mile of a stop with frequent service using this same methodology, but selecting only stops with frequent service. This provides an indicator about the reach of VTA's most useful and competitive service.

Figure 54 shows the results of this analysis. Of the 1.8 million people in Santa Clara County, 1.2 million (66%) are within 1/4 mile of a transit stop served by VTA⁵. Only 470,000 (26%) people have access to highfrequency all-day service.

Of the 874,000 jobs in Santa Clara County, 760,000 (87%) have some degree of transit access, with 320,000 (37%) near the frequent network.

5 95% of people in Santa Clara County (1.7 million) live in block groups where at least some part of the area is within 1/4 mile of a transit stop. However, whether their location within that block is at all close to that stop is unknown, which is why the spatial interpolation method is used as the primary tool for gauging the level of network coverage.

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A network designed to maximize ridership will seek to expand the frequent network to more people and jobs, so that the most competitive



⁴ VTA Transit Sustainability Policy, 2010. p. 3.

service type is in more suitable markets. On the other hand, a network designed to maximize coverage will measure its success in part by seeking to grow the total number of people and jobs near service of any kind. If VTA shifted more of its resources to focus on either one, the other would experience a negative shift. This is one way of gauging the impacts of a choice within the ridership/coverage trade off.

Current Plans

2016-2017 Transit Service Plan VTA's short range plan includes a range of changes to be implemented over the next two years. VTA is also preparing a BART Integration Plan (BTIP) that would be implemented in conjunction with Berryessa service. The TSP includes changes to routes to accommodate the Spring 2016 opening of the Warm Springs station, but does not include any planning related to BART extension to SCC. Our review of this plan focuses on the most important near-term service changes that effect the structure of the network as a whole, particularly changes to weekday service.

CHANGES RELATED TO WARM SPRINGS BART

VTA operates few routes in the vicinity of Warm Springs station, so changes required to serve this station are minor in the context of the network as a whole. Changes to VTA routes operating in the vicinity of Warm Springs BART are as





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- 180 (Great Mall TC Warm Springs BART). The 180's north end terminus would be moved from Fremont BART to Warm Springs BART. Service between Great Mall and Eastridge and Aborn (currently three trips per day) would be discontinued. Additionally, midday frequency would be reduced from 30 minute headway to 60 minutes.
- 181 (San Jose Diridon Fremont BART). The 181 would operate at 15 minute frequency through the midday, an improvement from its current midday headway of 30 minutes. No changes to the route in order to serve Warm Springs are planned at this time.
- 120 (Fremont BART Lockheed Martin TC). The 120 would now deviate to serve Warm Springs before continuing on to Fremont station. Additionally, service west of Lockheed Martin to the Shoreline area would be discontinued, and an additional daily round trip added.
- 140 (Fremont BART Mission College). The 140 would deviate to serve Warm Springs in the same way as the 120.

OTHER MAJOR ROUTING OR FREQUENCY CHANGES

Other than changes related to BART, most of the other changes in the TSP are quite minor, effecting single or a small number of trips, or very short route segments. A number of more major changes to the network are planned, which are reviewed in this section. We have created a network map in the same style as the existing system map (which showed several changes from the TSP expected to be implemented imminently, such as the frequency change on the 180), showing the network with all changes implemented.

Four new routes are proposed:

- Line 11, a 30-minute service connecting downtown and the airport.
- Line 56, a new peak-only service running every 30 minutes between Sunnyvale Caltrain and North San Jose via Scott and Trimble.
- Line 354, a 30-minute peak-only limited stop service duplicating segments of the 54 and 55 between Lockheed Martin and De Anza College via Sunnyvale Caltrain. Implementing this route would require moving the 522 stop on at El Camino Real and Hollenbeck one block east to Mathilda, and rerouting the 54 in this vicinity in order to maintain a transfer point between the 54 and 522.
- BRT 522, an upgrade of the existing 522 using BRT vehicles and infrastructure treatments running every 10 minutes.

When examining frequency changes, we are most focused on changes that effect qualitatively different experience for the rider, rather than minor tweaks that may improve reliability or precisely match demand patterns—essentially, changes that move routes between the frequency classes we have already established in this report.

The following major frequency changes are planned:

- Line 181 upgrade to 15 minute headway from current 30.
- Line 22 reduce to 15 minute headway from current 12 to accompany new 10 minute 522 BRT service.
- Line 522 increased to every 10 minutes.
- Line 32 increase frequency from 60 to 45 minute.
- Line 57 increase peak frequency to 30 minute from current 60.
- Lines 61 and 62 Combine on Bascom between Curtner and downtown to achieve combined 15 minute frequency. These routes are currently scheduled in a manner that aspires to this. The July 2016 service change would add sufficient vehicles to restore the combined headway as reliable.

Finally, several significant changes to route structure are proposed:

- In Gilroy, current routes 14 and 17 would run as a loop, adding weekend service to the 17 segment. To offset this cost, weekend service would be discontinued on the 18.
- The 51 and 81 would be merged into a new route 81, extending from downtown San Jose to De Anza College, then north through Mountain View using the same routing as the 51. This change would allow the segment currently run as the 51 to operate at 30-minute frequency during weekdays, and add Saturday service to the segment.
- As previously mentioned, route 180's trips south of Great Mall would be discontinued.

CHANGE ASSESSMENT

All in all, the changes proposed here are mostly quite minor, but several are very important improvements.

• Changes to the 181 and 61/62 will add two extensive frequent network elements, adding a first all-day frequent north-south element on the inner west side of San Jose and greatly improving the connection to BART from San Jose and Great Mall.

- corridors.

Capital vs Operating Priorities

VTA's Transit Capital Program comprises a package of transit investments that include a variety of infrastructure projects currently in planning or constructing, such as the Alum Rock and El Camino Real BRT corridors.

The purpose of this report is not to discuss the merits of any of these projects in detail. However, one of the major observations of this report has been to note the substantial decline in total transit service per capita in Santa Clara County over the past 15 years. As we've explained, this issue impacts the overall viability of the transit system as a useful travel option for all sorts of trips, as fewer resources are available for all the competing demands placed on transit, whether delivering frequent service to high-density places, extending late night hours or weekend service, or maintaining lifeline coverage service to lower-density places.

If voters approve a transportation sales tax ballot measure in 2016, new funds will be available which VTA could use for a variety of purposes, including the construction of important regional capital projects. Some portion of these resources could also be invested into bus operations, beginning to reverse the recent trend of falling transit service per capita

• In the El Camino Real corridor, the introduction of Alum Rock BRT and accompanying frequency changes will increase the overall level of service in VTA's premier transit corridor. The BRT improvements and added frequency on the limited-stop 522 will reduce wait times and increase convenience, particularly for longer trips, but the reduction of the frequency of the 22 from 12 to 15 minutes will slightly reduce its usefulness for short trips.

Since Warm Springs BART is far from most VTA services, the changes required to address it are quite minor, simply adding deviations to the 180, 120, and 140 to serve the station. These changes are temporary until the BART extension to San Jose is opened. These do not substantially impact the portions of the network where most of VTA's ridership is located—east San Jose, and the major westside radial

• No major changes are proposed to east side service apart from the two canceled 180 trips between Great Mall and Eastridge.

• Linking the 51 and 81 together into a new route 81 has the positive aspect of closing a coverage gap on Homestead between Wolfe and Hollenbeck, and adds weekend service to the 51 segment. These are unlikely to be high-ridership changes, as the 51 serves a very low density area, and the 81 offers a much longer path east and west from Cupertino towards downtown San Jose than the 23/323.

in Santa Clara County. Future stages of this study may evaluate alternatives which address the decline in service per capita by allocating future sales tax revenue in different ways.

Fare Policy

Setting fares correctly is a complex issue that we do not address in this report. However, since this focus of this study is network design, it is important to note how fare policy is affecting VTA's ability to offer an efficient and attractive network.

VTA's fare includes three pricing tiers (Adult, Youth, and Senior), within which a range of fare types are available, including single ride, day, and monthly passes. Importantly, fares on Express routes are double that of local routes and light rail. The various VTA base fares are shown in Figure 56.

This structure imposes an extremely high transfer penalty (100%) on people who have not purchased a monthly or day pass. This means that a simple one-transfer round trip, perhaps within the convenient frequent grid in eastern San Jose, costs \$8, or \$6 if you have a Clipper card. One of the most important advantages of a grid network design is the ability to make fast, reliable grid movements involving a transfer. While the service is in place to facilitate this, VTA's fare structure is working at cross purposes with its network design.

VTA's fare structure is working at cross purposes with its

network design.

Free transfers used to be the rule in transit. Passengers would pay their fare and receive a transfer slip to be used on the next bus. Over the last several decades, concern about the way these slips were abused -- by giving or selling them to others, for example -- led to their elimination at many agencies. However, this reason for not offering free transfers does not apply to customers using the Clipper card. Many transfer-dependent transit systems -- including those of San Francisco and Portland -- have retained free transfers because they consider it essential to the efficient functioning of their network.

Further analysis would be required to gauge the ridership and financial impact of removing the fare penalty (by allowing transfers within a set time window), but this is an important step towards a transit system that allows truly multidirectional travel across Santa Clara County.

VTA Fare Structure (Adult Age 19-64)

- Single Ride \$2 (Regular & Limited Stop Buses, Light Rail)
- Express Single Ride \$4
- Community Bus \$1.25
- 8-Hour Light Rail Pass \$4
- Day Pass \$6 (Clipper Only)
- Express Day Pass \$12 (Clipper Only)
- Monthly Pass \$70
- Express Monthly Pass \$140
- Annual Pass Subscription \$770

Figure 56: VTA Fare Structure

TRANSIT SERVICE AND PERFORMANCE

Key Chapter Findings

- Productivity (ridership/service provided) is strongest where frequency is highest. This matches a nationally-observed correlation between frequency and productivity.
- VTA's most productive routes tend be frequent routes serving dense, mixed-use places.
- VTA's frequent service is very concentrated in San Jose. There are some indications that a more extensive frequent network could succeed.
- There is relatively little peaking in ridership. Average ridership in the morning and evenign peaks is only 10% higher than the average midday.
- On average, VTA service does not get more crowded during commute peaks, because so much service is added at this time while ridership rises only moderately. This is unusual and suggests that peak service may be inefficient or excessive.

TRANSIT SERVICE AND PERFORMANCE

Transit Choices Report Santa Clara Valley Transportation Authority





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Service Branding

To many people, all buses look alike. Bus routes tend to be numerous, so they can also overwhelm people with complexity. It's often hard to find a service that might be useful to you out of a list of 77 bus routes, or on a map that shows them all on top of each other, and it's easy to come away from that effort with the feeling that buses are intrinsically confusing.

But bus services are not all alike, and their differences can be made clear. Different types of service have different purposes and are useful for different kinds of trips. Transit systems become clearer - to both potential riders and stakeholders – when those distinctions are obvious.

The key to clear communication about a local bus network is a well-designed system of service categories, manifested across the information system and also in policy. In this chapter, we review the principles behind service categories, the outcomes that these systems are seeking, and VTA's current position.

VTA already has service categories, and some of them are presented throughout the information system. Express services, for example, are red on the system map, have their own range of line numbers, and have a different fleet. "Community" service indicates lifeline services to lowdensity areas, usually infrequent and with low ridership expectations. This is the essence of how categories are useful. Service categories help people (both customers and stakeholders) figure out guickly which parts of the complexity matter to them. It may be appropriate to extend the same thinking to other categories.

This chapter reviews the VTA category system and points out ways that it could be clarified and made more useful to both customers and stakeholders.

VTA's Existing Service Categories

The Seven Bus Categories

VTA divides its bus service into seven main categories. Four of these denote all-day service:

- Rapid: Frequent with widely spaced stops for faster travel.
- Core: Frequent but with local stops to cover all areas along the line. •
- Local: Less frequent local stop services. •
- Community: Especially infrequent services, focused on low-demand areas.

The other three categories generally denote peak-only service:

- Limited: Additional services overlaid on local or core lines, providing faster service with widely spaced stops only during the peak commute period.
- Express: Nonstop links during peak hours, typically for long trips across the County.
- Commuter Rail Feeders. Various shuttles that connect commuter rail stations to worksites, almost entirely in the peak commute period.

A Spectrum from Diverse to Specialized

In this seven-level hierarchy, the higher categories -- especially Rapid and Core – achieve high ridership through the diversity of purposes and situations in which they are useful. All kinds of people doing all kinds of things at all times of day can benefit from these lines. On these services, a single bus serves many trip purposes at once, including trips to many origins and destinations. The lack of specialization is the key to the success of these services.

At the lower end of the hierarchy, and especially among the Expresses and Commuter Rail Feeders, the service is very specialized, generally around rush hour commuters. These services must win a high share of this group, because they are not useful to any other trips by design.

This spectrum from diverse to specialized helps to explain why the logical sequence of ridership-oriented network planning is to design services from the top of this list downward, starting with Rapid and Core services and ending with the peak-only services. With their high frequencies and infrastructure needs, Rapid and Core services are big investments that expect big returns of ridership, so other routes can't be allowed to compete with them. Once these major services are defined, Local and Community service needs are evident from the gaps in the higher-order services, and can be filled in accordingly. Peak only services, too, should only be introduced where the all-day network is not adequate to the demand or need.

The Special Case of Expresses

Express service exists in a different dimension from the others. Unlike the other four categories, Express service features a long nonstop segment for use in travelling long distances. Most run in only one direction and are useful only for rush hour commuting. Expresses help connect the geographically separate housing and employment land-use patterns in Santa Clara County.

Express service is difficult to compare to the rest of the network because

its purpose, and thus the logical measures of success, are so different. VTA measures the success of expresses using average load rather than productivity (boardings per revenue hour). Whereas productivity speaks of ridership per unit of cost, average load does not. Average load is implicitly per bus trip, but the cost of a bus trip varies widely based on length and whether it runs one-way or two-way. Assessing Expresses in terms of productivity would yield very low scores, as these long routes carry few passengers but for relatively long distances.

All-day inter County express service (Dumbarton Bridge, Santa Cruz-San 🔟 Jose, Fremont-San Jose) is somewhat different because it is the only transit linking its endpoints. For that reason it does have all-day service in addition to intensive peak service, and is not as narrowly specialized as most VTA expresses.

Overview of Useful Branding Distinctions

Are these the right categories? Are they defined in a way that helps both riders and policymakers understand what each one does and how they work together? To assess this, the next section considers the logic of service branding distinctions.

Figure 57 is a matrix showing how coherent brands can arise from two kinds of distinctions:

- Frequency and span.
- Speed vs. Stop Spacing

To illustrate the distinctions, the matrix contains examples from VTA or from nearby transit services.

Frequency tends to vary with span; frequent lines have the biggest markets, so they usually also have the longest duration. The relationship between speed and stop spacing, on the other hand, is inverse; wider stop spacing delivers higher speed.

In the figure, we identify four tiers of Frequency and Span:

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(Is it there when I need it?).

(How far will I walk to a stop? How fast will it go?)

• Frequent. Every 15 minutes or better all day. This generally corresponds to what VTA calls its Core Network, although VTA's Core category includes routes that are less frequent but aspire to be. This is a very distinct product for reasons outlined above.

• Candidate Frequent, also called Local or just Half-Hourly. These lines tend to run every 30 minutes or better all day and often have the

Service Branding

potential to grow into Frequent lines in the future.

- Infrequent, running every hour or so. Local services in this category, like VTA's community routes, have low ridership expectations. Longer lines, such as Caltrain or the Hwy 17 express, can do well despite low frequency because frequency expectations are lower for longer trips.
- Peak-Only. Many services run peak-only because they focus narrowly on the "nine to five" commute market.

There are many ways to manifest and brand these distinctions. Houston, for example, has taught its customers colors for these categories, calling Frequent lines red, half-hourly lines blue, and hourly lines green. The lines obviously appear in these colors on the system map, and the same colors are on signs and throughout the information system. They help everyone remain aware of the critical distinctions that these categories represent. We will use the same color meanings on all network maps throughout this study.

In the same figure, we identify four tiers of Speed vs Stop Spacing:

- Nonstop means "serving a long nonstop segment through which most riders pass." VTA's commuter express buses, including the inter County Dumbarton and Highway 17 services, meet this definition.
- Limited or Rapid means "serving widely but regularly spaced stops." There is obviously a wide range of stop spacing here, from several miles on BART to a half mile on parts of the Light Rail and BRT systems, but this range generally indicates faster speed than locals due to wider spacing, but still a regular pattern of stops along the line, unlike nonstop.
- Local. This typically means stop spacing of 1/4 mile or less, the typical historic behavior of bus routes intended to be continuously useful to all points along the line.
- Flexible. This category includes all transit services where the route varies based on customer demand, including deviated fixed routes, Dial-a-Rides, etc.

No transit agency keeps track of all 12 cells in this matrix, nor should it. A few are naturally empty. But the matrix helps us see how critical distinctions of speed, stop spacing, frequency and span interact to form meaningful categories. They also help show why most existing VTA service categories already make sense, because the distinctions they make line up with these crucial distinctions. They may also be helpful in refining the exact definitions of these existing categories.

Relationship to Trip Distance

This table also reveals how a customer's intended trip distance relates to the key distinctions shown. The longer a customer's trip is, the more speed they need (which is upward in the table) but the more patience they have for lower frequency (rightward in the table). This happens for two reasons:

- In determining how long a total trip will take, frequency (waiting time) is the dominant factor for short trips but in-vehicle travel time, governed by speed, is the dominant factor for longer trips.
- Demand is lower for longer trips, because (all other things being equal) people try to arrange their lives to minimize trip distances.

Both of these factors explain why Caltrain's infrequent service is acceptable for very long trips, such as Silicon Valley to San Francisco, but not if you're just going a couple of stations. It also explains why you might wait an hour for a flight to Los Angeles but a day for a flight to London.

That's why the upper-leftmost corner of this table (frequent and nonstop) is empty in most cities: relatively few people are going very long distances, so it's hard to assemble the intensity of demand to support very high frequency service without making intermediate stops, unless – as with the BART transbay tube – there is simply nothing to stop for. San Jose - Fremont express service is in this cell now, but it will be more efficient when replaced by BART, which makes more stops and is thus more of a Rapid service.

A Better Frame than "Bus vs. Rail"

The table also highlights all the ways that rail and bus services can be more similar than different. Caltrain and Commuter Express buses are in the same cells—high speed but low frequency and span. Light rail and Bus Rapid Transit are in the same area—especially if BRT has exclusive

		Frequent ("Core")	Candidate Frequent	Infrequent	Peak-only
		<=15 min all day, long span	Every <=30 min all day, long span	Every 60+ min all day	and other short spans
	Nonstop	unusual (1)	All-day Expresses (Mostly Intercounty)		Commuter Express Bus or Rail. Events.
<u>Speed vs. Access</u>	Rapid or Ltd.	"Rapid" (Light Rail, Bus Rapid Transit, Rapid Bus	unusual	Caltrain (SJ-SF)	
St	Local	"Core" Frequent Locals	Locals	Community Routes	Workplace Shuttles (to Caltrain, ACE, etc)

Figure 57: Transit Service Branding Distinctions

lanes. If VTA had frequent local streetcars comparable to San Francisco's F-Market & Wharves service, these would be in the same cell as frequent local buses. In all these cases, rail and bus are two ways of implement a service that has a similar role in the network and a similar range of uses. What's more, service branding helps make bus service clearer, thus reducing one of the biggest negatives that people cite about buses as opposed to trains - that they are just too complicated and uncertain.

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Span and Frequency

Service Branding

Defining vs Secondary Characteristics

The definitions of service categories often become confused over time because too many features are cited as part of a category, and this creates confusion over how to categorize a service that has some of these features but no others. The confusion is most obvious in conversations about "Bus Rapid Transit" (BRT)⁶ where some people emphasize the speed and reliability that arises from the exclusive right of way, others emphasize what stations need to look like, while others emphasize the attractiveness of infrastructure or fleet. While all of these features are parts of the best Bus Rapid Transit systems, there is constant disagreement⁷ about the minimal definition: What features must a service have to be called BRT at all?

For this reason, the definition of a category must not just be a long pile of features. It should also clarify which features are definitive of the category. Definitive means that if a service does not have that feature, it should not be in that category.

For reasons outlined below, we recommend that the distinctions outlined in the last section (first, frequency and span; second, stop spacing vs speed) be the defining features of VTA's service categories. We especially recommend clarifying, and branding even more strongly, the categories that promise frequent service (every 15 minutes or better) at most times of day.

Relationship to Cost and Ridership Expectations

As we explore the table of categories, it is helpful to note that certain services tend to be more expensive to provide than others, and therefore tend to come with higher ridership expectations. These categories as shown by their ridership expectations in Figure 58 on page 53.

In particular:

- Frequency and Span (leftward on the chart) are expensive. The cost of service doubles with a doubling of frequency, and also grows in proportion to extensions of the service day. However:
- Peak-only service (far right in the chart) is also expensive, especially long peak runs. The high cost of peak-only service arise from (a) the need to own fleet that is used only briefly, (b) the need to

compensate employees for awkward shifts, and (c) the high cost of serving demand that goes in only one direction at a time, as the driver must be paid to return to their starting point, usually with their vehicle, at the end of each shift.

• Nonstop service (upward) is expensive because a long distance must be crossed to connect the endpoints. Rapid service is not intrinsically expensive as service, but usually comes with infrastructure that needs a ridership justification.

As a result of these costs, ridership expectations tend to be higher in the cells marked red. Slightly lower expectations attach to the cells shaded in orange.

Low ridership expectations attach to the cheapest services – infrequent fixed routes, whose purpose (as we will explore in the next chapter) is not really ridership at all.

Frequent Network Branding and VTA's Core Network

Many transit agencies are finding value in identifying and branding all of their services that run frequently all day, where "frequently" almost always means "every 15 minutes or better." This brand more or less corresponds to VTA's "Core" category, but with more rigorous standards for inclusion. These "Frequent Networks" offer several kinds of value that make them worth identifying and marketing:

- "Turn up and go." High frequency means that you experience service as going when you're going, instead of requiring you to plan you trip around a schedule. This is a major qualitative difference in the experience of transit, and vastly expands the range of situations in which people might find it useful.
- Easy Connections. Where two infrequent lines cross, the untrained eye may imagine that the lines connect with each other, but the experienced rider knows that they really do not. Low frequency means long waits for connections, often prohibitively long. By contrast, wherever high-frequency lines cross, the connection is easy. Frequency thus makes lines work together readily, forming a network that can be used for travel between any two points in the network. The Frequent Network is a network in a way that the collection of

Cost-based Ridership Expe High Medium



Figure 58: Ridership Expectations by Service Category

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ctations by Service Category						
Span and Frequency						
Candidate Frequent	Peak-only					
Every <=30 min all day, long span	Every 60+ min all day	and other short spans				
All-day Exp Inter	Peak Express Bus or Rail.					
	Caltrain (SJ-SF) all day	Event services				
Locals	Community Routes	Workplace Shuttles (to Caltrain, ACE, etc)				

infrequent routes is not.

• Reliability. High frequency is a backstop for reliability problems. Breakdowns and delays matter less if another bus is always coming

• High Ridership. In most transit networks, the Frequent services are among the most productive.

⁶ Partly to avoid this debate, VTA and other agencies often use the term "rapid bus" or "rapid" to denote "not in an exclusive right of way, and therefore not really Bus Rapid Transit, but definitely faster than a local bus.

⁷ See, for example, the Bus Rapid Transit Standard by the Institute for Transportation and Development Policy (ITDP) for one attempt to argue for a strict set of definitions. https://www. itdp.org/library/standards-and-guides/the-bus-rapid-transit-standard/ The ITDP BRT standard is controversial in the US, partly because it excludes many projects that would be called BRT by the Federal Transit Administration, largely due to the lack of exclusive lanes.


now, to the customer of today. The term Candidate Frequent can be helpful in identifying - to the public and to stakeholders - the intention to introduce Frequent service in the future. Frequent service can also be used to leverage desired outcomes from municipal partners. For example, it may make sense, as a VTA investment, to introduce Frequent service only if certain speed and reliability improvements are achieved, or if development reaches a certain level.

Figure 59: LA Metro branding distinguishing Metro Rapid service (Red) from Metro local (orange)

- Permanence. Frequency is so expensive that the investment isn't made in corridors where ridership potential isn't strong, due to built environment features. As a result, the Frequent Network is generally the most permanent part of any transit system, apart from rail.
- Land Use Synergies. Because of their high usefulness and permanence. Frequent Networks are excellent locations for densification, lower parking ratios, etc.
- Affordability. Unlike rail, which tends to inflate property values around its stations, Frequent Networks can be so extensive that land along them remains relatively available at many price points. They are therefore a key tool for getting useful transit to lower income residents, and connecting them to opportunities.
- Full Employment. Transportation is one of the leading barriers to low income persons trying to hold jobs, and the Frequent Network is a particularly effective tool for that purpose. It runs long hours, comes soon, and can be relied on, both critical for workers who punch time clocks and whose shifts are rarely "nine to five."
- A Focus for Infrastructure and Priority. As Frequent Networks grow, and grow more permanent, they are obvious top-priority places for infrastructure investment and transit priority. Some cities recognize frequent network streets in their street classification systems, so that appropriate priority can be given to transit there.

VTA has an emerging Frequent Network brand, called the "Core" Network, which seeks to foster many of these values. It includes major lines that run every 15 minutes or better at least on weekdays. As such, Core is currently an aspirational term, not a term that strictly describes the existing system.

One question for VTA is whether the term "Core" is sufficiently selfexplanatory. The term has useful connotations such as "fundamental," "at the center of things," etc., but it does not tell a potential rider what the value proposition is for them.

This is why the emerging practice, in North America and to some extent overseas, is to use the word "frequent" in some form as the name of the service. This is understood as "frequent most of the time," including long evening and weekend spans, because the whole point is that service is coming soon, whenever you need it.

A brand like "Frequent Network" is introduced to signal high frequency and a long span. The exact guarantee that the term will signify needs to be refined as the brand is developed, but it usually means service running every 15 minutes or better at least 14 hours a day, 7 days a week, with some service continuing in the evening or early morning for a total service day of 18-20 hours. These definitions obviously vary based on the intensity of the transit market, so the guarantee will be higher in San Francisco than in most other parts of the region.

Unlike aspirational brands, it must also signify a guarantee of service

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Branding Service Categories

Service categories are most effective when they are presented both to the public and to stakeholders using the same language. While some agencies use one set of categories for policymaking and another for presenting service to the public, this yields a much weaker effect.

Once service categories are presented to the public, they can be called brands. VTA currently has some strongly branded services, like the Expresses, but it also has many categories that it keeps track of internally but that are not presented to the public very forcefully, such as the Core Network.

Branding a product within the network is obviously different from agency branding, but the plethora of two-word brands shows that everyone knows the difference. When we hear two-word brands like "Microsoft Excel," or "Google Maps" we immediately understand two things:

- The first word is the company, while the second is the product, and.
- This product is one of a series that are all designed to work together, as part of a larger whole.

Service categories work exactly like tech brands in this respect. Los Angeles Metro, for example, distinguishes between Metro Rapid and Metro Local buses, a stop spacing distinction.

These brands do not represent competitors, but rather different and complementary tools all brought to you by a single organizing entity. The key is that to use the tools together, it's best to be clear on how they're different from each other. Figure 60 shows a selection of maps and other Frequent Network brand elements from Los Angeles, Minneapolis and Portland, three cities whose transit agencies brand and



promote a distinct Frequent Network.

Conclusion and Recommendation

VTA's system of service categories is already broadly logical. Our suggestions are largely matters of clarification and branding, namely:

- Be clear that the defining features of a brand are frequency, span, and stop spacing, and that other features – for example, levels of amenity or types of infrastructure – are secondary features that follow from the defining features but never substitute for them. There is no evidence that this has actually happened at VTA, but it is a perennial caution because there are many situations where the temptation to do this is high.
- 2. Consider replacing the term Core with Frequent, which is more explicit about what the distinguishing feature of that service is and why people should care about it.
- 3. Consistent with the previous point, move the downtown San Jose shuttle, Line 201, from the Community category to the Core or Frequent category. It was placed in the Community category because it is very short, but to customers and stakeholders, the frequency is the more important defining feature.
- 4. Strengthen the relevance and public understanding of the categories by making them more explicit in branding and information. In particular, strongly brand the Frequent Network across the information system, including by making it one of the most prominent visual layer on the network map. The data reviewed in this report provides insights but is not sufficient to tell VTA what to do. Network planning decisions arise from the combination of facts and values. Value judgments—choices about how to balance different goals—will also be needed, and the next steps of the study will encourage discussion on these. This short chapter outlines the major ones.

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Key Chapter Findings

- Transit services can be classified based on multiple attributes, but the most relevant to customers focus on usefulness.
- Classification is reflected in customer information (maps, apps, schedules, infrastructure, vehicles), and in goals and outcomes.
- The most important categories to communicating the usefulness of a transit service are frequency and span: when is the service available, and how long is the wait to access it likely to be?
- Frequent Network Branding is focused on quickly communicating what level of service is available in which places, and where transit is most useful.
- VTA's current classification is already broadly logical, but the connection to frequency could be made more explicit by renaming the "Core" class to "Frequent," and reclassifying a few routes based on this distinction.

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Key Questions

The Ridership / Coverage Tradeoff

VTA's performance data—like that of most agencies—reveals that not all services are justified by ridership. Many services exist despite not just low ridership, but despite any reasonable prospect of high ridership in the future. These services run in areas where the development pattern—especially the transit-critical features of density, walkability, linearity, and proximity—largely ensure low ridership potential. All of VTA's Community services are in this category, as are some segments of other lines.

Rather than judging such services as failing, it is more accurate to describe them as having a non-ridership purpose.

Every transit network is a mixture of services designed for high ridership and those designed for a competing goal, which can be called *coverage*. This trade-off arises unavoidably from the nature of the transit product. This is not an either-or choice; no transit agency is at either extreme; every transit agency operates services geared towards either goal, and identifying them clearly is necessary to translate policy-level direction on the purpose of transit into service planning.

Ridership Goal: "Maximize Ridership"

Do you want transit to be designed for maximum ridership for the budget? This goal serves several common intentions for transit, including:

- Low subsidy, because more of the revenue comes from fares.
- Vehicle trip reduction and emissions benefits. •
- Support for dense urban development, because a focus on ridership • tends to serve these areas well.

The Ridership goal is often what is meant by "running transit like a business." Unlike government services, businesses are motivated by the goal of maximum profit. In the case of local transit, where the fare paid by each customer is reasonably constant, this would mean maximizing the number of customers at a given cost.

Government services have a more complex set of motives, but they do resemble businesses when they are trying to maximize the number of users. So it is important to understand both why transit sometimes runs like a business and why it sometimes, intentionally, does not.

Every private business chooses which markets it will enter based on where it believes it can realize the strongest return on investment. If Santa Clara County wanted its transit to work in this way, this would mean deploying all of the service in places where the greatest number of people are the most likely to use it.

If VTA's network were designed for maximum ridership, it would focus only on serving areas where the built environment meets the necessary conditions for high ridership, places where many people (and thus many potential transit customers) are present, and which can be easily served by efficient transit paths linking important destinations. The system would have far fewer routes, but they would be much more frequent. Large parts of the County's area would have little or no service at all, just as a private business feels no obligation to offer its product in places with low demand for it.

Coverage Goal: "Access for Everyone"

It's very common to hear that the goal of our transit services should be "access for everyone." This goal reflects desires such as:

- Service to every city and every part of the service area.
- Lifeline for people with severe mobility limitations, no matter where they live.
- Support for suburban and rural styles of development.

When you say "for all," you implicitly say "every last one, no matter how expensive it is to get to them." The resulting network would run less service in high demand areas so that it can run more service in lowdemand areas, to ensure that everyone has some

access. Service is spread out, which also means that it is spread thin. The resulting frequencies are low, and service may not run long hours. Because the service is not very useful, even in areas of high transit demand, ridership is typically poor.

But while the Coverage goal is not what would motivate a private business, it has played an important role in the shaping of every North American public transit system. Excluding so much of a service area tends to be politically unacceptable. Concerns about lifeline access not high demand, but extreme needs experienced by small numbers of people—are also a reason to devote resources to the coverage goal.







This transit network is designed to generate high ridership as efficiently as possible. The transit agency has thought like a business, investing its resources only into the best transit markets.

Figure 61: How Ridership and Coverage Goals Produce Opposite Kinds of Network

The Two Goals in Practice

Why does a Ridership goal cause service to be concentrated in the highest-demand areas? Because as we noted in Chapter 3, frequency correlates with high productivity (ridership per unit of cost). Highfrequency service, serving a favorable built environment, consistently generates the highest "bang for buck," that is, ridership per unit of cost.

High-ridership planning therefore starts with high all-day frequency and extends it as far as it will go, focusing on the places where the most people will benefit from it. That, in turn, means dense and walkable places where many people are near the stops and can get to the stops. A transit line along an already-busy corridor can also stimulate some new

Imagine you are the transit planner for this fictional town. The dots scattered around the map are people and jobs; the streets shown are ones on which transit can be operated. The buses are the resources the town has to run transit.

Before you can plan transit routes, you must first decide what you want transit to do.



This network is designed to provide some access to the transit system for all people. The transit agency has divided its resources among many routes throughout the town, none very frequent.



Key Questions

growth along that corridor, encouraging new retail, employment activity and residential growth.

When coverage is the goal, service is spread out so as to maximize the number of people who are near any service. The result is always low freguencies, because low frequency allows a limited resource to be spread over more area. Most coverage services run every hour, and for shorter hours than other services do. The Community service category at VTA typifies coverage services: hourly routes, often circuitous, because the goal is a little service over a large area.

The Current Balance

So throughout this study, we will ask: What percentage of resources do you want to devote to the goal of Ridership, and what percentage to Coverage?

We estimate that approximately 70% of VTA's non-express bus service is where it would be if ridership were the agency's only goal, while the other 30% serves coverage purposes. (We have excluded the Express services from this calculation because the measures of ridership are so different for them.) Moving towards ridership would mean shifting resources from service providing coverage to low-density areas and investing it in frequent service to dense places, while moving towards coverage would entail the opposite. The next phase of this study will develop some conceptual alternatives to help people consider this tradeoff, and to decide whether VTA should revise the current balance, increasing ridership at the expense of coverage or vice versa.

One important note is that all current performance standards (as set forth in the Transit Sustainability Policy) are ridership-based; that is, they are based on measures of how effectively each route generates ridership given investment. However, as mentioned in the section on service branding, these measures alone may not be appropriate for low-cost, infrequent services serving primarily the coverage goal. A clear choice to allocate some portion of VTA's resources towards the coverage goal may also invite a discussion of additional service standards that could be used to assess those routes' performance towards non-ridership goals.

How to Serve the Peak?

Another significant trade-off at VTA is the high expectation that the agency focus intensely on the peak or "rush hour" commute, combined with the fact that this is not always the cost-effective thing to do.

While ridership is certainly higher during the peak, service cost also rises very dramatically at that time. Service that runs only during the peak is

much more expensive for VTA to operate, for three reasons:

- The high cost of buying, storing and maintaining vehicles that are used only briefly each day.
- The higher cost of driver time due to short shifts. (VTA's labor contract has no provision for part time drivers, who are the most efficient way to staff peak-only service.)
- The tendency of peak-only service to be busy in only one direction, which requires all the vehicles and drivers to return empty in the other direction.

Another way of saying this is that all-day, evening, and weekend service is relatively cheap to operate compared to peak service, which is why focusing on all-day markets is often a better path to high ridership overall. The key to the all-day market is that it's so diverse. It includes most commuting by lower-income people, whose work and training commitments rarely require them to travel only at rush hour. It also includes a wide array of trip purposes which tend to use capacity more evenly.

In general, then, we expect the study to feature a discussion about the relative importance of peak-only services for the "rush hour" commute as opposed to all-day, all-direction service. (Note, of course, that all-day service is used at rush hour too). While the rush hour is the time of highest demand, that does not necessarily make it the time of highest productivity, because of the high marginal cost of peak-only service.

Network Design

VTA's most intensive services are very concentrated in San Jose, with two major frequent lines extending westward but no frequent north-south service in the western half of the County. San Jose is a strong market, generating a tremendous amount of the agency's ridership. Further improvements to routing or frequency could likely make it even better, but the key driver of ridership that the agency controls, useful high-frequency service, is already in place.

If the agency is to grow its ridership and increase transit mode share, as mandated by the Transit Sustainability Policy, it must expand its frequent network to replicate the successes of the eastside grid. It has found success in radial frequent routes along El Camino Real and Stevens Creek, the two strongest westside radial corridors, but has so far not seriously directed resources towards a set of frequent grid services similar to that in place west of downtown.

Such a service design would be expensive, but some of it could be potentially forged out of existing duplicative services, especially the

The next step of this study, the conceptual service alternatives, will explore these possibilities in more detail.

Service Hierarchy

In Chapter 4, we discussed VTA's current service hierarchy, and the idea of branding service based on the mobility outcomes they can provide. VTA current groups in services into several categories: Core, Local, Community, Express and Limited, but these categories do not necessarily match to easily explained service outcomes. For instance, the Core network includes services like the 22 and 23, routes which deliver a high level of frequency to key markets. It also includes the 55, a 30-minute route serving Sunnyvale-Saratoga road, far outside the "core" of the network in a geographic sense, and offering a lower level of service to the customer.

As discussed in Chapter 4, VTA may wish to consider its options around service branding in the future, in order to better communicate actual attributes of the network to customers more easily.

Resource Level

Perhaps the most fundamental question about transit in this region is "how much"? We opened this report with the observation that many of the key indicators for the richness and impact of transit (quantity, ridership, relevance, productivity) have fallen or flatlined for VTA's network over the past 15 years. The population, with an average population growth rate of 1.1% annually since 2010, has been growing faster than the transit service (as measured in terms of revenue hours, the basic transit service unit). The choice for policymakers and voters may be whether transit should be an important and viable mode the get around in the heart of Silicon Valley.

If the County continues to grow, it will do so mainly by increasing density within the already developed area. This will increase both demand and ridership potential for VTA, as more people will live on its busiest lines. Frequent network branding can also help insure that people who want

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0 complex braid of partly overlapping routes that flow north-south through Sunnyvale and Cupertino. Further west, Mountain View has poor frequency for such high density and low income, and here the problem may also be that service is offered by too many overlapping routes, in this case routes generated by a multitude of operators and arrangements. D Some efficiencies may also be possible in the northeast, in the context of BART's opening to Berryessa. But the route pattern covering most of the 📊 rest of the County shows little sign of easily re-allocated wasted service. $\mathbf{\nabla}$

Key Questions

to rely on transit can located where transit will serve them well, further increasing ridership potential.

Growth in demand will use existing capacity to a degree, but will soon need new capacity. New destinations will also arise—housing developments, corporate campuses, shopping centers—and with them, new demands on transit to provide more service to satisfy all the trips those sorts of places generate.

Chapter 1 showed that in general, ridership has tracked with the quantity of service. This means that if higher ridership is desired—with benefits including less reliance on cars, higher fare revenue, and support for more energy- and emissions-efficient urban form, more service will be needed as well.

Some of this increase could be achieved by cutting coverage services, but this would sacrifice other values, including lifeline access and the inclusion of every member city. So if the current balance of ridership and coverage services is desired, and the needs of population growth are to be met, overall resources will eventually need to grow.

KEY QUESTIONS

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To get a sense of the current mix of priorities in VTA's existing bus network, we performed a basic accounting of the extent to which different routes service each of the ridership and coverage goals. The route-by-route accounting is shown in the tables on the next few pages, a summary on the chart on this page.

Methodological Description

This ridership/coverage analysis is not designed to identify ridership potential, or routes which serve places where high ridership indicators are present. Instead, it is intended simply to gauge the extent to which each route (and the network at large) is oriented towards either goal. In other words, given the "three-legged stool" of transit ridership (land use, street network and service provision), how focused is the transit service element on ridership?

An analysis of this sort can be performed through a variety of methods, but we prefer to simplify it to the greatest extent possible. Thus:

- All Frequent routes (operating every 15 minutes or better during the peak and midday periods) are initially considered to be 100% ridership routes, since it is assumed that the investment in such a high level of service is generally not warranted without the expectation of a favorable ridership outcome.
- All 60 minute routes are assumed to be operated for 100% coverage purposes, because such a low frequency is very rarely rewarded with much ridership as it is the least useful, most inconvenient sort of all-day service. Fittingly, most of VTA's 60-minute services are feeders routed through low-density, peripheral areas.
- All 30 minute services are initially considered to be 50% ridership, 50% coverage oriented, since this moderate service level is sometimes a capacity-driven coverage solution, but at other times a precursor to the establishment of a future high-ridership frequent route.
- Limited and Express services were assigned to their own category, since these routes serve other goals in addition to the ridership/coverage outcomes, such as connecting outlying areas to job centers, taking advantage of HOV infrastructure and available external funding, and providing a congestion reduction element.

Starting from this initial classification and goal allocation, each route was examined in isolation, and its goal orientation adjusted if a compelling rationale to do so was found. The tables on the next page include some information used for this assessment, including productivity, total average daily ridership, frequency by time period, and span. Additionally, we used interactive data visualization tools to examine the pattern of ridership on routes.

To provide an example of how such a judgement might be made, consider route 26 (Sunnyvale/Lockheed - Eastridge). This is a very long route operating at 30 minute frequency during the peak and midday, with a limited segment between Lockheed and El Camino Real that runs every 15 minutes during the peak periods. Of all bus routes in the network, it generates the 8th most average daily boardings, and is the 8th most productive as measured by boardings per revenue hour. By examining its ridership pattern as shown at right, we can see that its highest-ridership segments are on its frequent segment, and also in the portion of the route that traverses the east side of San Jose along Tully.

As a 30-minute route, its ridership/coverage split was initially set to 50/50, but based on its performance relative to other routes in its class, and even to more frequent routes, its clear that this is an example of a route that is substantially more focused on ridership than its class base-line. While its clearly not a 100% ridership route since it mostly operates at 30-minute headways, the great majority of its revenue hours are where they would be if ridership were the only goal. Thus, we adjusted its ridership coverage split to 80% ridership, 20% coverage, and its daily revenue hours are allocated as such.

We went through the same process for each route, resulting in the eventual split shown in the table. It should be noted that the precise split of local resources shown here is approximately 66% ridership, 34% coverage, but understanding that this is a process based on professional judgement and multifactor assessment, we have reported the result rounded to the nearest 10%.

Entire Bus No Local System

Express

Figure 62: Ridership / Coverage Split Table

letwork		Local Bus Netw	ork
I	93%	Ridership	70%
		Coverage	30%
	7%		

		F	requen	су									
Туре	Name	AM	Mid	PM	Span	Rev Hrs	Avg. Daily Boardings	Productivity	Ridership%	Coverage%	Notes	Ridership Hrs	Coverage Hrs
Local	SANTA CLARA TRANSIT- METRO AIRPORT	15	15	15	5a-1130p	37.87	1355.1	35.79	100%	0%	Major all-day frequent or 20 minute corridor.	37.87	-
Community	ALMADEN & MCKEAN- OHLONE/CHYNWTH	60	60	60	630a-730p	10.05	193.4	19.24	0%	100%	Local coverage route serving low density area.	-	10.05
Community	GILROY TRANS CTR - ST. LOUISE HOSP	45	40	45	8a-6p	9.42	169.4	17.99	0%	100%	Local coverage route serving low density area.	-	9.42
Community	M.H. CIVIC CTR - BURNETT AVE	60		60	630a-9a, 2p-530p	5.63	100.1	17.77	0%	100%	Local coverage route serving low density area.	-	5.63
Community	GILROY TRNS CTR - MNTRY & LS ANIMAS	45	40	40	730a-530p	4.88	57.3	11.73	0%	100%	Local coverage route serving low density area.	-	4.88
Community	GILROY TRANS CTR - GAVILAN COLLEGE	30	40	45	7а-6р	6.35	201	31.65	0%	100%	Local coverage route serving low density area.	-	6.35
Community	GILROY TRANS CTR - WREN & MANTELLI	45	40	45	530a-7p	8.92	286.7	32.15	0%	100%	Coverage service far outside the core dense area of the network.	-	8.92
Core	PALO ALTO - EASTRIDGE	12	12	12	24 hrs.	356.20	14178.7	39.81	100%	0%	Major all-day frequent or 20 minute corridor.	356.20	-
Core	DE ANZA COL - ALUM ROCK TRANS CTR	12	12	12	530a-1a	207.90	8397.2	40.39	100%	0%	Major all-day frequent or 20 minute corridor.	207.90	-
Core	DE ANZA COL - ALUM ROCK TRANS CTR	10/30	10/30	10/30	5a-12mid	224.57	7269.5	32.37	75%	25%	Important connection east-west across the city. Frequent segment west of Bascom very high ridership. Low density market generates little ridership in the long segment between Bascom and Cupertino.	168.43	56.14
Core	SUNNYVALE/LOCKHEED - EASTRIDGE	15/30	30	15/30	530a-11p	113.95	4005.1	35.15	80%	20%	High productivity crosstown grid element with frequent segment in east.	91.16	22.79
Local	GOOD SAM HOSP - KAISER SAN JOSE	30	45	30	6a-8p	36.47	822.7	22.56	0%	100%	Local coverage route serving low density area.	-	36.47
Local	EVERGREEN VALLEY COL - EASTRIDGE	30	30	30	6а-10р	24.17	689.9	28.55	10%	90%		2.42	21.75
Community	SN ANTONIO SHOP CTR - STA CLARA TC	30	45	30	6a-730p	44.27	1093.6	24.70	50%	50%	Low-productivity coverage route serving moderately dense areas, may be important E-W grid element, but perhaps better market north on Arques/Scott for segment west of Sunnyvale?	22.13	22.13
Community	SN ANTONIO SHOP CTR - DOWNTOWN MV		60		930a-3p	4.55	69.6	15.30	0%	100%	Local coverage route serving low density area.	-	4.55



5	Local	DNTN MTN VIEW - STANFORD SHOP CTR	30	30	30	6a-930p	54.08	1123.8	20.78	0%	100%	Short, infrequent coverage route duplicating high-tier service on El Camino Real or longer trips.	-	54.08
7	Community	WEST VALLEY COLLEGE - CAPITOL LRT	30/60	30/60	30/60	630a-10p	30.62	698.6	22.82	30%	70%	Short, low ridership, low frequency route, but some connection between the college/TC and rail station may be desirable in ridership- only network.	9.19	21.43
)	Community	THE VILLAGES - EASTRIDGE	30	60	30	630a-730p	14.53	458.5	31.55	0%	100%		-	14.53
)	Local	FOOTHILL COL - LA AVENIDA & SHOR	30	30	30	630a-1030p	35.25	1040.4	29.51	50%	50%		17.63	17.63
	Community	KAISER SJ - EVERGREEN VALLEY COL	45	45	45	630a-7p	30.73	641	20.86	10%	90%	Infrequent route with many deviations, only serves one major destination.	3.07	27.66
)	Community	ALUM ROCK TC - PENITENCIA CK TC	60	60	60	630a-630p	8.15	227.1	27.87	0%	100%	Local coverage route serving low density area.	-	8.15
,)	Local	GREAT MALL - MILPITAS HIGH SCHOOL	30	60	30	6a-630p	17.38	604.2	34.76	0%	100%	Coverage route. Low ridership at low cost. Highest ridership stop other than Great Mall is a high school .	-	17.38
7	Local	GREAT MALL - MCCARTHY RANCH	30	30	30	6a-930p	27.95	847.7	30.33	50%	50%		13.98	13.98
3	Community	LOS GATOS - WINCHESTER LRT	45	60	45	6a-7p	14.20	366.8	25.83	0%	100%	Local coverage route serving low density area.	-	14.20
7	Community	LOS GATOS - WINCHESTER LRT	45	60	45	630a-730p	15.77	298.1	18.91	0%	100%	Local coverage route serving low density area.	-	15.77
	Local	DE ANZA - MOFFETT/AMES CTR	30/60	60	30/60	630a-630p	25.78	766.5	29.73	0%	100%		-	25.78
2	Local	FOOTHILL COLLEGE - DWNTOWN MTN VIEW	30	30	30-60	7a-930p	19.33	480.3	24.84	50%	50%	Ridership-only network would have some connection between college and downtown Mountain View, but unclear whether El Monte or San Antonio is a better street. Both low density, coverage territory.	9.67	9.67
3	Local	WV COLLEGE- SUNNYVALE TRANS CTR	60	60	60	7a-630p	20.87	676.9	32.44	0%	100%	Low-frequent, low-ridership, low-cost route, direct connection between WV College, Cupertino and El Camino Real, but the 57 is a more frequent, direct and shorter way to get to the college from El Camino Real from most places east of Sunnyvale. Low-density area around route other than around Sunnyvale downtown and Cupertino		20.87

			30	30	30	(- 0	20.02	1002.2	27/4	10.00/	0.00/		29.02	
54	Local	DE ANZA COLLEGE - LOCKHEED	30	30	30	6a-9p	29.02	1092.2	37.64	100%	0%	Critical direct westside connection between De Anza and Sunnyvale, but infrequent, and lower density north of downtown Sunnyvale. A 100% ridership network would likely have a route on either Sunnyvale-Saratoga or Hollenbeck between De Anza and Sunnyvale.	29.02	-
55	Core	DE ANZA COLLEGE - GREAT AMERICA	15/30	30	15/30	530a-1030p	76.52	2416.7	31.58	75%	25%	Critical direct westside connection between De Anza and Sunnyvale, but infrequent, and route follows a looping path through low density area north of downtown Sunnyvale. Strong anchors at both ends. A 100% rider- ship network would likely have a route on either Sunnyvale-Saratoga or Hollenbeck between De Anza and Sunnyvale.	57.39	19.13
57	Local	WEST VALLEY COLL - GREAT AMERICA	30	30	30	530a-1030p	53.43	1604.1	30.02	100%	0%		53.43	-
58	Local	WEST VALLEY COLLEGE - ALVISO	30	60	30	6a-730p	42.13	756.8	17.96	0%	100%	Duplicates route 57 for almost entire length; other segments local coverage.	-	42.13
60	Core	WINCHESTER TC - GT AMERICA	15/30	30	15/30	530a-1030p	77.63	2259.3	29.10	75%	25%		58.23	19.41
61	Core	GOOD SAM HOSP - SIERRA & PIEDMONT	30	30	30-40	6a-9p	59.95	1784.4	29.76	75%	25%	South of Curtner this route performs a cov- erage function, but serves strong Bascom and somewhat dense E San Jose Mabury corridors.	44.96	14.99
62	Core	GOOD SAM HOSP - SIERRA & PIEDMONT	30	30	30-40	6a-1030p	60.75	1717.4	28.27	50%	50%	South of Curtner this route performs a cov- erage function, and its north end in NE San Jose is low density relative to other routes' markets to the south. However, Bascom is a strong corridor.	30.38	30.38
63	Local	ALMADEN EXPY - SAN JOSE STATE	30	45	30	630a-10p	38.27	942.3	24.62	25%	75%	Low productivity service to low-density area. However, as a grid element, some service might be present on Meridian in ridership- only network.	9.57	28.70
64	Core	ALMADEN LRT - MCKEE & WHITE	15/30	15/30	15/30	530a-11p	100.53	3714.6	36.95	50%	50%	Very strong eastern side on McKee, but Almaden segment is low-ridership, serving low density area, until southern terminus.	50.27	50.27
65	Community	KOOSER & BLOSSOM HILL- DNTN S.J.	45	45	45	630a-7p	31.40	620.4	19.76	50%	50%	Infrequent route, but serves moderately dense Blossom Hill and Fruitdale, so potential grid-element in ridership only system.	15.70	15.70

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66	Core	KAISER SAN JOSE - MILPITAS/	15	20	15	5a-1130p	181.30	6314.1	34.83	70%	30%	Productive route, generates strong rider-	126.91	54.39
		DIXON										ship in moderately dense but low-income market. However, ridership drops off south of Monterey and Senter.		
68	Core	GILROY TC - SAN JOSE DIRIDON	15	20	15	4a-1230a	198.58	5276.3	26.57	40%	60%	Segment within San Jose is high ridership route; in Gilroy and Morgan Hill, performing non-ridership express function.	79.43	119.15
70	Core	CAPITOL LRT STN - GREAT MALL/MAIN	15	15	15	5a-11p	162.03	4860.6	30.00	100%	0%		162.03	-
71	Core	EASTRIDGE- GREAT MALL/ MAIN	15	30	15	530a-10p	64.72	2074.4	32.05	50%	50%		32.36	32.36
72	Core	SENTER/MONTEREY - DOWNTOWN SAN JOSE	15	15-20	15	530a-1030p	73.70	2556.3	34.69	75%	25%	High productivity element of the SE San Jose frequent network grid, but ridership and density is greatest north of Curtner. Monterey and Senter better corridors south of Curtner.		18.43
73	Core	SNELL & CAPITOL - DOWNTWN SAN JOSE	15	20	15	530a-930p	61.82	2627.5	42.50	100%	0%	Major all-day frequent or 20 minute corridor.	61.82	-
77	Core	EASTRIDGE - GREAT MALL/ MAIN	15	20	15	6a-930p	74.00	2293	30.99	30%	70%		22.20	51.80
81	Local	VALLCO - SAN JOSE STATE	30	30	30-60	630a-830p	47.75	1051.8	22.03	0%	100%	Low productivity service to low-density area.	-	47.75
82	Local	WESTGATE - DOWNTOWN SAN JOSE	30	30	30	6а-9р	47.98	1349.5	28.12	50%	50%	Somewhat productive, strong anchors, poten- tial grid element, but doesn't serve a dense east of highway 87 market, and carries few total riders.	23.99	23.99
88	Community	VETS HOSP - MIDDLEFIELD & COLORADO	60	60	60	630a-630p	10.12	195.7	19.34	0%	100%	Local coverage route serving low density area.	-	10.12
89	Local	CALIFORNIA AVE CTRN-VETS HOSPITAL	30	30-40	30	630a-630p	7.33	118.4	16.15	0%	100%		-	7.33
101	Express	CAMDEN & HWY 85 - PALO ALTO				2 trips each direction	5.27	84.6	16.06	0%	100%	Express route- serves purposes other than ridership primarily.	-	5.27
102	Express	SOUTH SAN JOSE - PALO ALTO				7 trips each direction	17.25	334.2	19.37	0%	100%	Express route- serves purposes other than ridership primarily.	-	17.25
103	Express	EASTRIDGE - PALO ALTO				4 trips each direction	8.77	186.3	21.25	0%	100%	Express route- serves purposes other than ridership primarily.	-	8.77
104	Express	PENITENCIA TRANS CTR - PALO ALTO				2 trips each direction	5.58	85.9	15.39	0%	100%	Express route- serves purposes other than ridership primarily.	-	5.58
120	Express	FREMONT BART - LOCKHEED MARTIN				6 trips each direction	12.60	270.9	21.50	0%	100%	Express route- serves purposes other than ridership primarily.	-	12.60

121	Express	GILROY TRANS CTR - LOCKHEED MARTIN				9 trips each direction	25.38	370.6	14.60	0%	100%	Express route- serves purposes other than ridership primarily.	-	25.38
122	Express	SOUTH SAN JOSE - LOCKHEED MARTIN				1 trip each direction	2.12	48.8	23.06	0%	100%	Express route- serves purposes other than ridership primarily.	-	2.12
140	Express	FREMONT BART - M.COLLEGE & MONTAGUE				3 trips each direction	6.53	55.4	8.48	0%	100%	Express route- serves purposes other than ridership primarily.	-	6.53
68	Express	GILROY TRANS CTR - SAN JOSE DIRIDON				6 trips each direction	13.90	261.4	18.81	0%	100%	Express route- serves purposes other than ridership primarily.	-	13.90
180	Express	GREAT MALL/MAIN - FREMONT BART	30	30	30	530a-10p	31.23	781.3	25.01	0%	100%	Duplicates multiple other services traveling north to connect to BART; express service serves purposes other than ridership.	-	31.23
181	Express	SAN JOSE DIRIDON - FREMONT BART	15-30	15	15	530a-12mid	91.12	2368.9	26.00	50%	50%	Most productive freeway express route, soon to be upgraded to FTN.	45.56	45.56
182	Express	PALO ALTO - IBM/BAILEY AVE				1 trip each direction	2.10	33.2	15.81	0%	100%	Express route- serves purposes other than ridership primarily.	-	2.10
200	Local	BAYPOINTE LRT - MOUNTAIN VIEW LRT			2 NB pm trips		0.77		-	0%	100%		-	0.77
201	Community	DOWNTOWN AREA SHUTTLE (DASH)	10	15	10	630a-9p	23.02	1019.9	44.31	0%	100%	High productivity, but duplicates a lot of other frequent service. Same service could likely be provided with incoming routes.	-	23.02
304	Limited	S. SAN JOSE - SUNNYVALE TRANS CTR				4 trips each direction	10.68	83.4	7.81	0%	100%	Express route- serves purposes other than ridership primarily.	-	10.68
321	Limited	GREAT MALL/MAIN - LOCKHEED MARTIN				1 trip each direction	1.30	24.7	19.00	0%	100%		-	1.30
323	Core	DE ANZA COL - DOWNTOWN SAN JOSE	15	15	15	630a-1030p	87.85	2411.1	27.45	80%	20%	Ridership-oriented nonstop service, but duplicates high-ridership 23.	70.28	17.57
328	Limited	ALMADEN VALLEY - LOCKHEED MARTIN				2 trips each direction	5.32	31.5	5.92	0%	100%	Express route- serves purposes other than ridership primarily.	-	5.32
330	Limited	ALMADEN VALLEY - TASMAN DRIVE				4 trips each direction	10.57	109.3	10.34	0%	100%	Express route- serves purposes other than ridership primarily.	-	10.57
522	Core	PALO ALTO - EASTRIDGE	15	15	15	5a-1030p	218.63	7034.3	32.17	100%	0%	Frequent, limited stop service on critical cor- ridor, will be upgraded to BRT-lite soon.	218.63	-



Date:	April 19, 2016
Current Meeting:	May 12, 2016
Board Meeting:	June 2, 2016

BOARD MEMORANDUM

TO:	Santa Clara Valley Transportation Authority Policy Advisory Committee
THROUGH:	General Manager, Nuria I. Fernandez
FROM:	Director of Planning and Program Development, John Ristow
SUBJECT:	Network Concepts for the Transit Ridership Improvement Program

FOR INFORMATION ONLY

BACKGROUND:

The Transit Ridership Improvement Program (TRIP) is a two-year policy and planning effort to redesign VTA's transit service network. The Program seeks to accomplish the goals of increasing transit ridership, improving VTA's farebox recovery rate, and integrating VTA's transit network with BART service to Milpitas and San Jose. The program's four major components are an assessment of VTA's current service, development of transit service policies, partner education and involvement, and the development of VTA's next transit network. These efforts will culminate in a redesigned transit network for implementation coincident with the extension of BART service in 2017.

The Transit Ridership Improvement Program will culminate with the Next Network, a complete redesign of VTA's transit network (bus and light rail) for implementation in the second half of 2017. Due to the significance of this network redesign and the policy choices involved, the project will engage the community and decision makers <u>twice</u> over the course of the project -- first over the summer of 2016 to guide the development of the draft Next Network plan, followed by a second phase in early 2017 to present and refine the draft plan.

VTA's Board of Directors was introduced to the TRIP in late 2015, was presented with a project update in February 2016, and received the Transit Choices Report in April 2016. In addition, at the April 2016 meeting, the Board of Directors was presented with a preview of the network concepts that will be used over the project's summer outreach phase to illustrate the ridership/coverage policy choice.

DISCUSSION:

As the second major deliverable of the Transit Ridership Improvement Program (the first being

the Transit Choices report), three network concepts have been developed to illustrate the most significant Next Network policy choice for VTA - the ridership/coverage balance.

As explained in the Transit Choices report, public transit operators like VTA are charged with two opposing goals in providing transit service. One goal comes from VTA's role as a social service and aims to provide service to as many people as possible, spreading out transit service and "covering" as much geographical area as possible, without regard to service productivity or ridership. However, in addition to this coverage goal, VTA is also charged with thinking like a business and focusing on areas where high ridership is possible, focusing on building a useful transit network for the greatest number of people in areas that can support it. Transit agencies must balance these goals and allocate resources between them. <u>Currently, VTA allocates about 70% of its local bus network resources on services aimed at achieving high ridership, and 30% to services aimed at spreading coverage. This ridership/coverage balance represents the major policy choice for VTA as it develops its Next Network - should VTA adjust its ridership/coverage balance in order to increase ridership? The first outreach phase over the summer of 2016 will engage the community and decision makers on this ridership/coverage policy decision so that the draft Next Network plan reflects the community's desire.</u>

The network concepts as presented in Attachments A, B, and C were developed to illustrate what VTA's Next Network could look like at different points along the ridership/coverage allocation spectrum. These concepts were developed by Jarrett Walker + Associates in collaboration with VTA staff. The three concepts are:

Network 70 presents a concept that reflects VTA's existing allocation of resources between ridership and coverage goals, while still making some improvements to the network to improve efficiency and expand usefulness. This network concept would maintain service access to 100% of today's transit riders, would expand the frequent network to serve 1.2 million residents and jobs, and would likely result in a low/minimal ridership increase over today.

Network 80 presents a concept that would shift some resources from coverage to ridership, which would result in a network with 80% of resources focused on ridership and 20% focused on coverage. As a middle point between network concepts, this network concept would maintain service access to **99%** of today's transit riders, would expand the frequent network to serve **1.3 million** residents and jobs, and would likely result in a **medium** ridership increase over today.

Network 90 presents a concept that would shift significant resources from coverage to ridership, which would result in a network with 90% of resources focused on ridership and 10% focused on coverage. This network concept would maintain service access to **96%** of today's transit riders, would expand the frequent network to serve **1.6 million** residents and jobs, and would likely result in a **high** ridership increase over today. As such, this network represents the most ambitious ridership increasing concept.

All three concepts accomplish the following:

• Each concept would connect with BART service at Milpitas and Berryessa stations.

- Each concept would replace VTA's existing Fremont BART Express service with service to Milpitas and Berryessa stations.
- Each concept would expand VTA's frequent grid network to other areas of the county that have the land use intensity that supports transit.

Each network concept assumes BART service at Milpitas and Berryessa stations, plus Caltrain and ACE commuter rail service. In addition, each concept assumes the following services continue:

- VTA's Express network (excluding those to Fremont BART)
- Caltrain and ACE shuttles
- FLEX service

As the ridership/coverage decision applies to the geographical allocation of transit resources, it is most applicable to buses, which may drive on most streets, rather than light rail, which may only travel on tracks. As such, the three network concept maps treat light rail as a fixed element of the transit system and merely adjust how bus service resources are deployed around the county. The 2017 light rail operating plan, with three service change alternatives, is being considered by the VTA Committees and Board of Directors as a separate item. Designing the light rail and bus changes are coordinated efforts. The FY 18-19 Service Plan, including changes to both bus and light rail, will be presented to the Board for adoption in 2017.

The network concepts will be used to facilitate discussions of the difficult ridership/coverage policy choice during this summer's first phase of outreach. The VTA Board of Directors will be presented with a summary of community input in late summer/early fall, which will aid the Board in deciding how the draft Next Network will allocate resources between coverage and ridership.

Prepared By: Jay Tyree Memo No. 5562





^{04/04/2016}

