Appendix H: Equitable Engagement Plan

Valley Transportation Authority

Equitable VMT Mitigation Program for Santa Clara County: Engagement and Consensus Building Plan

Prepared for:
Santa Clara Valley Transportation Authority

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FEHR PEERS

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1. WHY will we engage the community?

1.1 Goals and Objectives

Community engagement is integral to developing an Equitable VMT Mitigation Program for Santa Clara County and is consistent with VTA's ongoing commitment to engaging a broad cross section of the community throughout the County. This Engagement and Consensus-Building Plan is developed to accommodate a thoughtful and inclusive engagement process that centers around Equity Priority Community (EPC) demographics and geographies and provides a clear path to involve these stakeholders and develop a successful Equitable VMT Mitigation Program for Santa Clara County. The Engagement and Consensus-Building Plan targets and engages EPC demographics and geographies early and often while providing a range of engagement activities to effectively solicit meaningful feedback and incorporate it into the project decision-making process.

We recommend the following Engagement and Consensus-Building Plan to ensure the Equitable VMT Mitigation Program for Santa Clara County provides clear information on how to identify the needs and preferences of EPCs, and to reflect these in the project team's efforts. The engagement process is designed to achieve the following outcomes:

1. **Understand Program Goals and Impacts**: EPCs, EPC Community-Based Organization (CBO) leaders, and staff from local jurisdictions are familiar with the Equitable VMT Mitigation Program and understand the goals and potential impacts of the Program at an appropriate level. By increasing the knowledge of these community members and leaders, we can collect informed and constructive input on the Equitable VMT Mitigation Program.
2. **Reach Wide Spectrum of Community**: Engagement activities meaningfully engage a wide spectrum of community members, especially traditionally hard-to-reach populations, and connect with key stakeholders across the county. Fehr & Peers will work with subconsultants and the CBO partners to intentionally and effectively seek feedback from EPCs by developing and working to meet quantifiable metrics of success.
3. **Reflect EPC Input**: The Equitable VMT Mitigation Program framework reflects EPC input, including shaping the VMT mitigation strategies that are recommended.
4. **Understand How Input is Used**: Community members and stakeholders understand how their input is used in developing the program framework and shaping the VMT reduction strategies with the goal of building consensus particularly with EPCs.

The Engagement and Consensus-Building Plan describes the planned activities and meetings that provide opportunities for communities and stakeholders to provide input on the Equitable VMT Mitigation Program.

2. WHO will be involved?

2.1 Communities and Stakeholders

Fehr & Peers will work with its subconsultant team, CBO partners, and VTA staff to identify a list of key communities and stakeholders from which to gather and integrate input on the Equitable VMT Mitigation Program strategies and framework. The goal will be to include a broad range of communities and groups that reflect the diversity of Santa Clara County and provide a variety of perspectives on transportation and land use. A list of stakeholders generated by VTA with input from the Fehr & Peers project team is attached as **Appendix A**.

The engagement and outreach activities will focus on sharing information with, and soliciting feedback from, the following groups of people:

General Public and EPC stakeholders refers to local residents, workers, and students who may have an interest in, or be affected by, the project. Outreach will also focus on gathering input from EPCs with an emphasis on:

- People living in MTC Equity Priority Communities plus Alviso in north San José
- People most comfortable speaking a language other than English
- People who often cannot find time to participate, such as single parents, people who work multiple jobs, or people who work night shifts
- First generation immigrants to the United States
- People who have not previously participated in the planning process, including youth
- People experiencing disability
- Rent burdened households and people experiencing low income
- Zero-vehicle households and transit riders
- Women, LGBTQ+ or non-binary community members

Input from the general public and EPC stakeholders will be used to inform the framework for the Equitable VMT Mitigation Program.

Community Based Organizations (CBOs) are local organizations that work closely with communities at a local level to empower communities and improve economic and social well-being. Our outreach will target CBO's that serve EPC geographies and demographics. **Appendix A** shows an initial list of CBOs to target and will continue to be finalized through the engagement process. Ultimately, we will seek to reach agreement from the CBOs on the Equitable VMT Mitigation Program.

Local Jurisdictions refers to local government agencies who will have a stake in the project. This would include VTA's member agencies which consists of 15 cities and the County of Santa Clara. Ultimately, we will seek to reach agreement from local jurisdictions on the final Equitable VMT Mitigation Program framework.

Researchers are people in the academic or professional field who are experts on topics related to VMT evaluation and mitigation.

Development Community refers to those involved in proposing land use development projects (development companies or non-profits), or those who represent developers such as site/civil engineering firms.

Decision Makers are those involved in local, regional or state regulatory government agencies who make the legislative and regulatory decisions in the community.

Technical Advisory Group (TAG) Stakeholders includes local jurisdictions, researchers, and decision makers. The TAG will be made up of agency representatives from VTA, Caltrans, Metropolitan Transportation Commission (MTC), Santa Clara County, San José State University, and each local jurisdiction. TAG meetings will be facilitated by VTA to solicit representatives' feedback on draft VMT mitigation program framework and options, with respect to the interests and goals of the represented agencies. **Table 1** lists the TAG participants as of mid-July 2023.

Table 1: Technical Advisory Group Contact List

Agency	Identified Representatives
VTA	Gretchen Baisa, Lorena Bernal-vidal, Deanna Bolio, Shanthi Chatradhi, Aiko Cuenco, Lani Ho, David Kobayashi, Ian Lin, Menominee Mccarter, Cristina Nape, Jessie O'malley Solis, Brent Pearse, Laura Posadas, Robert Swierk
San José State University	Serena Alexander, Hilary Nixon
City of Campbell	Rob Eastwood, Matthew Jue
City of Cupertino	Luke Connolly, Piu Ghosh, Gian Martire, David Stillman
City of Gilroy	Sharon Goei, Cindy McCormick, Kraig Tambornini
City of Los Altos	Marisa Lee, Stephanie Williams
City of Milpitas	Jay Lee
City of Monte Sereno	Daryl Jordan
City of Morgan Hill	Maria Angeles, Tiffany Brown, Jennifer Carman, Adam Paszkowski
City of Mountain View	Phillip Brennan, Ben Pacho, Diana Pancholi
City of Palo Alto	Amy French, Shrupath Patel, Sylvia Star-Lack
City of San José	Banwait Manjit, Charla Gomez, Ramses Madou, Wilson Tam
City of Santa Clara	John Davidson, Karen Mack, Carol Shariat, Lesley Xavier
City of Saratoga	John Cherbone, David Dorcich
City of Sunnyvale	Dennis Ng, George Schroeder, Lillian Tsang, Angela Wong
Town of Los Altos Hills	Woojae Kim
Town of Los Gatos	Jennifer Armer, Nicolle Burnham, Savannah Van Akin, Tracy Wang
Santa Clara County	Ben Aghegnehu, Robert Cain, Samuel Gutierrez, Leza Mikhail
Metropolitan Transportation Commission	Krute Singa
Caltrans	Mark Leong, Yunsheng Luo

All TAG members listed above are not anticipated to attend every meeting; instead, the goal is to attract a representative cross-section of county technical stakeholders to participate in this process. Meeting and project materials will be distributed to the whole group should TAG members want to follow along outside of designated meeting times.

TAG meetings will be structured with discussion items and interactive activities to encourage participation from members, and breakout rooms/sessions may be used for deep-dive discussions to give everyone an opportunity to provide input.

2.2 Project Team Presenters and Participants

Fehr & Peers will assist VTA throughout the engagement process including participating in most engagement meetings, preparing engagement materials and online surveys, and providing a summary of each phase of engagement which will be incorporated into the final report. VTA will provide translation of key materials into several non-English languages, as well as prepare day-after reports of events. Fehr & Peers will work with the following subconsultants and partner organizations:

- Ann Cheng Consulting
- Mariposa Planning Solutions (Chris Lepe)
- CBO Partners
    - Carry the Vision
    - Catalyze SV

SJSU Mineta team members and students from the Fall 2023 Urban Planning 236 class taught by Dr. Serena Alexander will participate in select engagement events, particularly during Phase I.

3. WHAT will we discuss with the community?

3.1 Areas of Key Input

Engagement is divided into Phase I, Phase II, and Phase III; each phase will include specific areas of input as described below.

3.1.1 Phase I: Broad and Diverse Input that Prioritizes Needs of Equity Priority Communities (EPCs)

Phase I will solicit input on people's (residents, workers, and students) lived experience with transportation including behaviors, challenges, and needs. This phase will also gather information on existing VMT mitigation policies and strategies at the local level and challenges around implementation. Lastly, as part of Phase I we will introduce a broad set of VMT reduction strategies and seek feedback on strategy preferences and how to effectively implement these strategies. Community engagement will seek input, perspective, and knowledge from a broad spectrum of stakeholders and community members. This information will be used to develop the VMT reduction measures within the equity framework.

As a starting point in EPC and community-oriented events, we will share a bit of information (text/images for a non-technical audience) to frame the issue of why we are trying to reduce VMT and why people should care. We will also include one or two slides on "What We've Heard Already" that alludes to the fact that VTA, cities and the County have been talking with the community about transportation needs before and mentions some key plans/studies and types of transportation needs identified.

We will solicit feedback from the general public and community members in EPCs on their existing transportation behaviors, challenges, and needs, and VMT reduction strategies that best meet their needs. In Phase I, we will present general mitigation categories to understand what types of improvements best meet their needs. This is a working list that will be further worked through developing the engagement materials for Phase I.

- Access to Vehicles: carshare and rental car subsidies, or e-bike subsidies.
- Active Transportation Facilities: expanded bike network, expanded pedestrian network, or improved street connectivity.
- Land Use Strategies: transit-oriented development, increased job and residential density, increased density of affordable and market rate housing near transit, implementation of trip-end facilities (e.g., bike parking and other supportive amenities), or Housing Relocation-Subsidy Program (HRSP)[1].

[1] A concept for a VMT mitigation program focused on reducing the housing cost differential between high accessibility areas and low accessibility areas.

- Mobility Services: implement or expand on-demand shuttle services, shared ride van services, or bike- and scooter-share services.
- Transit Service Improvements: increased transit service frequency, increased network coverage, or implementation of transit-priority roadway treatments such as signal priority or dedicated lanes.
- TDM Programs and Incentives: subsidized or free transit passes, subsidized or free passes for bike- and scooter-share services or on-demand shuttles; subsidized bike leasing; or commute trip reduction services (e.g., Guaranteed Ride Home Program).
- Pricing Strategies: price public parking, workplace and/or residential parking, price freeway lanes, reduced transit fares, reduced public or free parking, or price parking at VTA facilities.

We will also solicit feedback on how to maximize the effectiveness of each VMT reduction strategy for different populations and in different contexts. The project team will note, in general terms, which VMT reduction strategies were desired by EPCs stakeholders and which were not. Phase II outreach will prioritize these VMT reduction strategies.

Table 2 shows the target audiences and the relevant input to be solicited from each group as part of Phase I.

Table 2: Phase I Input

Group	Input
General Public and EPC Stakeholders	Lived neighborhood expertise and experiences with transportation, qualitative assessments of needs, barriers, and opportunities to gather input on how people travel today and their needs. (Task 1.1 to 1.5) Initial VMT reduction strategies to be developed in Task 3.1, that best address inventoried needs (VMT reduction strategies to be prioritized in Phase II engagement)
EPC-serving CBOs	Lived experiences with transportation within, to, and from Santa Clara County (as a resident, worker or student) and qualitative assessments of needs, barriers, and opportunities to gather input on how people travel today and their needs. (Task 1.1 to 1.5) Initial VMT reduction strategies to be developed in Task 3.1, that best address inventoried needs. (VMT reduction strategies to be prioritized in Phase II engagement)
Developers	Experiences and challenges with the local jurisdiction CEQA transportation analysis and mitigation process, focusing primarily on VMT. Interest in initial VMT reduction strategies to be developed in Task 3.1
Researchers	Local mitigation practices, needs and statewide practices (Task 1.1 to 1.5)
TAG, including Local Jurisdictions	Local and statewide equity-oriented VMT mitigation and implementation practices and needs (Task 1.1 to 1.5) Defining equity across a range of topic areas to inform the work under Task 3.2

In Phase I events, we will also address "How we will use your feedback" so that engagement event participants have an idea of how their feedback will be used and to demonstrate that their input is valued.

3.1.2 Phase II: Filter and Refine

In Phase II we will work with the community and relevant stakeholders to identify potential mitigation strategies and the structure of the program. Upon first obtaining broad and diverse feedback as part of Phase I, Phase II will focus in on EPC stakeholders and EPC-serving CBOs to gather a narrower, equity-focused range of feedback.

The input from EPCs and EPC-serving CBOs will continue to be less technical and will focus on potential mitigation strategies, including preferences for how to prioritize reduction strategies and how to consider equity in the prioritization. EPC-serving CBOs will also be asked to consider certain aspects of the Equitable VMT Mitigation program to develop the outcomes of the program.

The input from the TAG/local jurisdictions will be technically focused, and will leverage information gathered from EPCs and EPC-serving CBOs on EPC priorities and needs. This will include looking at trade-offs associated with hypothetical projects and exercises to prioritize mitigation measures. The TAG/local jurisdictions will also provide input on the Equitable VMT Mitigation program structure (i.e., VMT Bank vs VMT exchange program). **Table 4** shows the audience and relevant input from each group.

Table 3: Phase II Input

Group	Input
EPC Stakeholders	Input and feedback on the list of VMT mitigation projects and how they could be prioritized in Task 4.3.
EPC-serving CBOs	Input and feedback on the list of VMT mitigation projects and how they could be prioritized in Task 4.3. Input and feedback on program structure per content developed in Task 4.1, 4.2, and 4.4.
TAG, including Local Jurisdictions	Input and feedback on the list of VMT mitigation projects and how they could be prioritized in Task 4.3. Input and feedback on program structure per content developed in Task 4.1, 4.2, and 4.4.

3.1.3 Phase III: Confirm

Phase III will provide an opportunity for feedback on the draft report. The draft report will reflect input collected from the community with feasibility details and strategy refinement informed by local jurisdiction insights. A streamlined and accessible summary of the report will be presented to the general public, decision makers, the TAG including local jurisdictions, CBOs, and researchers to allow opportunities for feedback and input.

4. HOW and WHERE will we engage the community?

This section describes the planned activities and meetings through which communities and stakeholders will have the opportunity to provide input on mitigation and implementation strategies.

4.1 Community Engagement Activities

A variety of community engagement activities are needed to engage a broad and diverse group of community members and stakeholders.

4.1.1 Surveys

We will use Social Pinpoint (an online webmap/survey tool that can be accessed on a computer or a smart phone) to share surveys through social media and at in-person community events as follows:

- Phase I
    - An online survey of local jurisdiction staff, to understand local jurisdiction VMT and transportation mitigation practices (refer to Task 1.2 for the survey specifications).
    - An online survey of the general public and EPC members, to understand EPC travel needs, challenges, and preferences (refer to Task 1.4 and Task 3.1 for the survey specifications).
- Phase II
    - An online survey/prioritization exercise of the general public and EPC members (to inform Task 4.3), particularly focused on EPC input, to prioritize VMT mitigation measures.

The benefit of a webmap/survey is that it allows the project team to reach a widespread and diverse population of regional transportation users, nicely complementing the in-person community events that reach traditionally hard-to-reach residents. To help advertise the availability of the webmap/survey with the broader community and EPCs, Fehr & Peers will prepare a QR code and brief text that TAG members and EPC-serving CBO's can use to advertise via their social media platforms and other communication strategies. To ensure that the online survey format doesn't further inequality, Fehr & Peers and VTA will work with EPC-serving CBOs to distribute the survey through EPC-used spaces and monitor and update the distribution method to prioritize survey input from EPCs as defined above and in the equity framework. Community members without a mobile phone or data plan can complete the survey at in-person events.

The key outreach material and some meetings will be available in multiple languages options as described in **Section 4.1.2**. VTA will lead the translation of key written materials into non-English languages; in general, VTA will need a minimum of one week lead time for translation before materials are needed for distribution or use at an event.

Fehr & Peers will work with VTA and TAG representatives to determine the appropriate amount of time to push out marketing efforts to request feedback. After the commenting periods are closed, Fehr & Peers will review the community input and work with VTA to integrate the input.

4.1.2 Meetings and Pop-ups

In addition to online materials, VTA with members of the Fehr & Peers team will host or present at around 40 meetings throughout the course of this project to engage a broad and diverse group of community members and stakeholders. The following is a list of meeting and engagement activities across all three phases:

Three Virtual Community Meetings (one in each phase of engagement): These virtual meetings would include a streamlined presentation followed by participatory exercises focused on voting, as well as questions and comments. This format will allow the project team to share basic background information, help participants understand why they should care, and convey materials to a non-technical audience (targeted for an 8th grade reading level). The meetings will generally be 1.5 hours long and will be:

- Led by VTA with Fehr & Peers presenting technical content
- Introduced by CBOs to provide a welcome that resonates with target audience.
- Provided by Fehr & Peers in Spanish, Mandarin, Vietnamese, or other language options depending on need

Focus Groups, Pop-Ups, and Meetings Hosted by Others (through all three phase of engagement): These meetings will gather information from a mix of local jurisdictions, representative set of stakeholders, underserved communities, general public, and the TAG on specific topics such as people's lived experiences, local needs and challenges, industry practices, and preferences on proposed VMT mitigation strategies. The meetings will vary in size and length. While most meetings will be 1.5 to 2 hours long, the pop-up events will be longer, lasting between 3 and 4 hours. These events will be a mix of in-person or virtual events, depending on the situation. The following is a summary of planned events over the course of the three phases of engagement:

- Four Local Jurisdiction/Technical Focus Groups
    - Led by Fehr & Peers
    - Likely virtual to make attendance easier
    - Separate from TAG meetings; intended to gather information on local needs and challenges, industry practices, and similar topics
- Three EPC Focus Groups
    - Led by Fehr & Peers, a CBO, and Chris Lepe
    - Fehr & Peers to provide Spanish or Mandarin translation
    - Location to be determined based on the focus of each group
    - Some participants in the two Phase I focus groups, may be invited back for the Phase II focus group if they are highly engaged in Phase I and represent key EPC constituencies.

- Twenty-Four EPC-Focused Meetings Hosted by Others
    - Attending and presenting at meetings lead by other stakeholders and organizations
    - Twelve involving both VTA and Fehr & Peers/team, twelve involving only VTA staff
    - Likely to be a combination of in person and virtual
- Ten EPC Pop-up Events
    - 5 Led by Fehr & Peers, CBO partners, and Chris Lepe
    - 5 led by VTA
    - Fehr & Peers to provide Spanish or Mandarin translation at 5 events

Six Online Technical Advisory Meetings (through the entire project): These meetings will be attended by the TAG created and managed by VTA. At these meetings, TAG members will receive milestone and outreach updates and opportunity to provide guidance and advice on decisions throughout the project, supplementing the engagement activities targeted at the broader community and agency stakeholders. VTA will lead the meetings and Fehr & Peers will support with presenting technical content. The meetings are expected to be about 1.5 hours long.

4.1.3 Other Engagement Channels

The project team will use a variety of other channels to raise awareness, share information, and engage with the general public and EPCs stakeholders. These will include:

- Maintaining a project website (https://www.vta.org/projects/equitable-vmt-mitigation-program-santa-clara-county) where basic project information, videos, dates of engagement events, and the draft Final Report will be posted; the site will have a box to allow interested individuals to sign up for email updates (led by VTA, with some content provided by Fehr & Peers and CBO partners)
- Developing three short videos to introduce the project and explain some of the concepts with words and images that are accessible to non-technical audiences (one developed by VTA, two by Fehr & Peers and CBO partners)
- Promoting events via email blasts, social media and occasional blog posts (led by VTA, with some content provided by Fehr & Peers and CBO partners)
- Providing periodic updates at VTA Board Committees (introductory item and in-progress update(s) led by VTA; presentation of draft Final Report and project recommendations led by VTA, with participation by Fehr & Peers and CBO partners at certain meetings)

5. HOW will we monitor?

It is important that the input reflects the needs and priorities of a diverse community and focuses on the feedback of EPCs. The community engagement efforts will be successful in prioritizing equity and EPCs if:

1. EPC-serving CBOs are actively involved in spreading the word about events and sharing project progress updates.
2. Individuals from EPCs are well represented among engagement event attendees (especially pop-up events and focus group participants), as well as among survey respondents (whether online, via paper surveys, or via boards/dot exercises).
3. The Equitable VMT Mitigation Program framework reflects EPC inputs and preferences and EPCs understand how their feedback is used.

The project team plans to monitor the demographics of individuals participating in engagement events in several ways. For the virtual community meetings and the web surveys, the project team will ask the following demographic questions to get a sense of who is participating:

- Age
- Race
- Disability status
- Gender identity
- Income
- Primary Mode of Transportation
- Home location (Zip code)

For in-person events, the project team will conduct rough observations of the age and race of attendees in the aggregate. The project team will also look into ways for event attendees and survey respondents to report where they live (i.e., zip code) to compare to the locations of EPCs across the county. For both virtual and in-person events, this information will be noted in the Day-After Reports.

At the conclusion of Phases I and II of engagement the project team will review the demographic and zip code data of participants/respondents and compare them to countywide demographic indicators, as well as the demographics of Equity Priority Communities. If the team finds that the events to date have not been successful in reaching EPC members (e.g.., if the participants are largely higher-income, and not persons of color), the project team will identify ways to course-correct for the later phases of engagement. Some options for course-correcting could include changing the locations of pop-up events in Phase II to better attract EPC members; working with Fehr & Peers and our CBO partners to better publicize the events; and reaching new groups in Meetings Hosted by Others.

The SJSU Mineta team, including the Fall 2023 Urban Planning 236 class, will also help observe some of the Phase I engagement events, analyze demographic data on attendees, and provide another set of recommendations that VTA may consider for Phase II and III engagement (budget/logistics permitting), or for future projects.

6. WHEN will the engagement occur?

Phase I will occur between July and December of 2023. Phase II will start in January 2024 following the end of Phase I and is planned to be completed by April 2024. Phase III is set to occur between October and November of 2023 as the program framework is developed. Project timeline and schedule will be posted on the VTA project website to share important dates and milestones with the public.

Table 5: Engagement Schedule and Topics

Phase and Engagement Activities	2023						2024											
	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Phase I: Broad and Diverse Input		•	•	•														
Virtual Community Meetings (1)				•														
Local Jurisdiction Technical Focus Groups (3)				•	•	•												
Community Focus Groups (2)				•														
Meetings Hosted by Others (3)				•	•	•												
Community Pop-Up Events led by Contractor (3)			•	•														
Community Pop-Up Events led by VTA (2)			•	•														
Phase II: Filter and Refine							•	•	•	•								
Virtual Community Meetings (1)							•	•	•	•								
Local Jurisdiction Technical Focus Groups (1)							•	•	•	•								
Community Focus Groups (1)							•	•	•	•								
Meetings Hosted by Others (3)							•	•	•	•								
Community Pop-Up Events led by Contractor (2)							•	•	•	•								
Community Pop-Up Events led by VTA (3)							•	•	•	•								
Phase III: Confirm																•	•	
Virtual Community Meetings (1)																•	•	
Meetings Hosted by Others (6)																•	•	
Technical Advisory Group (TAG) Meetings (6)		First TAG Meeting	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Appendix A: Working Engagement Contact List

Organization	Cause	Web Page
A&T Training Center	Disabilities	
AARP	Seniors/Elderly	https://local.aarp.org/san-jose-ca/
Access Community Resource Day Program	Disabilities	www.accesscommunityresourcesdayprogram.org
Addison-Penzak JCC of Silicon Valley	Seniors/Elderly	https://apjcc.org/
African American Community Services Agency	Ethnic/Race	https://www.sjaacsa.org/
Aging Services Collaborative of Santa Clara County	Seniors/Elderly	https://www.agingservicescollaborative.org/
Alum Rock Counseling Center	Social Services	https://alumrockcc.org/
Alzheimer's Association	Disabilities	https://www.alz.org/norcal
Amigos de Guadalupe Center for Justice & Empowerment	Social Services	https://www.amigoscenter.com/
Arab American Cultural Center of Silicon Valley	Ethnic/Race	https://aaccsv.org/
Asian American Center of Santa Clara County (AASC)	Ethnic/Race	https://asianamericancenterscc.org/
Asian American Recovery Services	Ethnic/Race	https://www.healthright360.org/location/santa-clara-county
Asian Americans for Community Involvement (AACI)	Ethnic/Race	https://aaci.org/
Asian Law Alliance	Ethnic/Race	https://asianlawalliance.orghttps://asianlawalliance.org/
Assyrian American Association of San Jose	Ethnic/Race	https://www.aaasj.org/
Avenidas Rainbow Collective	LGBTQ+	https://www.avenidas.org/programs/lgbtq-seniors-initiative/
Bay Area Housing Action Coalition	Homeless/Housing	https://housingactioncoalition.org/
Bella Terra (Senior Apartments)	Seniors/Elderly	
Bill Wilson Center	Social Services	https://www.billwilsoncenter.org/
Billy DeFrank LGBTQ Community Center	LGBTQ+	https://www.defrankcenter.org/
Black Leadership Kitchen Cabinet of Silicon valley	Ethnic/Race	https://blkc.org/
Boys and Girls Clubs of Silicon Valley	Children/Youth	https://www.bgclub.org/
Breakthrough Silicon Valley	Education	http://breakthroughsv.org/
Breathe California of the Bay Area	Health & Disease	https://lungsrus.org/
Californians for Justice	Advocacy/Social Justice	https://caljustice.org/
Carry the Vision	Advocacy/Social Justice	https://www.carrythevision.org/

Organization	Cause	Web Page
Catholic Charities of Santa Clara County	Social Services	https://www.ccscc.org/?locale=en
Center for Employment Training	Other	https://cetweb.edu/
Charities Housing	Homeless/Housing	https://charitieshousing.org/
Chopsticks Alley Art	Ethnic/Race	https://www.chopsticksalleyart.org/
Community Agency for Resources, Advocacy, and Services (CARAS)	Ethnic/Race	http://www.carassouthcounty.org/
Community Services Agency of Mountain View & Los Altos (CSA)	Social Services	https://www.csacares.org/
Community Solutions	Social Services	https://www.communitysolutions.org/
Community Integrated Work Program	Disabilities	http://www.ciwp.org/
Day Worker Center of Mountain View	Social Services	https://www.dayworkercentermv.org/
Deaf Counseling Advocacy and Referral Agency (DCARA)	Advocacy/Social Justice	https://dcara.org/
DeAnza College - Disability Support Program and Services	Disabilities	www.collegeofadaptivearts.org
Destination: Home	Homeless/Housing	https://destinationhomesv.org/
Eden Housing Inc.	Seniors/Elderly	
Employment and Community Options	Disabilities	https://optionsforall.org/
Eritrean Community Center	Ethnic/Race	http://www.eritreancommunity.org/
Ethiopian Community Services	Ethnic/Race	https://www.ecssanjose.org/
Family & Children Services of Silicon Valley (A Caminar Division)	Health & Disease	https://www.fcservices.org/
Fiesta Educativa	Ethnic/Race	https://fiestaeducativa.org/
First Community Housing	Homeless/Housing	https://www.firstcommunityhousing.org/
Foothill College - Transition to work	Disabilities	
Fresh Lifelines for Youth (FLY)	Children/Youth	https://flyprogram.org/
Friends of Children with Special Needs	Disabilities	https://fcsn1996.org/
Gardner Family Health Network, Inc.	Health & Disease	https://gardnerhealthservices.org/
Goodwill of Silicon Valley	Social Services	https://goodwillsv.org/
Greater Opportunities	Disabilities	https://greateropportunities.org/
Green Oak Developmental Center	Disabilities	https://green-oak.org/greenoak3
Health Mobile	Health & Disease	http://www.healthmobile.org/
Heart of the Valley, Services for Seniors	Seniors/Elderly	https://www.servicesforseniors.org/
Homefirst	Homeless/Housing	https://www.homefirstscc.org/

Organization	Cause	Web Page
Hope Services	Social Services	https://www.hopeservices.org/
Immigrant Resettlement & Cultural Center, Inc. (Viet Museum)	Ethnic/Race	https://www.sanjose.org/attraction/viet-museum
India Community Center	Ethnic/Race	https://www.indiacc.org/
Indian Health Center of Santa Clara Valley	Ethnic/Race	https://indianhealthcenter.org/
International Children's Assistance Network (ICAN)	Children/Youth	https://www.ican2.org/
International Rescue Committee	Advocacy/Social Justice	https://www.rescue.org/united-states/san-jose-ca
Islamic Circle of North America (ICNA) Bay Area	Ethnic/Race	https://www.icnabayarea.org/
Jewish Family & Children's Services	Ethnic/Race	https://www.jfcs.org/
Jewish Family Services of Silicon Valley	Ethnic/Race	https://www.jfssv.org/
Korean American Community Services, Inc. (KACS)	Ethnic/Race	https://www.kacssv.org/
Latina Coalition of Silicon Valley	Ethnic/Race	https://www.latinacoalition.org/
Latinas Contra Cancer	Ethnic/Race	https://www.latinascontracancer.org/
Latino Business Foundation Silicon Valley	Ethnic/Race	https://www.lbfsv.org/
Latinos United for a New America (LUNA)	Advocacy/Social Justice	https://www.lunalatinosunidos.org/
LEAD Filipino	Ethnic/Race	https://leadfilipino.org/
Let's Talk Housing	Hunger & Poverty	https://www.letstalkhousingscc.org/
LGBTQ Youth Space (A Caminar Program)	LGBTQ+	https://youthspace.org/
LifeMoves	Homeless/Housing	https://www.lifemoves.org/
Live Oak Adult Day Services - Cupertino	Seniors/Elderly	https://liveoakadultdaycare.org/
Live Oak Adult Day Services - Gilroy	Seniors/Elderly	https://liveoakadultdaycare.org/
Live Oak Adult Day Services - Los Gatos	Seniors/Elderly	https://liveoakadultdaycare.org/
Live Oak Adult Day Services - Willow Glen	Seniors/Elderly	https://liveoakadultdaycare.org/
Los Gatos - Saratoga Recreatiom	Seniors/Elderly	https://www.lgsrecreation.org/
MACLA/Movimiento De Arte Y Cultura Latino Americana	Ethnic/Race	https://maclaarte.org/
Mexican Heritage Plaza	Ethnic/Race	https://www.schoolofartsandculture.org/
Midtown Family Services	Homeless/Housing	https://midtownfs.org/
Mission College - Disability Support Program and Services	Disabilities	
Momentum for Health	Health & Disease	https://momentumforhealth.org/
Moving Forward-Santa Clara Adult Ed	Disabilities	
National Alliance of Mental Illness (NAMI) Santa Clara County	Health & Disease	http://www.namisantaclara.org
Next Door Solutions to Domestic Violence	Social Services	https://www.nextdoorsolutions.org/
On Lok	Seniors/Elderly	https://onlok.org/
Oshman Family Jewish Community Center	Seniors/Elderly	https://www.paloaltojcc.org/
PACT San Jose	Advocacy/Social Justice	https://www.pactsj.org/
Pakistani American Community Center	Ethnic/Race	http://www.pacc-ca.org/
PARS Equality Center	Ethnic/Race	https://parsequalitycenter.org/
Planned Parenthood Mar Monte Inc	Women's Issues	https://www.plannedparenthood.org/planned-parenthood-mar-monte
Portuguese Organization for Social Services and Opportunities (POSSO)	Ethnic/Race	https://portuguesecenter.org/
Project Hired	Disabilities	https://www.projecthired.org/
Project More Foundation	LGBTQ+	https://domoreproject.org/
Recovery Cafe San Jose	Social Services	https://recoverycafesj.org/
Sacred Heart Community Service	Hunger & Poverty	https://www.sacredheartcs.org/
Saint Catherine Church	Religion	https://stca.org/
Salvation Army	Social Services	https://siliconvalley.salvationarmy.org/
San Andreas Regional Center	Disabilities	https://www.sanandreasregional.org/
San Jose Bridge Communities	Social Services	https://www.sjbridgecommunities.org/
San Jose City College Disability Support Programs and Services	Disabilities	
San Jose Conservation Corps	Education	https://www.sjcccs.org/
San Jose Conservation Corps + Charter School	Other	https://www.sjcccs.org/
San Jose Grail Family Services	Social Services	https://gfsfamilyservices.org/
San Jose/Silicon Valley NAACP	Advocacy/ Social Justice	http://www.sanjosenaacp.org/
Santa Clara Senior Center	Seniors/Elderly	https://www.santaclaraca.gov/our-city/departments-g-z/parks-recreation/community-centers/senior-center
Saratoga Area Senior Coordinating Council	Seniors/Elderly	https://www.sascc.org/
Second Harvest Food Bank	Hunger & Poverty	https://www.shfb.org/
Self-Help for the Elderly	Seniors/Elderly	www.selfhelpelderly.org
Services Immigrant Rights and Education Network (SIREN)	Advocacy/Social Justice	https://www.sirenimmigrantrights.org/
Sewa International Bay Area	Hunger & Poverty	https://sewausa.org/

Organization	Cause	Web Page
Shreemaya Krishnadham Bay Area Youth Vaishnav Parivar	Ethnic/Race	https://bayvp.org/
Si Se Puede Collective	Ethnic/Race	https://www.sspcmayfair.org/
Silicon Valley Bike Coalition	Transit	https://bikesiliconvalley.org/
Silicon Valley Center for Independent Living	Disabilities	
Silicon Valley Independent Living Center	Disabilities	https://svilc.org/
Silicon Valley Independent Living Center	Disabilities	https://svilc.org/
Silicon Valley Korean American Federation	Ethnic/Race	http://svkaf.org/content_view.php?co_id=contact
Social Vocational Services	Disabilities	http://www.SocialVocationalServices.org
Society of Saint Vincent De Paul Santa Clara County	Religion	https://www.svdp.org/
Somos Mayfair	Ethnic/Race	https://www.somosmayfair.org/
South Bay Coalition to End Human Trafficking	Social Services	https://southbayendtrafficking.org/
South Bay Islamic Association	Ethnic/Race	https://sbia.info/
Sunnyvale Community Services	Social Services	https://svcommunityservices.org/
Sunnyvale Hindu Temple & Community Center	Religion	https://www.sunnyvale-hindutemple.org/
SV @ Home	Homeless/Housing	https://siliconvalleyathome.org/
Sycamore Glen (Senior Housing)	Seniors/Elderly	

Organization	Cause	Web Page
Taiwanese American Center	Ethnic/Race	https://sites.google.com/taiwanacenter.org/tac/home
The Unity Care Group	Children/Youth	https://www.unitycare.org/
Timpany Center @ San Jose State University	Seniors/Elderly	www.sjsu.edu/timpany
TransForm	Transit	https://www.transformca.org/
Ujima Adult & Family Services	Ethnic/Race	https://www.ujimaagency.org/
United Way Bay Area	Hunger & Poverty	https://uwba.org/
Vietnamese Amer. Prof. Womens Association	Ethnic/Race	
Vietnamese American Service Center	Ethnic/Race	https://vasc.sccgov.org/home
Vietnamese Voluntary Foundation (VIVO)	Ethnic/Race	https://www.vivousa.org/
Vision Literacy North County	Education	https://www.visionliteracy.org/
Vista Centers for the Blind and Visually Impaired	Disabilities	https://vistacenter.org/
West Valley College - Disability Support Program and Services	Disabilities	
West Valley Community Services	Hunger & Poverty	https://www.wvcommunityservices.org/
Working Partnerships USA	Advocacy/Social Justice	https://wpusa.org/
Yu Ai Kai Senior Services	Seniors/Elderly	https://yuaikai.org/
YWCA of Silicon Valley	Women's Issues	https://yourywca.org/

Appendix I: Phase 1 - Broad and Diverse Input

Valley Transportation Authority

Appendix I1: Phase 1 Community Engagement Summary Memorandum

Valley Transportation Authority

Phase 1 Engagement Summary

Phase 1 Engagement Goals

- Solicit **broad feedback** from a broad spectrum of stakeholders and community members.
- Gather information on existing travel behaviors, challenges, and needs.
- Gather information on existing VMT mitigation practices.
- Feedback on a broad set of **VMT reduction strategies**.

Phase 1 Events

The project team hosted the following events as part of Phase 1:

- 6 Pop-ups
- 1 Virtual community meeting
- 1 Community web survey
- 1 Local jurisdiction web survey
- 2 CBO focus groups
- 2 Local jurisdiction focus groups
- 2 Technical advisory meetings
- 2 Explainer videos
- Additional presentations to organizations and VTA committees

Phase 1 Results

Summary of Broad Community Feedback

"What solves your biggest transportation challenges?" "What would help you or others drive less?"

- *Frequency of service. Buses not having signal priority or getting held up in traffic. Badly timed transfers.*
- *I live in South county and there is really poor transit coverage.*
- *I don't feel safe riding transit especially at night.*
- *As I age, I worry about mobility since I am no longer able to safely ride my bike or drive.*
- *Add EV shuttle services for large hospitals, medical clinics, and shopping centers too.*
- *There is an embedded culture of car ownership.*
- *It's impossible for me to take my dogs to daycare via transit.*
- *Lack of Wi-fi on transit.*
- *Delayed transit times, on-going human trafficking from individuals wearing modern plain clothing.*
- *Money is my biggest issue. I make minimum wage so even Clipper is hard to afford.*
- *Home to work takes 12 minutes driving alone vs 50+ minutes by Caltrain + VTA. Bicycling is feasible but zigzags along unpleasant wide roads with narrow bike lanes, and busy intersections with slip lanes and long red time.*
- *Lack of dense development in Santa Clara County means there's less available to you on foot, bike, or bus.*
- *I live far from work with little children. I need to be able to get home quickly in an emergency.*
- *Weekend service is too limited. The weekend is when I have the most places to go to other than work but have the fewest options available.*
- *My job offers free parking, and free vehicles for work trips, no commuter benefit, no transit pass.*
- *Inability to chain trips on foot and transit since transit is not frequent enough.*
- *Lack of awareness of transit pass and discount options.*
- *Being motivated to leave my home is my biggest transportation challenge.*

Summary of Local Jurisdiction Feedback

What types of projects are most challenging to mitigate? What else would you like to share?

- *State guidance on how to assess VMT impacts do not work well in rural unincorporated areas, or for regional serving uses or attractions.*
- *We need to learn about all available funding for transportation improvements within communities of concern.*
- *Achieving City staff expertise and policy-maker familiarity with VMT concepts is key.*
- *The CEQA threshold of 15% below the existing city/regional average would not help achieve San Jose's 2040 VMT goal to reduce VMT per service population by 45% from the 2017 level.*
- *City staff found it difficult to identify a meaningful, VMT-reducing improvement in a high-VMT area.*
- *It would be helpful to have a per square foot mitigation fee.*
- *No project has exceeded our VMT thresholds.*
- *Equity should be secondary to identifying Countywide VMT solutions for CEQA.*
- *The most difficult projects to mitigate are the townhouse projects just large enough to not be screened out of the VMT analysis process.*
- *We are struggling with how we measure actual VMT in practice once the development is occupied to verify the effectiveness of the mitigations.*
- *The VMT screening indicated a VMT analysis was needed, only that ultimately showed the project resulted in a decrease of regional VMT and would not have a significant impact.*
- *VMT for an industrial site is created by employees (which can be partially mitigated) and by heavy equipment and hauling (which cannot be effectively mitigated).*
- *How do we determine staff resources required for the verification process and how do we manage that moving forward as more developments come online?*
- *A key mitigation measure prioritized by the City includes transit service improvements that are dependent on its partnership with VTA.*
- *Concerns include reconciling the City's VMT goals with GP policies related to maintaining acceptable LOS at major intersections.*
- *The Specific Plan Area is currently located outside of an established core or transit station area which will make it challenging to attract a significant share of residents, employees, and visitors to use transit.*
- *Gilroy cannot achieve the level of reductions required given its small size and location far from employment centers.*

VMT Reduction Strategy Preferences

We asked participants "Which VMT reduction strategies best solve your biggest transportation challenge?" **Table 1**, presents the results of the VMT reduction strategies. Key findings include:

- **Community Results** (pop-up, virtual, and web survey):
    - Frequent and Fast Transit Service
    - Biking and Walking Paths
    - Many Things To Do Close By

Notes about community respondents:

- The younger respondents were overrepresented compared to county population and many already take transit.
- Only about half of respondents felt they needed access to a vehicle to meet day-to-day needs (web-survey only).
- Travel speed, cost, and availability of the transportation mode matter to the respondents.
- Little interest in carshare (cost, lack of availability, and need for flexibility), and carpooling (need for flexibility, convenience, and speed)

We asked local jurisdictions to rank VMT reduction strategies from most useful[1] to least useful. **Table 1**, presents the results of the VMT reduction strategies. Key findings include:

- **Local Jurisdiction Results** (web survey):
    - Access to vehicles
    - Mobility Services
    - Transit, Bike, & Carpool Incentives

Notes about local jurisdiction responses:

- Local jurisdictions are supportive of transit, but their experience is that it is not effective at reducing VMT.
- The leading options were selected as a way to meet first-mile/last-mile service and to fill travel gaps.
- "Return to source funding" of mitigation was a concept that was important for local jurisdictions.

[1] "Useful" in this case can mean feasible to implement, relevant to your jurisdiction, and/or supported by other policies and planning efforts.

Table 1: Which VMT Reduction Strategies Best Solve Your Biggest Transportation Challenge?

VMT Reduction Strategy	Pop-Ups[1]		Virtual Meeting[1]		Survey[1]		Local Jurisdictions[2]	
	Count	Percent	Count	Percent	Count	Percent	Weighted Value	Percent
On-Demand Mobility	26	6%	4	6%	42	6%	69	25%
Mobility Services	-	-	-	-	-	-	58	21%
Biking and Walking Paths	105	25%	17	25%	166	23%	32	11%
Many Things to do Close-by	78	18%	8	12%	156	21%	37	13%
Frequent and Fast Transit	118	28%	15	22%	256	35%	40	14%
Transit, Bike & Carpool Incentives	32	8%	7	10%	31	4%	45	16%
Change Travel Cost	45	10%	3	4%	59	8%	-	-
Other	21	5%	14	21%	18	3%	-	-
Total	**425**	**100%**	**68**	**100%**	**728**	**100%**	**281**	**100%**

Underlined text indicates most frequent or highest ranked responses.
Notes:
1. Respondents were asked to select their top two strategies. The results are based on total number of votes.
2. Respondents were asked to rank these strategies from most useful to least useful. The results are shown as a weighted score based on ranking.

Source: Fehr & Peers, 2023.

Phase I Event Summary

Table 2 shows the general demographic statistics of Phase I outreach participants by event type.

Table 2: Event Summary

Event Type	Participants	Age range	Race/ethnicity	Household Income	Format Tradeoffs
Pop-Ups	323	Families with children and seniors	Mostly Asian-American, Caucasian and Latino/Hispanic with some African-American.	-	Gathering and documenting quick input (mapping, multiple choice). One-off interaction. Can target specific EPC geographies.
Virtual Community Meeting	23	Mostly between 25 and 34 years old, some between 45 and 54 years old	Largely Asian-American and Caucasian	Most marked income >200k	Gathering and documenting quick input (mapping, multiple choice). Low turnout. Focus on transportation enthusiasts, low EPC representation.
Community Web Survey	>350 responses	Mostly between 26 and 35 years old	51% White and 29% Asian	65% make over $100,000	Broad input from large sample size. No opportunity for dialogue. Good for understanding the relationship between multiple variables. Moderate EPC representation.
CBO Focus Groups	16 participants representing 15 organizations	-	-	-	Good for in-depth conversations with back-and-forth dialogue on program trade-offs. Can target invites to specific EPC community leaders.
Local Jurisdiction Focus Groups	31 participants representing 15 of 16 local jurisdictions in Santa Clara County	-	-	-	Good for in-depth conversations with back-and-forth dialogue on program trade-offs.

Source: Fehr & Peers, 2023.

Age

Pop-ups: Mostly families and seniors.

Virtual Community Meeting: As shown in **Table 3**, 42% of Zoom poll participants were between 25 and 34 years of age. About 37% were over 45 years old.

Community Survey: Mostly (61%) under 45 years old.

Table 3: Age of Phase I Participants

VMT Reduction Strategy	Pop-Ups	Virtual Meeting		Community Survey		Santa Clara County	
		Count	Percent	Count	Percent	Count	Percent
less than or equal to 25 years old	Mostly families and seniors. VTP Open house had a few younger college-aged advocates.	1	5%	50	13%	544,607	29%
26-35 years old	*Same as above*	8	42%	110	28%	298,826	17%
36-45 years old	*Same as above*	2	11%	76	20%	268,938	14%
46-55 years old	*Same as above*	3	16%	58	15%	249,141	13%
56-65 years old	*Same as above*	2	11%	48	13%	227,289	12%
66-75 years old	*Same as above*	2	11%	32	8%	155,835	8%
76-85 years old	*Same as above*	*Included above*	*Included above*	12	3%	88,614	5%
Other	*Same as above*	1	4%	-	-	37,695	2%
Total		**68**	**100%**	**387**	**100%**	**1,870,945**	**100%**

Notes:
1. American Community Survey, 2022 1-year.
Source: Fehr & Peers, 2023.

Race/Ethnicity

We gathered race and ethnicity information through observation and asking optional survey questions. The results are shown in **Table 4** and described below:

Pop-ups:

- Viva Calle and VTP Open House skewed more Caucasian and some Asian-American.

- Alviso Day by the Bay and De Anza Flea Market had between 40-60% Asian-American participants, 15-25% Latino participants, 15-25% Caucasian participants, and <10% African-American participants.
- Gilroy Dia De Muertos participants were between 80-90% Latino/Hispanic.

Virtual Community Meeting: As shown in **Table 4**, of the participants who took the Zoom poll, 37% were Asian-American and 32% were Caucasian.

Community Meeting: As show in **Table 4**, of the 51% of participants who took the survey, 51% were White and 29% were Asian-American.

Table 4: Race/Ethnicity of Phase I Participants

VMT Reduction Strategy	Pop-ups	Virtual Meeting		Survey		Santa Clara County[1]	
		Count	Percent	Count	Percent	Count	Percent
White	Mostly Asian-American and Caucasian. Some Latino/Hispanic	6	32%	214	51%	511,254	27%
Black or African American	*same as above*	1	5%	5	1%	41,239	2%
American Indian and Alaska Native	same as above			4	1%	2,932	1%
Asian	same as above	7	36%	120	29%	753,965	40%
Native Hawaiian and Other Pacific Islander	same as above	-	-	8	2%	6,534	1%
Hispanic/Latino	same as above	-	-	58	13%	462,494	24%
Some other race	same as above	2	11%	11	3%	92,527	4%
Not Specified	same as above	3	16%	-	-	-	-
Total	**same as above**	**19**	**100%**	**387**	**100%**	**1,870,945**	**100%**

Notes:
1. American Community Survey, 2022 1-year.
Source: Fehr & Peers, 2023.

Commute Travel Modes

We asked participants to identify the travel mode for their work commute or a trip they made frequently (over two trips per week). The results are presented below in **Table 5**. Generally, most participants noted they drove alone.

Table 5: Commute Travel Modes of Phase I Participants

VMT Reduction Strategy	Pop-Ups		Virtual Meeting		Survey		Santa Clara County[1]	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Drive Alone/Personal Vehicle	165	55%	9	47%	151	27%	573,510	78.8%
Carpool	15	5%	*Included above*	*Included above*	32	6%	85,750	11.8%
Transit	58	19%	3	16%	43	8%	19,997	2.7%
Bike	38	13%	3	16%	103	18%	14,613	2.0
Walk	15	5%	1	5%	4	1%	19,283	2.7%
Other	8	3%			142	25%	14,261	2.0%
Not Specified	3	1%	3	16%	62	11%	-	-
Total	**302**	**100%**	**19**	**100%**	**557**	**100%**	**727,414**	**100%**

Notes:
1. American Community Survey, 2022 1-year.
Source: Fehr & Peers, 2023.

Appendix I2: Virtual Community Meeting Presentation

Valley Transportation Authority

Equitable VMT Mitigation Program

Programa de mitigación de VMT equitativo de VTA

Chương trình giảm thiểu VMT mang tính công bằng của VTA

VTA 公平 VMT 缓解计划

Virtual Community Meeting #1

Primera reunión virtual con la comunidad

Cuộc Họp Cộng Đồng Qua Mạng #1

虛擬社區會議 #1

October 16, 2023

16 de octubre de 2023

Ngày 16 tháng 10 năm 2023

2023年10月16日

Santa Clara Valley Transportation Authority

Solutions that move you

FEHR PEERS

Language Channels / Interpretation

Canales de Idiomas / Interpretación

Kênh Ngôn Ngữ/Thông Dịch

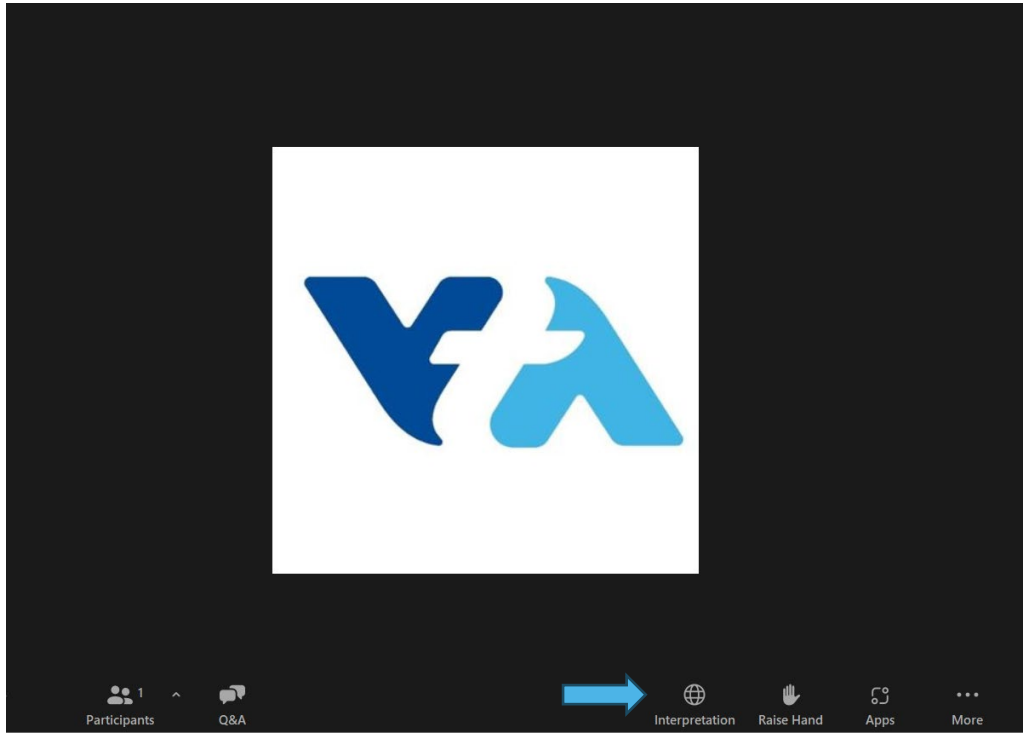
語言頻道 / 口譯

Click Interpretation🌐.
Click the language that you would like to hear; everyone should pick; do not use the default.

Haga clic en Interpretación.🌐 Seleccione el idioma que le gustaría escuchar. Todos deben elegir una de las opciones; no utilice el idioma predeterminado al inicio de la reunión.

Nhấp vào Interpretation (Thông Dịch).🌐 Chọn ngôn ngữ quý vị muốn nghe. Mỗi người nên chọn một ngôn ngữ; không sử dụng ngôn ngữ mặc định.

點擊「口譯」🌐 選擇您想聽到的語言。每個人都應選擇一個語言;不要使用預設。



Staff and Interpreter Introductions

Presentación del personal y del intérprete

Giới Thiệu Nhân Viên và Thông Dịch Viên

工作人員和口譯員介紹

Carry the Vision:
Brittany Mendoza

Interpreters:
Alex Zajdman
Van Nguyen Hong
Jing Yang

Caltrans:
Mark Leong

VTA:
Deanna Bolio
Ian Lin
Laura Posadas
Rob Swierk

Fehr & Peers:
Taylor McAdam

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What is the project about?

¿De qué se trata el proyecto?

Dự án này nói về cái gì?

本項目有關何事?

Reducing driving from development projects	Reducir los niveles de conducción vehicular desde los proyectos de desarrollo	Giảm việc lái xe từ các dự án phát triển	減少開發項目的驅動力
Improving transportation options	Mejorar las opciones de transporte	Cải thiện các lựa chọn giao thông	改善交通選項
Improving equity, especially for communities that need it the most	Mejorar la equidad, especialmente para las comunidades que más la necesitan	Cải thiện tính công bằng, đặc biệt là đối với các cộng đồng cần nó nhất	提高公平性，特別是對最需要平等的社區

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Meeting Recording

Grabación de la reunión

Ghi âm cuộc họp

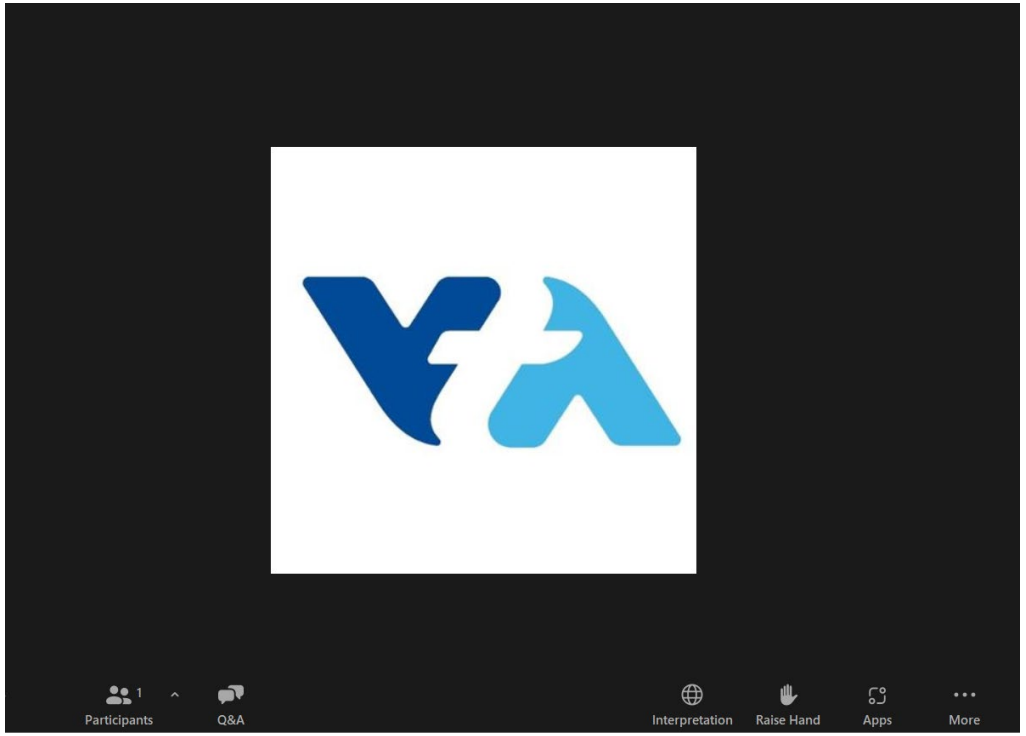
會議錄音

The meeting will be automatically be recorded.

Esta reunión está siendo grabada.

Cuộc họp này đang được ghi lại.

本次會議正於錄製中。



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How to Participate

Cómo participar

Cách thức tham gia

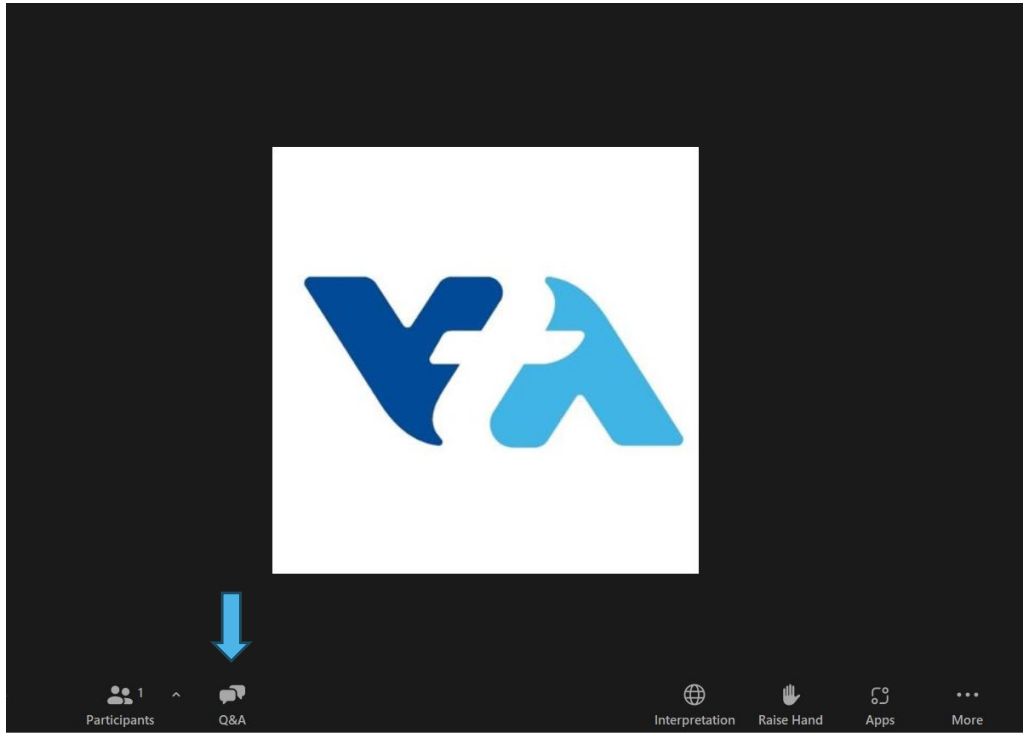
如何參與

Please use the Q&A to request Zoom technical assistance, ask questions or share comments.

Utilice la función de preguntas y respuestas (Q&A) para solicitar asistencia técnica con Zoom, hacer preguntas o compartir comentarios.

Vui lòng sử dụng phần Q&A (Hỏi & Đáp) để yêu cầu hỗ trợ kỹ thuật cho Zoom, đặt câu hỏi hoặc đưa ra nhận xét.

請用Q&A向Zoom請求技術協助、提問或分享評論



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Productive Meeting Tips

Consejos para tener una reunión productiva

Lời Khuyên Họp Hiệu Quả

高效會議技巧

- Be **respectful** of one another.
- Please **share time** to allow others to speak.
- Participants will automatically be **muted**.
- Disruptive participants **may** be removed from the meeting.

- Sean respetuosos los unos con los otros.
- Por favor comparta el tiempo de su participación para permitir que otros hablen.
- Los participantes serán silenciados automáticamente.
- Los participantes que causen perturbaciones podrán ser retirados de la reunión.

- Hãy tôn trọng lẫn nhau.
- Vui lòng chia sẻ thời gian với người khác để họ có thể nói.
- Người tham gia sẽ tự động bị tắt tiếng.
- Những người tham gia gây cản trở có thể bị mời ra khỏi cuộc họp.

- 互相尊重。
- 請給他人發言的時間。
- 參與者將被自動靜音。
- 搗亂者可能會被踢出會議。

Valley Transportation Authority
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Agenda

Agenda

Chương Trình

議程

1. Project overview	1. Descripción del proyecto	1. Tổng Quan Dự Án	1. 項目概況
2. What input are we looking for today	2. ¿Qué tipo de comentarios buscamos hoy?	2.Chúng tôi đang tìm ý kiến đóng góp nào hôm nay?	2. 我們今天需要什麼意見?
3. Interactive exercises	3. Ejercicios interactivos	3. Bài Tập Tương Tác	3. 互動練習
4. Question & Answer period	4. Preguntas y respuestas	4. Hỏi & Đáp	4. 問答
5. Next Steps	5. Próximos pasos	5.Các Bước Tiếp Theo	5. 後續步驟

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Demographics/Poll

Demografía/Encuestas

Nhân Khẩu Học/Thăm Dò Ý Kiến

人口統計/民調

Valley Transportation Authority

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Welcome from Caltrans

Bienvenidos de Caltrans

Chào Mừng từ Caltrans

來自加州交通局(Caltrans)的歡迎

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What is the project about?

¿De qué se trata el proyecto?

Dự án này nói về cái gì?

本項目有關何事?

Reducing driving from development projects	Reducir los niveles de conducción vehicular desde los proyectos de desarrollo	Giảm việc lái xe từ các dự án phát triển	減少開發項目的驅動力
Improving transportation options	Mejorar las opciones de transporte	Cải thiện các lựa chọn giao thông	改善交通選項
Improving equity, especially for communities that need it the most	Mejorar la equidad, especialmente para las comunidades que más la necesitan	Cải thiện tính công bằng, đặc biệt là đối với các cộng đồng cần nó nhất	提高公平性，特別是對最需要平等的社區

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Project Concept

Concepto del proyecto

Khái Niệm Dự Án

項目概念

New Developments Generate Driving

Los nuevos desarrollos generan más tráfico de vehículos particulares

Những Phát Triển Mới Tạo Điều Kiện Cho Việc Lái Xe

新開發項目產生駕駛量

Equitable VMT Mitigation Program

Programa de mitigación equitativa VMT

Chương Trình Giảm Thiểu Hợp Lý VMT

公平VMT緩解計劃

Transportation Solutions for the Community

Soluciones de transporte para la comunidad

Giải Pháp Giao Thông cho Cộng Đồng

社區交通解決方案

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What is VMT & why is it important?

¿Qué significa VMT y por qué es importante?

VMT là gì & tại sao nó lại quan trọng?

什麼是VMT, 為什麼它很重要?

Vehicle Miles Traveled (VMT) measures how much people drive; VMT is tied to air quality, health, noise, and street safety

Las Millas Recorridas por Vehículo (VMT, por sus siglas en inglés) miden cuánto conducen las personas; las VMT están ligadas a la calidad del aire, la salud, el ruido y la seguridad vial

Số Dặm Xe Đã Đi (Vehicle Miles Traveled, VMT) đo lường số người lái xe; VMT gắn liền với chất lượng không khí, sức khỏe, tiếng ồn và an toàn đường phố

車輛行駛里程(VMT)衡量人們的駕車量; VMT與空氣品質、衛生、噪音和街道安全息息相關。

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How do we reduce VMT?

¿Cómo reducimos las VMT?

Làm thế nào để chúng tôi giảm VMT?

我們如何減少VMT?

Safer Bike & Pedestrian Routes
Rutas para peatones y bicicletas más seguras
Các Tuyến Đường dành cho Người Đi Bộ và Xe Đạp An Toàn Hơn
更安全的腳踏車和行人路線

More Affordable Transit
Transporte público más barato
Phương Tiện Công Cộng Giá Cả Phải Chăng Hơn
更實惠的公共交通

Faster & More Frequent Transit
Transporte público más rápido y frecuente
Phương Tiện Công Cộng Nhanh Hơn và Thường Xuyên Hơn
更快、更頻繁的公共交通

Bring Jobs, Housing & Shops Closer
Hacer que los empleos, las viviendas y los comercios estén más cercanos
Đem Việc Làm, Nhà Ở và Cửa Hàng Đến Gần Nhau Hơn
拉近工作、住宅和商店之間的距離

And more..

Y otros métodos

Và các phương pháp khác

以及其他方法

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Why are we focusing on equity?

¿Por qué nos centramos en la equidad?

Tại sao chúng tôi tập trung vào tính công bằng?

我們為何要關注平等?

Engage historically underrepresented people in the process

Involucrar en el proceso a personas históricamente subrepresentadas

Thu hút những người ít được đại diện từ trước tới nay tham gia vào quá trình này

讓史上代表性不足的人群參與此過程中

Envision and create equitable outcomes

Visualizar y crear resultados equitativos

Hình dung và tạo ra kết quả công bằng

想像並創造平等的結果

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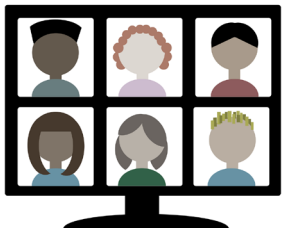
How are we engaging with people?

¿Cómo nos relacionamos con la comunidad?

Chúng tôi tương tác với mọi người như thế nào?

我們如何使人參與?

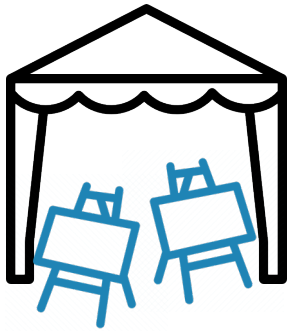


Virtual Meetings

Reuniones virtuales

Cuộc Họp Qua Mạng

虛擬會議



Pop-Up Events

Eventos en los vecindarios

Sự Kiện Dựng Tạm

快閃活動

Community Survey

Encuesta comunitaria

Khảo Sát Cộng Đồng

社區民調

Presentation to Groups

Presentaciones a grupos

Trình Bày với Nhóm

小組演講

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How are we engaging with people?

¿Cómo nos relacionamos con la comunidad?

Chúng tôi tương tác với mọi người như thế nào?

我們如何使人參與?

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How will we use your input?

¿Cómo usaremos sus comentarios?

Chúng tôi sẽ sử dụng ý kiến đóng góp của quý vị như thế nào?

我們將如何使用您的意見?

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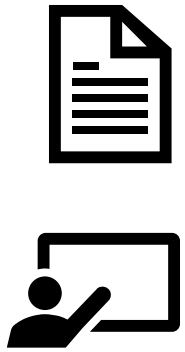
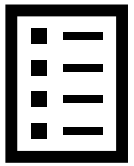


Other ideas for cities, county, VTA
Otras ideas para las ciudades, el condado y VTA
Các ý tưởng khác cho các thành phố, quận và VTA
其他針對城市、縣和VTA的想法



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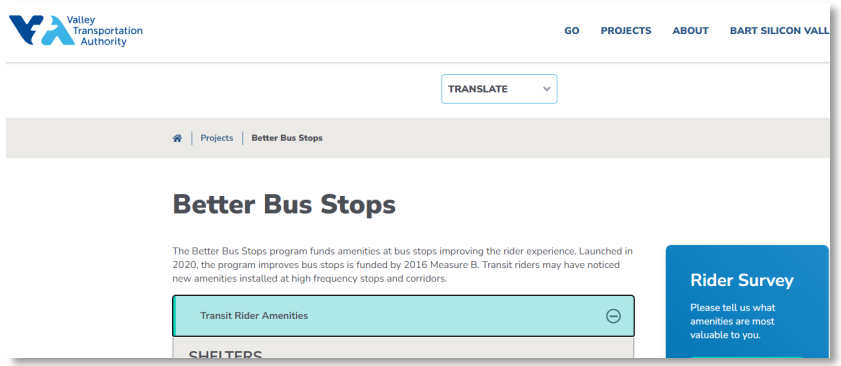
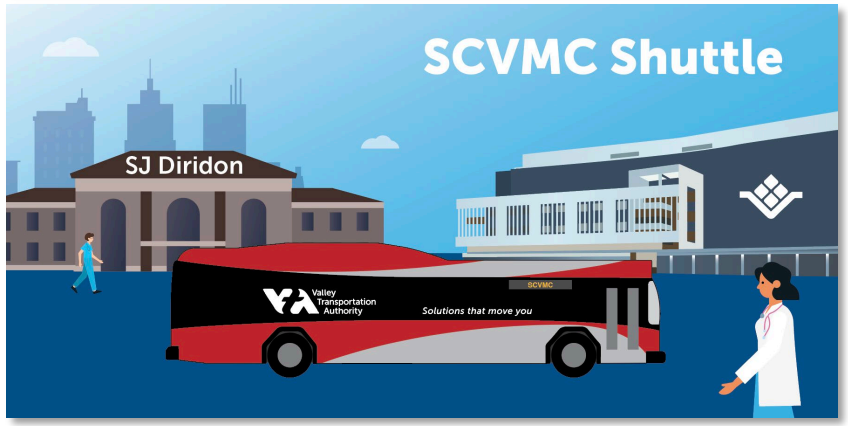
Building on past studies and plans

Aprovechamiento de estudios y planes anteriores

Xây dựng dựa trên các nghiên cứu và kế hoạch trước đây

以過去的研究和策畫為基礎





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What travel challenges do you face?

¿Qué dificultades enfrenta al transportarse?

Quý vị phải đối mặt với những khó khăn đi lại nào?

您面臨哪些交通挑戰?

Cost? Travel time? Availability?
Safety? Disabilities? Reliability?

¿Costo? ¿Tiempo de viaje? ¿Disponibilidad?
¿Seguridad? ¿Discapacidades? ¿Fiabilidad?

Chi phí? Thời gian đi lại? Sự có sẵn?
Sự an toàn? Tình trạng khuyết tật? Độ tin cậy?

費用? 交通時間? 可用性?
安全性? 身心障礙? 可靠性?

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What would help you drive less?

¿Qué le ayudaría a conducir menos?

Điều gì sẽ giúp quý vị lái xe ít hơn?

什麼能幫助您少開車?

Here are some options to help reduce driving and expand travel options

Aquí hay algunas opciones para ayudarle a reducir la conducción y ampliar las opciones de viaje:

Dưới đây là một số tùy chọn để giúp giảm việc lái xe và mở rộng các lựa chọn đi lại:

以下是一些有助於減少駕車並擴張出行選擇的選項:

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On-Demand Mobility

Movilidad a través del alquiler a corto plazo de medios de transporte

Đi Lại Theo Nhu Cầu

按需交通工具

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Walking and Biking Paths

Vías para caminar y utilizar bicicleta

Lối Đi dành cho Xe Đạp và Đi Bộ

腳踏車道和步道

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Many Things to Do Close By

Cercanía de muchas cosas para hacer

Nhiều Điều Cần Làm Gần Đó

附近有很多可做的事

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Frequent and Fast Transit Service

Servicio de transporte público frecuente y rápido

Dịch Vụ Xe Công Cộng Thường Xuyên và Nhanh Chóng

頻繁、快速的交通服務

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Transit, Bike, and Carpool Incentives

Incentivos para el uso del transporte público, bicicletas y viajes compartidos

Ưu Đãi Khi Đi Xe Công Cộng, Xe Đạp và Đi Chung Xe

捷運、腳踏車和共乘獎勵

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Change Travel Costs

Cambio de los costos de transporte

Thay Đổi Chi Phí Vận Chuyển

改變交通費用

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Interactive Exercises

Ejercicios

Bài tập tương tác

互動練習

Exercise #1: What travel challenges do you face?

Ejercicio N.º 1: ¿Qué dificultades enfrenta al transportarse?

Bài Tập #1: Quý vị phải đối mặt với những khó khăn nào khi đi lại?

練習#1: 您面臨哪些交通挑戰?

Exercise #2: Which option helps solve your biggest travel challenges? What would help you drive less?

Ejercicio N.º 2: ¿Qué opción le ayudaría a resolver sus mayores dificultades al trasportarse? ¿Qué le ayudaría a conducir menos?

Bài Tập # 2: Lựa chọn nào giúp giải quyết những những khó khăn lớn nhất của quý vị khi đi lại? Điều gì sẽ giúp quý vị lái xe ít hơn?

練習#2: 哪個選項可以幫助您解決最大的交通挑戰? 什麼能幫助您少開車?

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Question & Answer Period

Periodo de preguntas y respuestas

Thời Gian Hỏi & Trả Lời

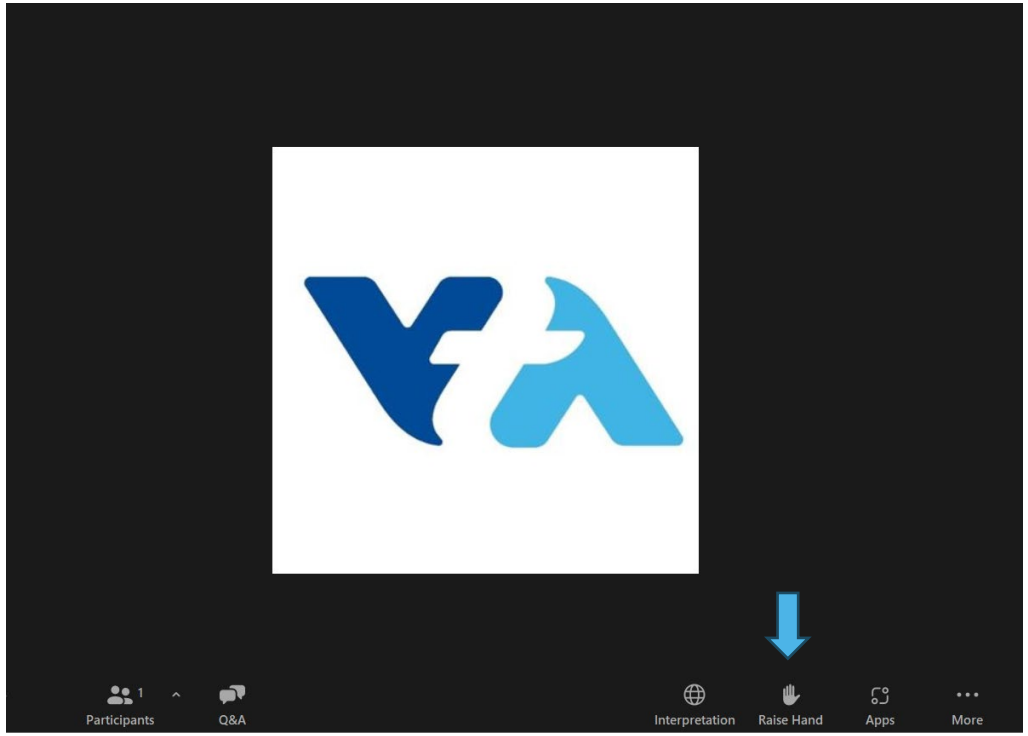
問答時間

“Raise your hand" or use Q&A to ask questions. Raise your hand by dialing * 9 if you are joining via phone.

“Levante la mano" o utilice la función de “Preguntas y Respuestas” (Q&A) para hacer preguntas. Si nos acompaña por teléfono, levante la mano marcando *9.

"Raise your hand" (Giơ tay) hoặc sử dụng Q&A để đặt câu hỏi. Giơ tay bằng cách nhấn số *9 nếu quý vị tham gia qua điện thoại.

「舉手」或用Q&A提問。如果您通過電話參與，請撥*9舉手。



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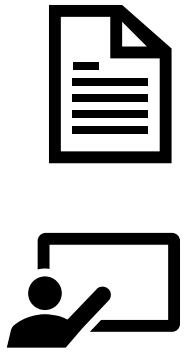

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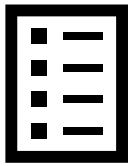

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Thank You & Next Steps

Agradecimiento y próximos pasos

Cảm Ơn Quý Vị & Các Bước Tiếp Theo

感謝與後續步驟

Second phase of engagement Spring 2024; Draft recommendations & report Fall 2024; Stay tuned on www.vta.org/EquitableVMT

Segunda fase de las actividades de participación: primavera de 2024; Borrador de las recomendaciones e informe: otoño de 2024
Entérese de todo lo que pasa en: www.vta.org/EquitableVMT

Giai đoạn tham gia lần thứ hai - Mùa xuân 2024; Những đề nghị được phác thảo & Báo cáo - Mùa thu 2024
Tiếp tục theo dõi trên www.vta.org/EquitableVMT

第二階段參與 - 2024年春季 -- 建議與報告草案 - 2024年秋季
請繼續關注 www.vta.org/EquitableVMT

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Appendix I3: Local Jurisdiction Focus Group Presentation

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Local Jurisdiction Focus Group

Equitable Vehicle Miles Traveled (VMT) Mitigation Program for Santa Clara County

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FEHR PEERS

Agenda

1. Welcome / Introductions (10:00)
2. Statewide Mitigation Practices (10:05)
3. Local Jurisdiction Survey Results (10:20)
4. Potential VMT Reduction Needed (10:45)
5. Wrap-Up (11:25)

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Introductions

Santa Clara Valley Transportation Authority

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Introductions

- Thanks for joining us!

Cupertino
Gilroy
Los Altos
Los Gatos

Milpitas
Mountain View
Palo Alto
Saratoga
Sunnyvale

County of Santa Clara
Caltrans
VTA
+Project Team

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Statewide VMT Mitigation Practices

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Statewide VMT Mitigation Practices

- Programs Reviewed (13)
  - VMT Exchange (4)
  - VMT Bank (2)
  - VMT Fee (2)
  - In-Process (5)

Statewide VMT Mitigation Practices

- Project Types
  - Land Development (7)
  - Transportation (2)
  - Both (3)
  - Unspecified (1)

Source: MTC

Statewide VMT Mitigation Practices

- VMT Exchange
  - Only operating VMT exchange
  - Identify VMT reduction needed
  - Fund bicycle improvements to address VMT reduction needed

ESCONDIDO
City of Choice

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Statewide VMT Mitigation Practices

- One operating VMT Exchange in the City of Escondido
- VMT Exchange is Most Common
- Most with a Defined Program Structure
- Most Not Adopted

Questions?

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Local Jurisdiction Survey Results

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Local Jurisdiction Survey

Goals

- Understand local VMT practices
- Interest in a cross-jurisdictional mitigation program

Survey Structure

- 19 questions
- 14 responses from 13 unique jurisdictions
- 100% response rate except on five questions
  - Only 10 of 14 answered Q3-7

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Local Jurisdiction Survey Results

Needs

- Local VMT generation/reduction data
- Off-site VMT mitigation for non-residential development
- VMT mitigation:
  - Access to vehicles?
  - Mobility services?

Challenges

- Limits of on-site VMT mitigation
- VMT mitigation uncertainty
- Rural locations and non-residential development
- Transit effectiveness
- Relationship between CEQA mitigation and equity

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Discussion

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Discussion

- VMT Mitigation Ranking Results – Why are these the most attractive options? (Q14)
  - Access to vehicles
  - Mobility services

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Local Jurisdiction Survey Results

14

- Most useful VMT mitigation measures?

- Access to Vehicles (80)
- Mobility Services (58)
- TDM Programs and Incentives (45)
- Transit Services (40)
- Land Use Strategies (37)
- Active Transportation Facilities (34)

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VMT Mitigation Measures

Mitigation Measure	Examples
Access to Vehicles	Carshare and rental car subsidies, or e-bike subsidies
Mobility Services	Implemented or expanded on-demand shuttle services, shared ride van services, or bike- and scooter-share services
TDM Programs and Incentives	Subsidized or free transit passes, subsidized or free passes for bike- and scooter-share services or on-demand shuttles; subsidized bike leasing; or commute trip reduction services (e.g., Guaranteed Ride Home Program).

VMT Mitigation Measures

Mitigation Measure	Examples
Transit Service Improvements	Increased transit service frequency, increased network coverage, implementation of transit-priority roadway treatments
Land Use Strategies	Transit-oriented development, increased job and residential density, increased density of housing near transit, implementation of trip-end facilities (e.g., bike parking), or Housing Relocation-Subsidy Program (HRSP)
Active Transportation Facilities	Expanded bike network, expanded pedestrian network, or improved street connectivity

Discussion

- What challenges associated with collecting VMT data and monitoring VMT impact mitigation are most challenging for your jurisdiction? (Q11, Q12 & Q17)

Local Jurisdiction Survey Results

11

- VMT monitoring?

- Process unique to each project (4)
- Annual reporting of trip counts relative to trip reduction threshold (4)
- Annual-to-3-year* reporting of trip counts relative to project trip generation (1)
- No process (2)

Local Jurisdiction Survey Results

12

- VMT mitigation process?

- Require TDM Plans (2)
- Require TDM measures from VTA VMT Mitigation Tool (2-3)
- Require adjustments to project characteristics, network improvements, parking strategies, programmatic TDM (4)
- Impose Transportation Impact Fee (2)
- No process (2)

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Local Jurisdiction Survey Results

17

- Top challenges or needs related to mitigating VMT?

- Measure Effectiveness Unclear (8)
- Measures Not Suitable (7)
- Limited Transportation Options (6)
- Challenging Land Use Patterns (5)
- Insufficient Funding (5)
- Lack of a VMT Policy (2)
- Lack of Good/Acceptable Data (2)
- Lack of Travel Model (2)
- Transportation Analysis Guidelines (1)

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Discussion

- What are your needs and/or concerns related to VMT screening and the use of CEQA streamlining for VMT? (Q9 & Q10)

Local Jurisdiction Survey Results

? 9

- What percent of projects screen out of VMT analysis?

- Non-Residential – varies
  - 7 jurisdictions: 65-100%
  - 3 jurisdictions: 25-50%
  - Remaining 3 jurisdictions, 0% or N/A
- Residential – most, 65-100%

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Local Jurisdiction Survey Results

? 10

- Apply CEQA Streamlining?

- Yes (6)
- No (5)
- No, but interested (2)

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Potential VMT Reduction Needed

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VMT Methods – VTA Travel Model

Land Use

697,400 new residents

262,180 new employees

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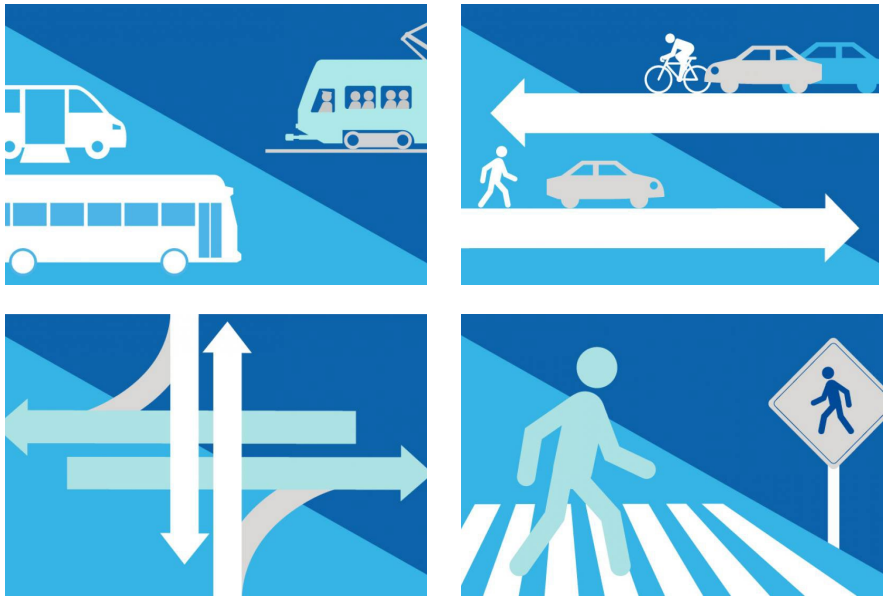
VMT Methods – VTA Travel Model

- Transportation Improvements
  - Transit
  - Express Lanes
  - Interchange Improvements
  - Expressway and Local Transportation Improvements



Source: VTA

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VMT Metric

- Total VMT generated per service population
  - Daily VMT
  - All vehicle trips, vehicle types, and trip purposes
  - All land use types
  - Service population is residents and employees

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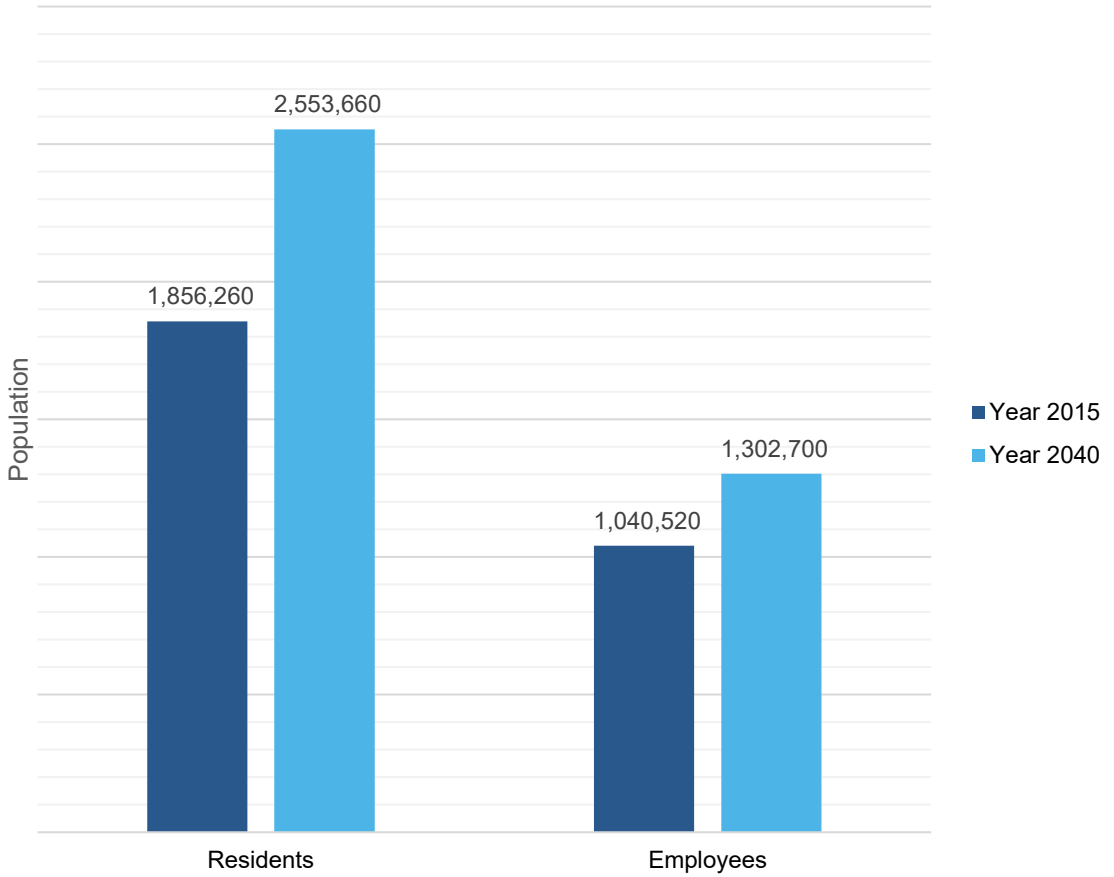
VMT Data

Santa Clara County Service Population



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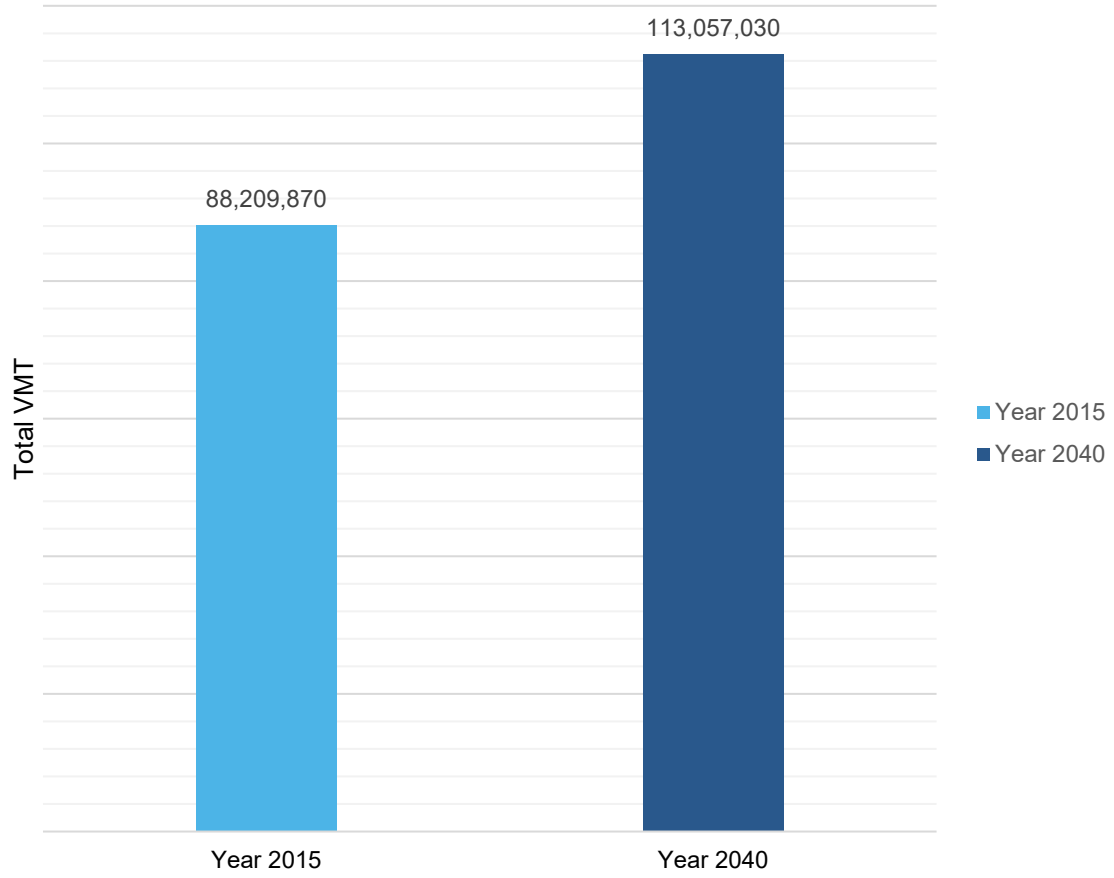
VMT Data

Santa Clara Countywide Total Daily VMT



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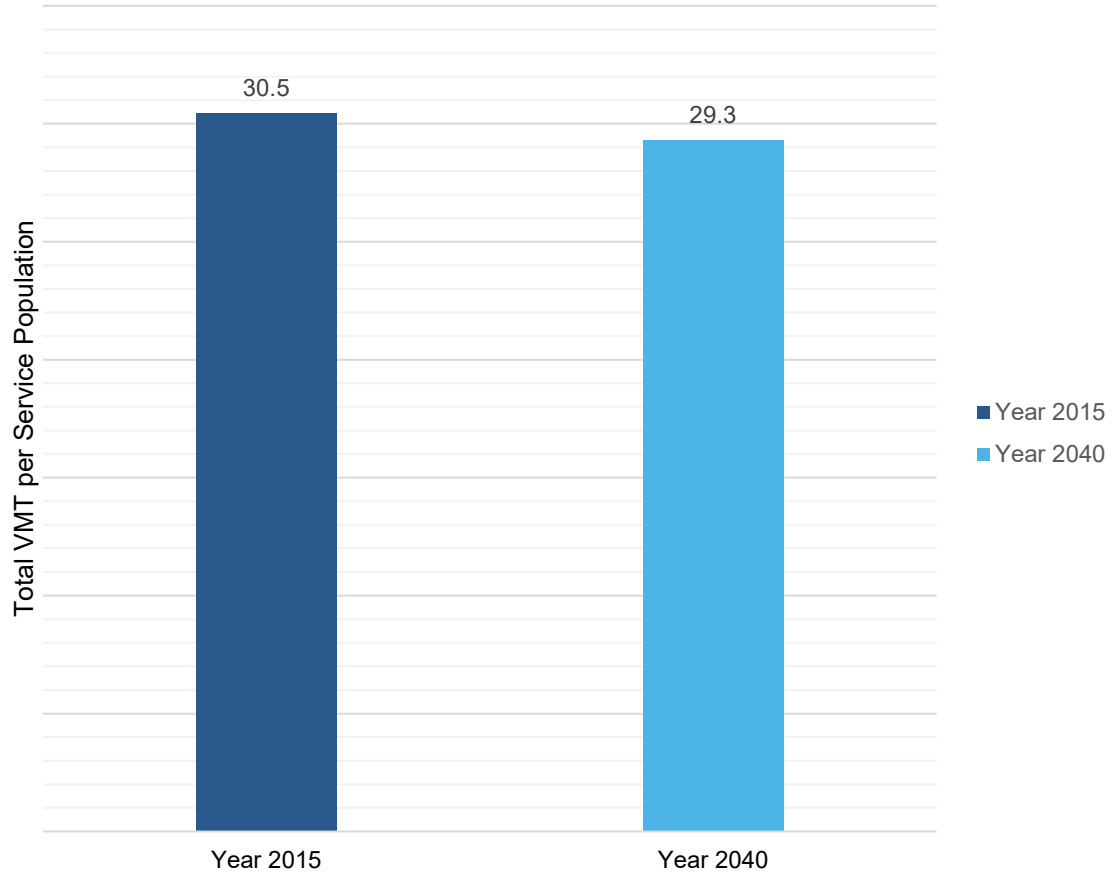
VMT Data

Santa Clara Countywide Total Daily VMT per Service Population



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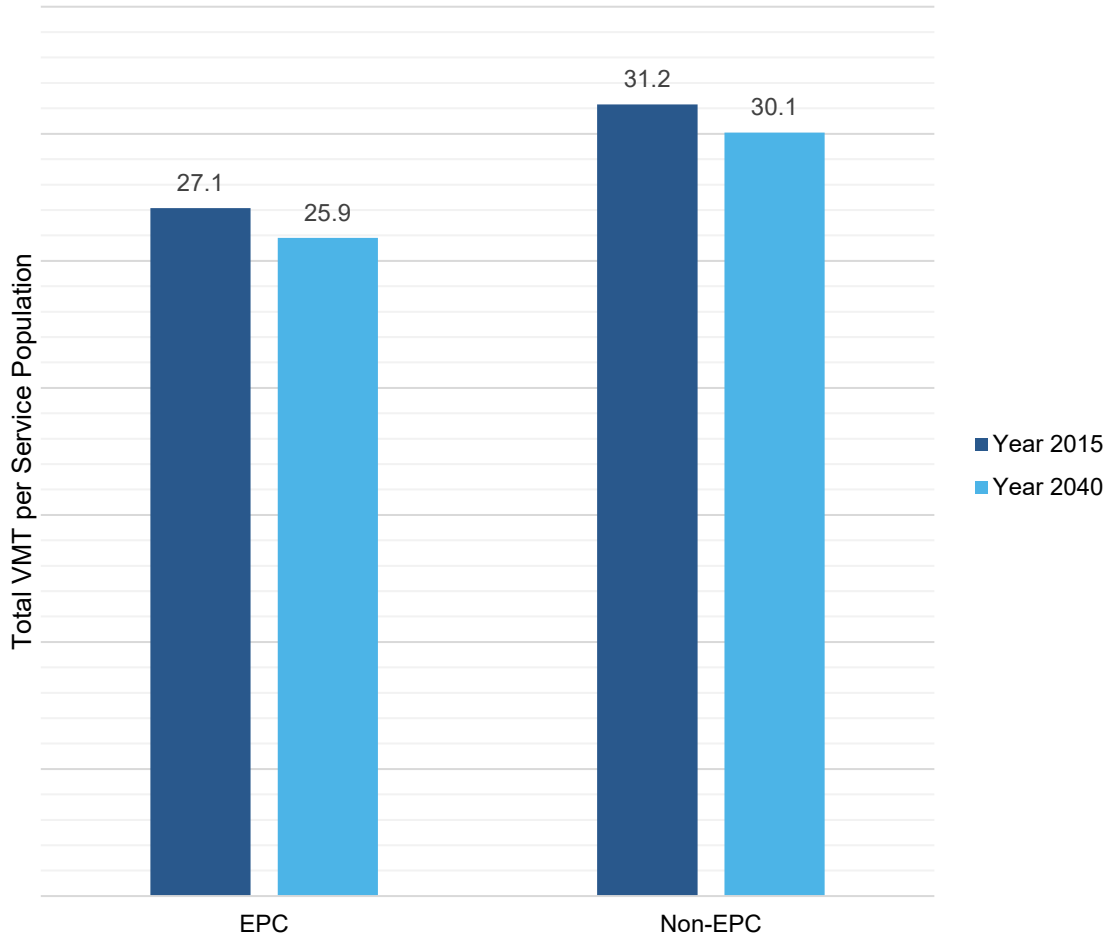
VMT Data

Total Daily VMT per Service Population for Non-EPC and EPC Areas



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Potential VMT Reduction Needed

We estimated how much VMT reduction would be needed under four different scenarios

	VMT Target set at 85% of Baseline Rate	VMT Target set at 70% of Baseline Rate
VMT Target applies only to future development	Scenario 1	Scenario 2
VMT Target applies to everything (both existing and future population and jobs)	Scenario 3	Scenario 4

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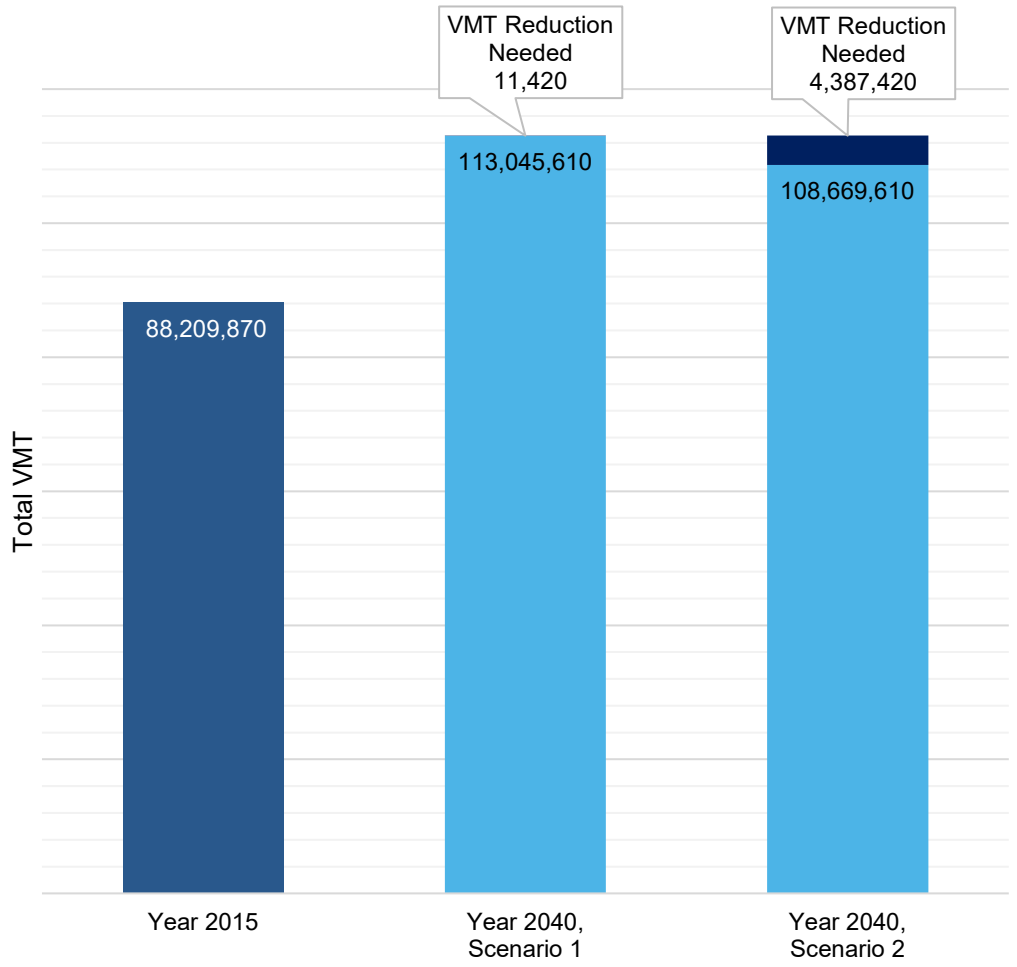
VMT Targets Applied Only to Future Development

Scenario 1:
Target = 85% of Baseline

Scenario 2:
Target = 70% of Baseline



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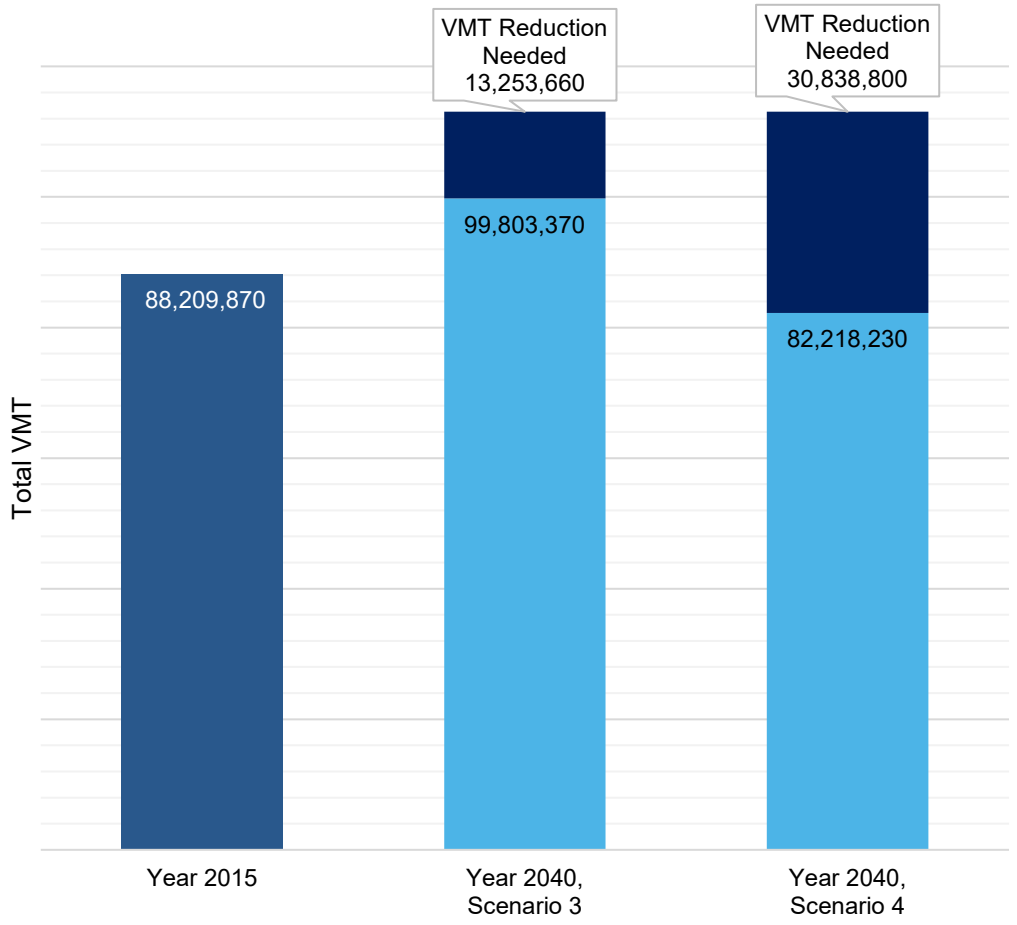
VMT Targets Applied to Both Existing and Future Development

Scenario 3:
Target = 85% of Baseline

Scenario 4:
Target = 70% of Baseline



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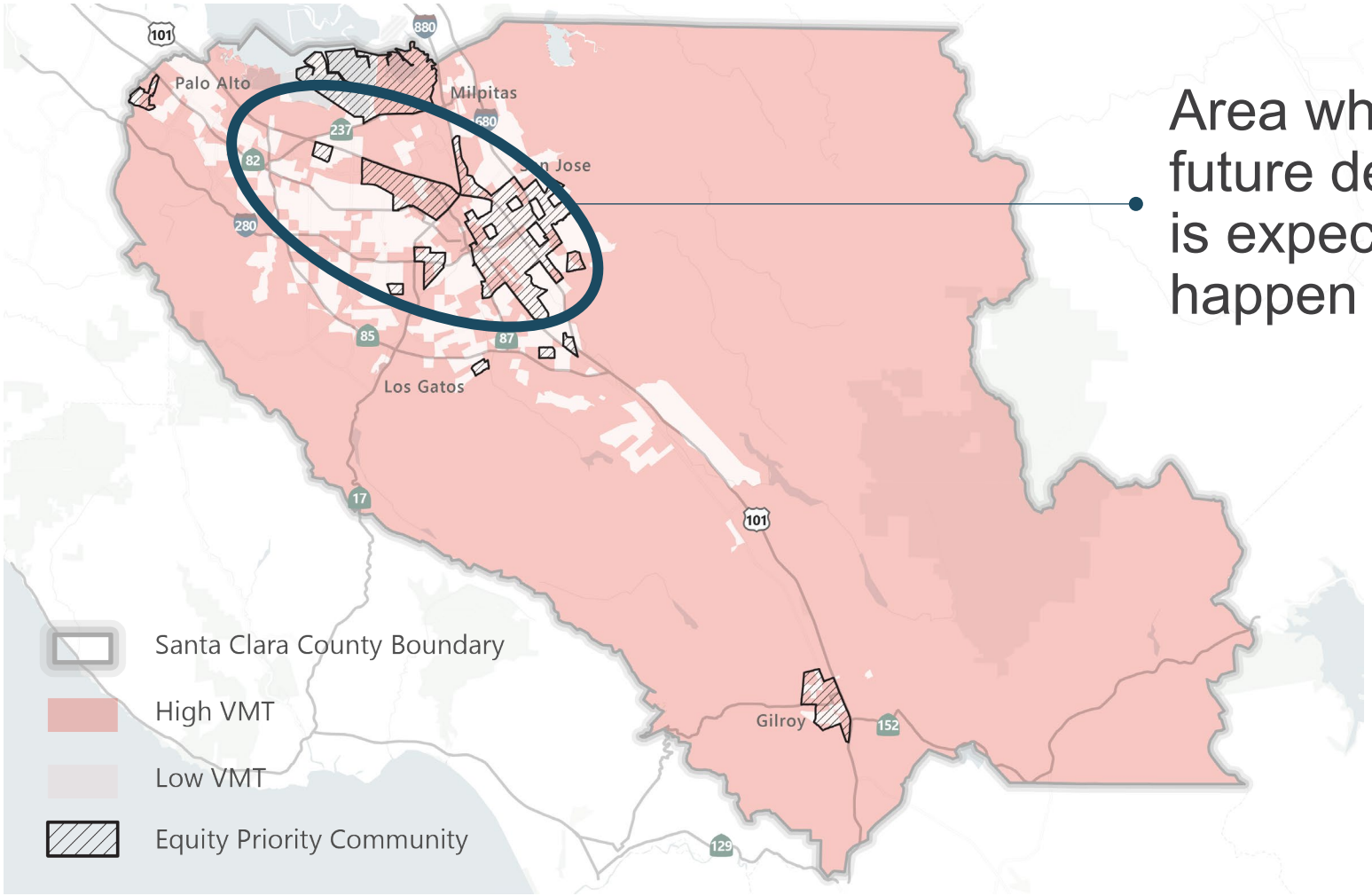
Observations about Future VMT

- Countywide VMT rates are expected to decline as population increases
- EPC areas tend to have lower VMT rates than non-EPC areas
- VMT rates in EPC areas are expected to decline somewhat faster than the VMT rates in non-EPC areas

Future Development Areas



Area where most future development is expected to happen

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Observations about Potential VMT Reductions

- Future development is anticipated to occur throughout the north-central county in a mix of high and low VMT areas
- Development that occurs in high-VMT areas is more likely to trigger significant VMT impacts and require mitigation
- As targets become more aggressive, more VMT reductions would be needed

Questions and Discussion

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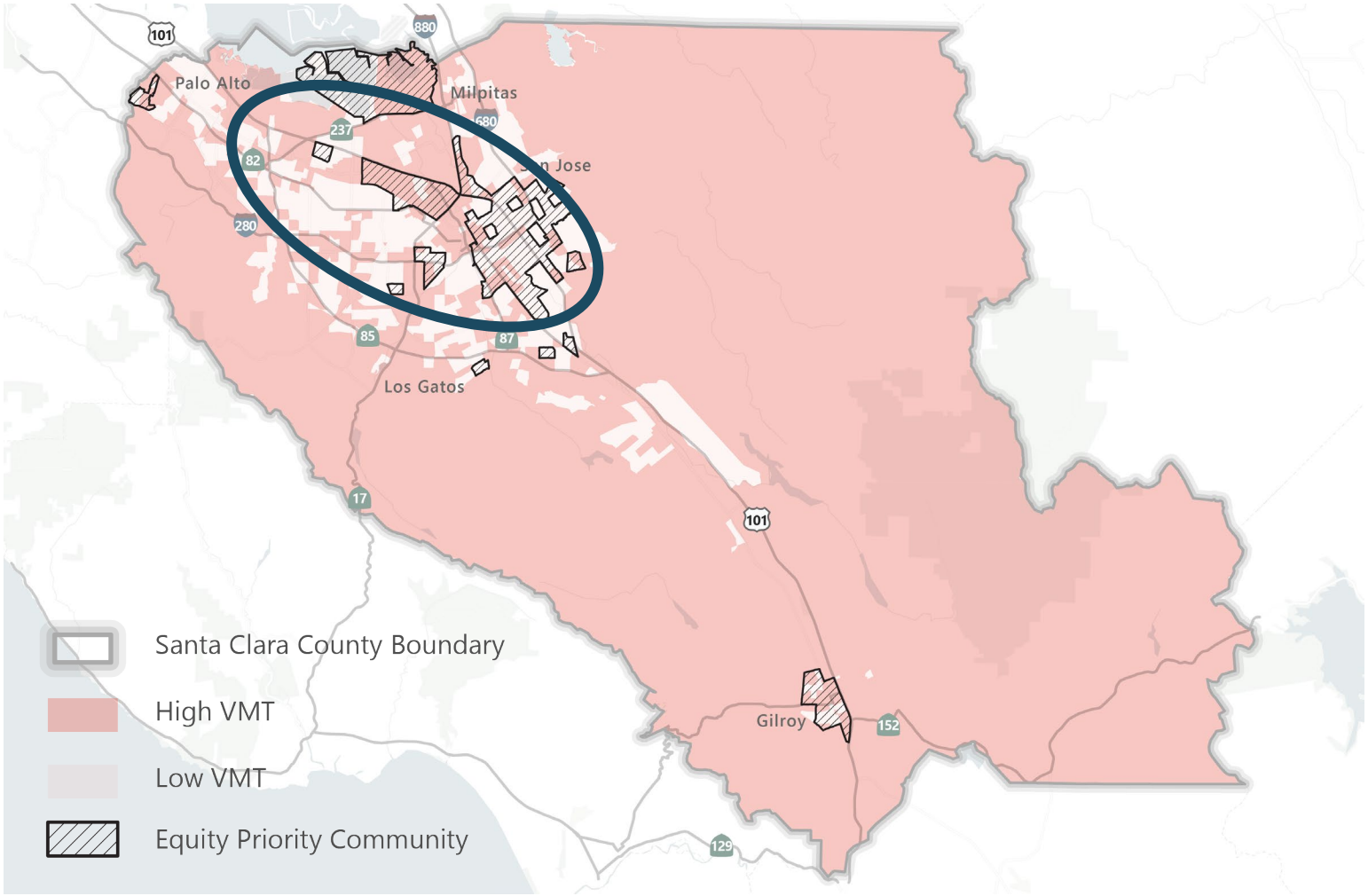
Questions about Potential VMT Reductions

- Target VMT Rate:
  - Should it be set at 85% of the Baseline Rate?
  - 70%?
  - Something else?

Potential VMT Reduction Needed



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Questions about Potential VMT Reductions

- Should VMT reduction strategies be focused in localized high-VMT areas?
- Should VMT reduction strategies be focused in EPC areas?
- How should the program consider that some EPC areas are low-VMT while others are high-VMT?

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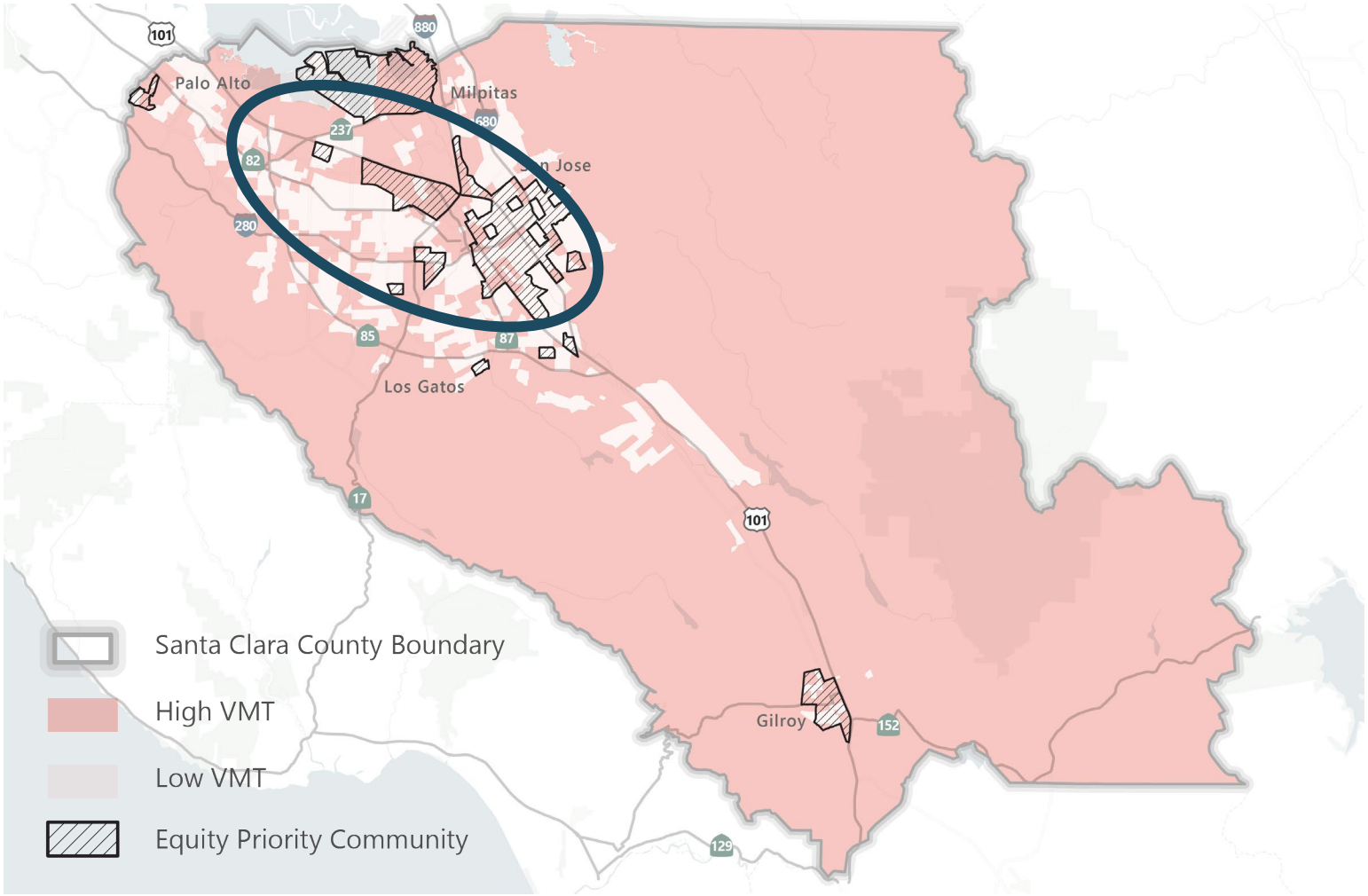
Potential VMT Reduction Needed



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Wrap up

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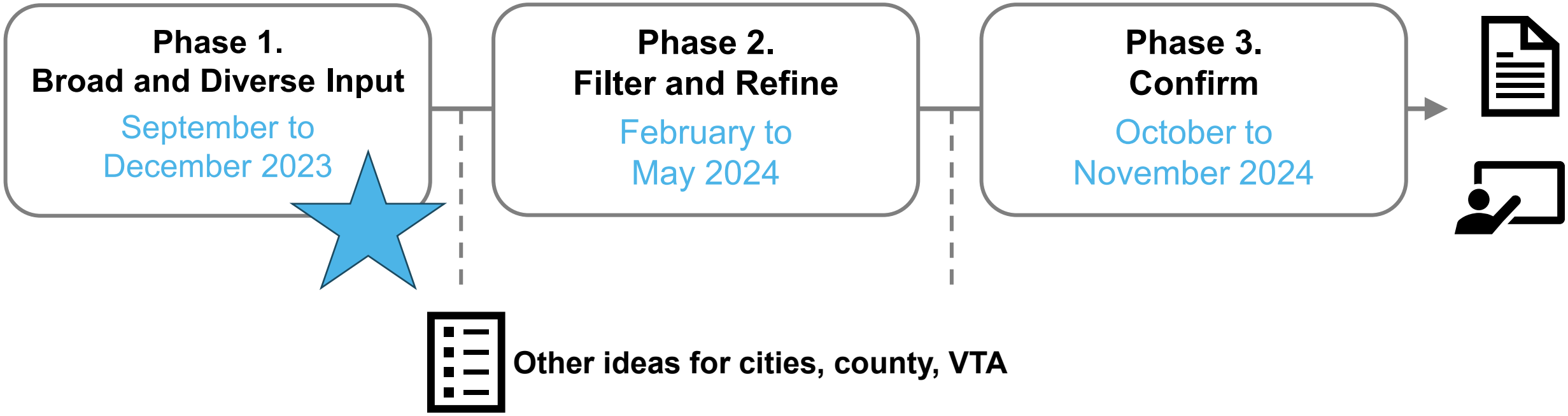
How will we use your input?



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What's next?

- Phase II – Filter and Refine
- Presentation to Jurisdiction – contact us if interested

How can you help?

- Stay up to date
  - www.vta.org/EquitableVMT
- Share upcoming events – listed on website
- Share the community survey
  - www.vta.org/vmtsurvey

Scan for the project website

Scan for the survey

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Thank You

Contact: Robert Swierk, VTA at Robert.Swierk@vta.org

Scan for the project website

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Appendix I4: Community Based Organizations Focus Group Presentation

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Community Based Organization (CBO) Focus Group

Equitable Vehicle Miles Traveled (VMT) Mitigation Program for Santa Clara County

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FEHR PEERS

Agenda

- Introductions
- What is This Project About?
- Discussion: How Can We Reduce Driving and Improve Travel Options?
- Questions
- Wrap Up

Introductions

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Introductions

- Fehr & Peers
  - Taylor McAdam
  - Alexandra Lee-Gardner
- Catalyze SV
  - Rocio Molina
- Mariposa Planning
  - Chris Lepe
- VTA
  - Rob Swierk
  - Laura Posadas

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Introduce Yourself

Name

Organization

What motivated you to participate in this project?

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What is This Project About?

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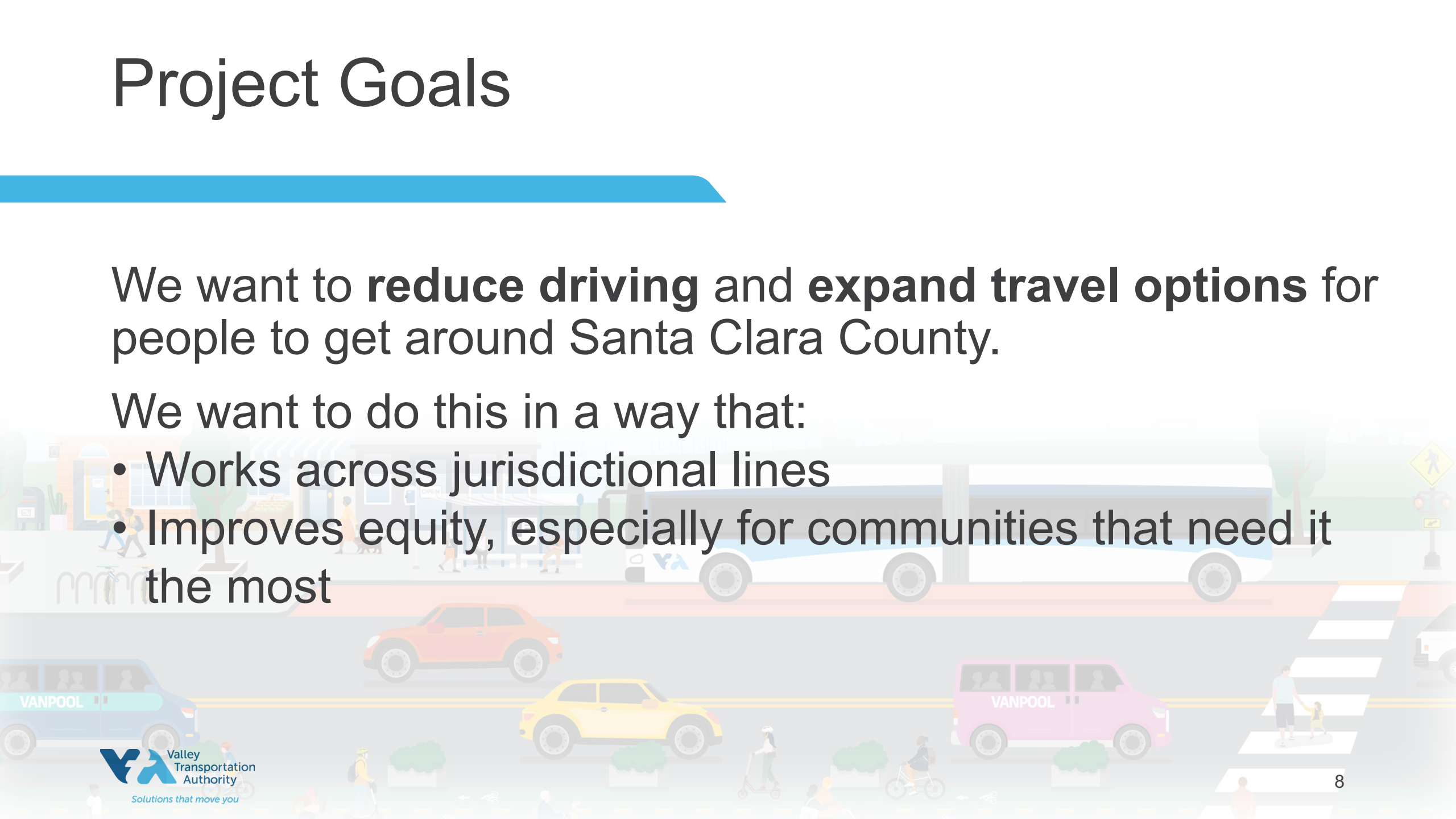
Project Goals

We want to **reduce driving** and **expand travel options** for people to get around Santa Clara County.

We want to do this in a way that:

- Works across jurisdictional lines
- Improves equity, especially for communities that need it the most



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How are we developing an equitable program?

Equitable Process

Engage historically underrepresented people in the process

Equitable Outcomes

Improve travel options for all Santa Clara County residents and workers, but especially for those living in communities with fewer resources

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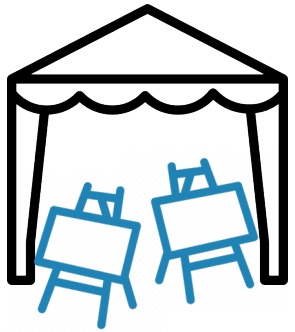
How are we engaging with people?



10 Pop-Up Events at public gathering places or as part of community events

Community Surveys during 2 Phases

3 Community Meetings

3 Community Focus Groups, 4 Technical Focus Groups

20+ Presentations to Organizations

Presentations to VTA Committees & Board

Presentations at City/County meetings (upon request)

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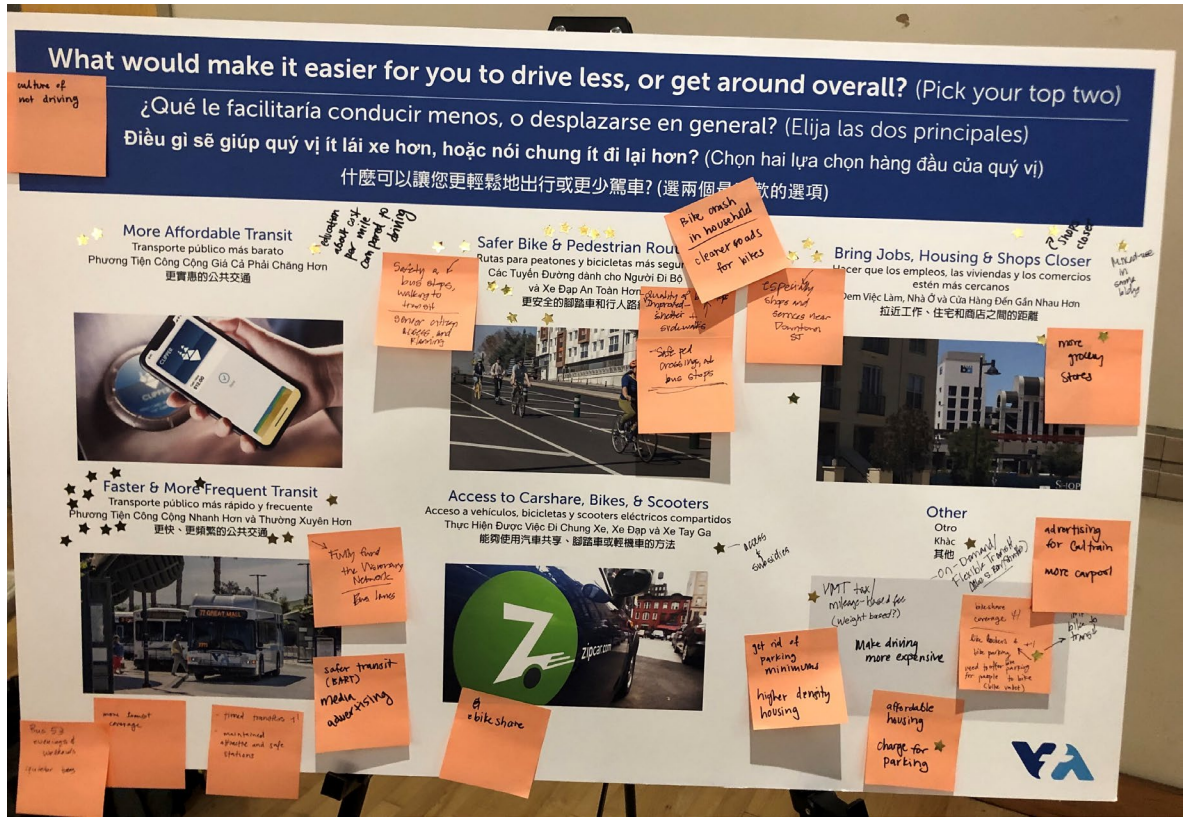
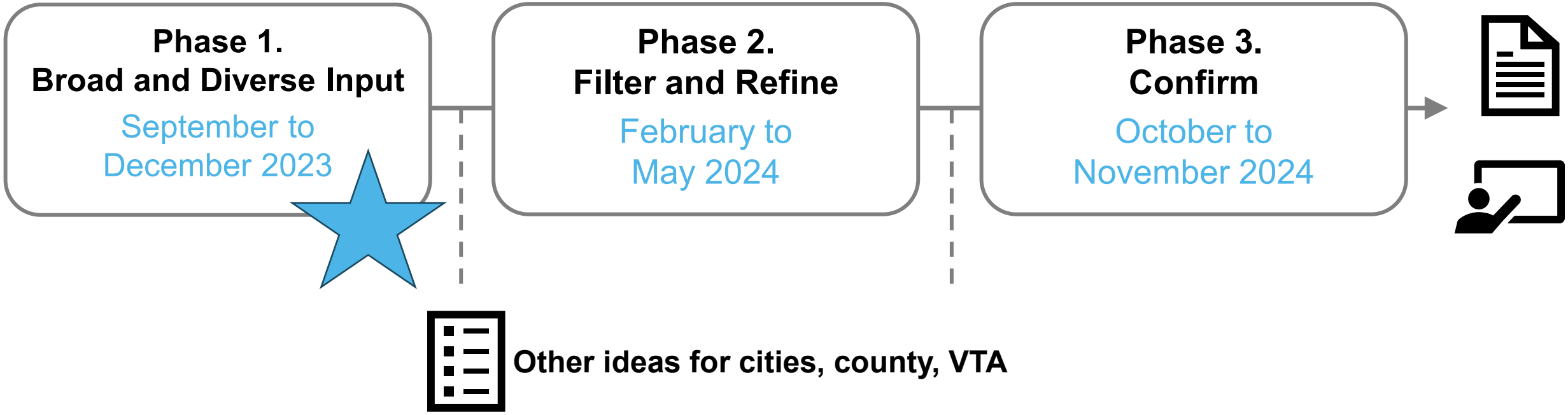
How are we engaging with people?



How will we use your input?



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What are your communities' biggest transportation challenges? (Discussion)

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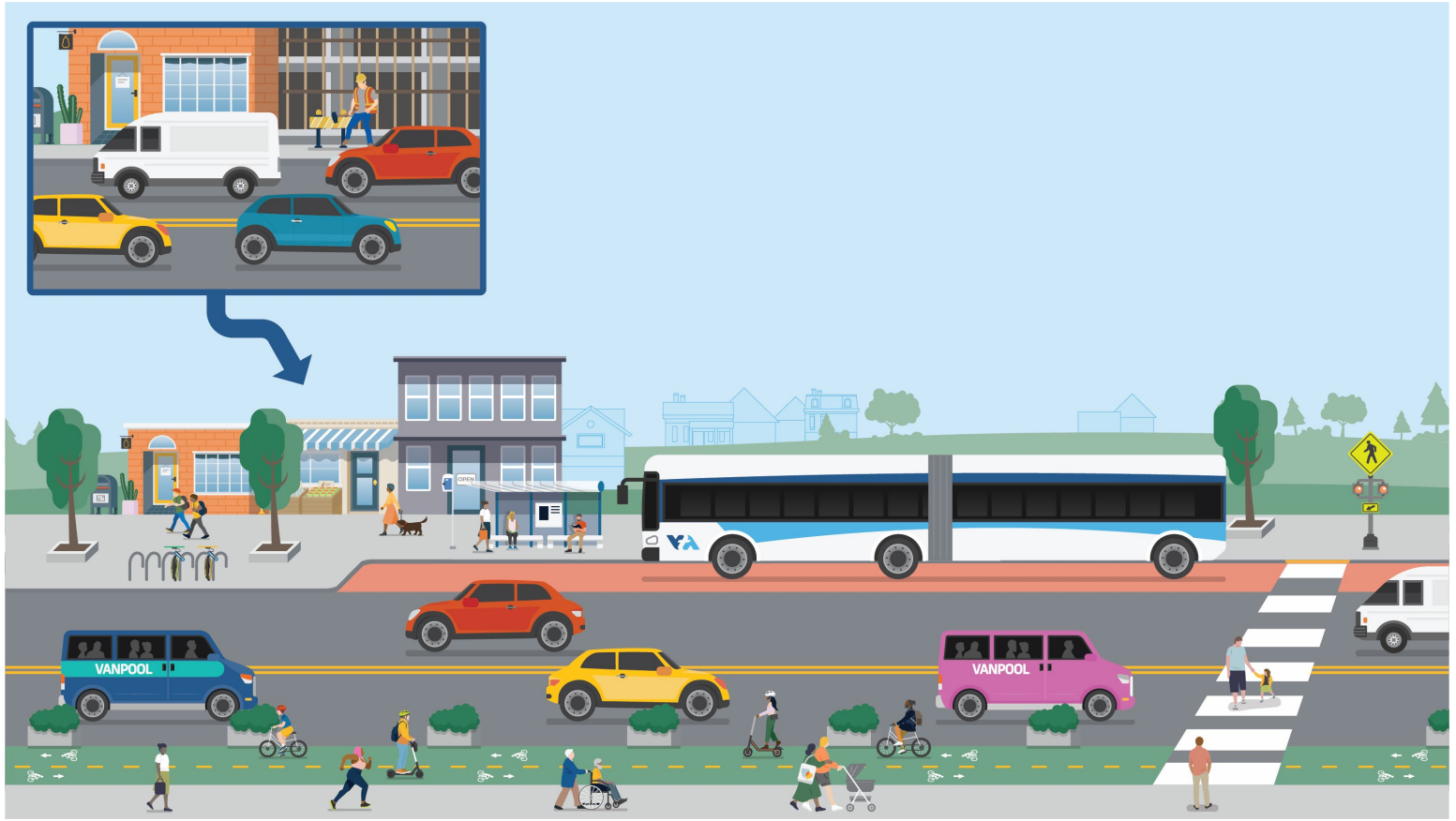
What travel challenges do your community members face?

- Cost
- Travel Time
- Availability
- Safety
- Accessibility
- Reliability



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Projects that can Reduce Driving

Could any of these projects help solve your communities' biggest transportation challenges?

On-Demand Mobility



Biking and Walking Paths


Many Things To Do Close By

Frequent and Fast Transit Service

Transit, Bike & Carpool Incentives

Change Travel Cost

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Discussion

- What are the biggest travel challenges that your community members face?
- Which options help solve your communities' biggest transportation challenges?

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Questions?

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Wrap up

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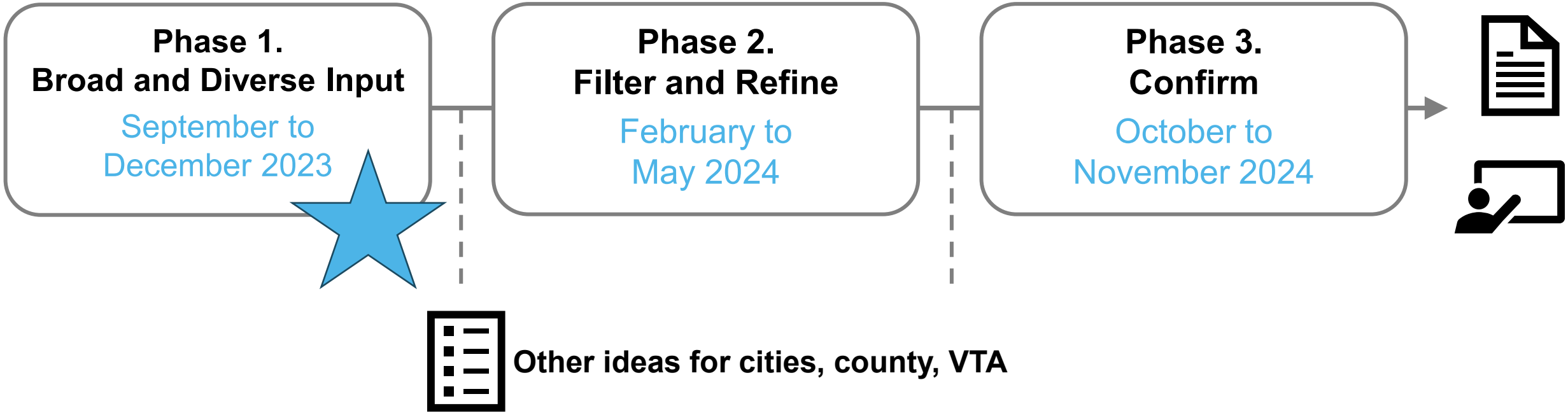
How will we use your input?



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What's next?

- Phase II – Filter and refine
- Post Focus Group survey (< 5 minutes)
  - Please fill out to receive a $50 Clipper Card
- Presentation to Organizations – contact us if interested

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How can you help?

- Stay up to date
  - www.vta.org/EquitableVMT
- Share upcoming events – listed on website
- Share the community survey
  - www.vta.org/vmtsurvey

Scan for the project website

Scan for the survey

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Thank You

Contact: Robert Swierk, VTA at Robert.Swierk@vta.org

Scan for the project website

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Appendix J4: VMT Mitigation Reduction Informational Videos

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Informational Videos

The project team developed three informational videos about vehicle miles traveled (VMT) mitigation which were posted by the VTA for public consumption. These two videos are described and linked below. Both may be accessed via the VTA Equitable VMT Mitigation Program for Santa Clara County project website (https://www.vta.org/projects/equitable-vmt-mitigation-program-santa-clara-county) or direct links below.

"Project Introduction"

This video introduces the purpose of the project, what VMT is (briefly), how we can reduce VMT (briefly), why the project is focused on equity, and how the community can benefit from the project and get involved.

Link: https://youtu.be/Wj9dUl3r-9w?si=ktRlKzswPainL_0D

“What is VMT and Why Does it Matter?”

This introductory video presents the ABCs of VMT. It explains that VMT is a measure of the total amount of driving that happens in an area and how recent changes in state law have required cities and counties to use VMT to evaluate new development. It presents that VMT is related to important issues such as greenhouse gas emissions, air quality, noise pollution, and street safety. Lastly, the video describes how lowering VMT may improve both quality of life and the environment.

Link: https://youtu.be/Ynips306aFc?si=kreCc5J8nvGf5uQ8

“Why It’s Important to Reduce VMT”

This second video dives deeper to describe that the transportation sector is the largest greenhouse gas emitter in California. It presents how reducing the amount of driving, or VMT, would help the County, member jurisdictions, and state as a whole, meet climate and air quality goals. The video includes a primer on VMT background including illustrations of how VMT is calculated for different trip types and purposes.

Link: https://youtu.be/lCPqJf3Y8XA?si=mUYZaxNrOWACPuPS

Appendix J: Phase 2 - Filter and Refine

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Appendix J1: Phase 2 Community Engagement Summary Memorandum

Valley Transportation Authority

Phase 2 Engagement Feedback Summary

Phase 2 Engagement Goals

- Solicit **specific input on the three example VMT reduction projects**
  - E-Bike Subsidies
  - Bus Speed Improvements
  - Enhanced Vanpool
- Gather input on the program sponsor and program structure
  - Sponsors:
    - VTA
    - Joint Powers Board
    - New agency
    - Private entity
  - Program structure
    - VMT impact-based fee
    - VMT exchange
    - VMT bank

Phase 2 Events

The project team hosted the following events as part of Phase 2:

- 1 VTA staff workshop
- 1 Local jurisdiction workshop
- 1 CBO focus groups
- 1 Virtual community meeting
- 2 In person workshops
- Additional presentations to organizations and VTA committees

Phase 2 Feedback

Example VMT Reduction Projects

At each outreach event, we shared details about three example VMT reduction projects and asked the community if these projects would be useful to your community and how to better improve them. The results of the engagement are described below as follows.

- **Favorability Score**: Based on community and local jurisdiction/VTA staff responses of support and answers on whether the projects were useful to them, each project type was assigned a favorability score of high, medium, or low.
- **Project Feedback/Needs**: We heard specific feedback that could improve the usefulness or value of the example VMT reduction projects. Feedback included ideas about the project features that could further reduce VMT as well as feedback to better meet community needs. The feedback has an annotation noting the category of the feedback which is included as follows:
    - **V**MT Reduction: Additional VMT reduction projects or features of a VMT reduction project that may support further VMT reductions.
    - **E**quity: Identifies a need or consideration to better serve the Equity Priority Community population or area.
    - **C**o-benefits: Co-benefits that can help justify funding, planning, and implementation of the feasible VMT reduction measures. This includes improved air quality, energy and fuel savings, water conservation, enhanced pedestrian, or traffic safety, improved public health, improved ecosystem health etc.
- **Supportive or Additional Projects**: These are supportive or additional projects that community members identified as necessary to ensure the usefulness of the example VMT reduction projects. Supportive projects require the implementation of entirely separate projects aimed at complementing the VMT reduction projects.

E-Bike Subsidies

Favorability score – high

- Many see e-bikes as great alternative travel mode to replace car trips
- Many feel that solving the cost factor will see an increase in use/e-bike consumption

Project Feedback/Needs

- Require or offer for those who register to participate in bike education courses. Could be hosted in partnership with Silicon Valley Bicycle Coalition or other partner organizations (C)
- Partner with local CBOs (e.g., Peninsula Clean Energy, which already has a program) to administer and market subsidies (E)

    - Organizations could advertise program and help with registration and the process of procuring the bikes (E)
    - Partner with online and in-person e-bike stores to help reduce research and streamline purchase processes (E)

- Ensure that program allows multiple subsidies per household (E)
- Consider expanding program to include e-scooters and other electronic micro-mobility (Limit class of e-bikes applicable as part of this program, include the cost of helmet in subsidy) (V,C)
- Include welcome packet with information about existing programs such as Bay Wheels, the VTA County bike map, and Link program access (C)
- Consider marketing to young folks through youth and school programs (C)
    - Consider who is the target age (C)
    - Should there be an age minimum? (C)
- Include as TDM strategy option for new developments (V)
    - Building manager could help to enroll residents/employees in program (C)
    - Developer required to share program information as part of “welcome packet” (C)
- Consider expanding program to middle income families as well (V)
- Plan for additional bike parking inside bus or consider alternative ways to store buses on bikes that are easier for heavier bikes (C)
- Consider re-framing the project to include discounted or free bikeshare membership and discounted e-bike rides. Bay Wheels already has a discounted membership program, but the eligibility requirements may be a barrier for some people who could benefit from it, so this program could offer additional discounts on top of the Bay Wheels for All program. Although this project is expected to have minimal VMT reduction it would reduce the need for bike storage and ongoing bike maintenance (E,C)
    - Could also include subsidized 1-day free access to bikeshare to allow people to “test ride” e-bikes (C)

Supportive or Additional Projects

- **Expand bike network**: Access to adequate facilities was one of the most frequent concerns from the community. We heard that people would be more comfortable biking and using an e-bike if they felt there was a safe and comfortable bike network. This concern was more prevalent in EPC areas such as East San José that have fewer high quality bike facilities. While this project is projected to have a low VMT impact, there are other safety and equity benefits to a better bike network. Suggest prioritizing bike improvements in EPC areas develop a connected and low stress bicycle network. This should be done before or coinciding with the e-bike subsidy project.
- **Increase bike parking and e-bike charging**: Almost every group voiced concerns about the lack of secure and convenient e-bike parking. This is particularly concerning for EPC populations that may have fewer secure spaces at their house to store e-bikes

or may not be able to support charging facilities. Suggest existing developments provide adequate e-bike charging and bike parking and consider changing bike parking requirements for new developments to better meet the needs of e-bikes. Consider locations to provide public bike parking/charging and opportunities to add parking/charging facilities to new projects. This should be done before or coinciding with the e-bike subsidy project.

- **Upgrade planning and regulations**: The influx of e-bikes and other emerging micromobility technologies comes with new safety considerations for bicyclists, pedestrians, and vehicles. Suggest looking for opportunities to develop regulations to e-bike and other micromobility speeds and improve safety conditions on facilities. Additionally work to consider the needs of e-bike and micromobility users when designing and reviewing development plans and street improvement plans such as ensuring adequate bicycle parking and charging locations. This should be done before or coinciding with the e-bike subsidy project.
- **Bikeshare subsidies**: Consider discounted or free bikeshare access (including free e-bikes) to use existing bikeshare services. This reduces need to bike storage and maintenance and may increase ease of use for some folks. This could be done in addition to the e-bike subsidy project. Bay Wheels already has a discounted membership program, but the eligibility requirements may be a barrier for some people who could benefit from it, so this program could offer additional discounts on top of the Bay Wheels for All program. This would reduce the need for bike storage and ongoing bike maintenance.

Bus Speed Improvements

Favorability score – medium

- Many see benefits of more reliable/speedy service
- People enjoyed side benefits of complete street design that will improve protection for bike lanes, connect existing bike lane gaps at bus stops, and reduce vehicle speeds

Project Feedback/Needs

- Include adequate lighting at bus boarding islands (C)
- Ensure bus boarding islands are ADA accessible and a positive experience for those with disabilities (E,C)
- Design bus only lanes to limit private vehicle access (red painted lanes, better signage, more enforcement) (V)
- Consider adding bike lockers or other bike parking options at bus boarding islands (see e-bike subsidies project feedback) (C)
- Suggested additional locations could include El Camino Real, 522/22 route, Story Road (San José), Senter Road (San José), King Road (San José), 1st Street (Gilroy), Monterey Road (South County), Tully Road (San Jose) (V)

Supportive or Additional Projects

- **Expand service**: Many EPC members shared they would not benefit from this project because the service did not go where they wanted to go when they wanted to go there. This project may have a higher VMT reduction if paired with projects to expand transit service.
  Community members also shared that transit service increases that would bring a bus from low frequency to high frequency (i.e., 15-minute headways) would be more impactful to their travel habits (i.e., they might shift from driving) than a 5-minute travel time savings on a route that already runs frequently. This should be done before or coinciding with the bus speed improvement project.
- **Mobility hubs**: Consider creating mobility hubs with access to transit and first/last mile services. While not directly related to this project, we heard lots of support for this idea.
- **Transit subsidies**: Cost or perceived cost continues to be a barrier to riding transit for some folks. While a transit subsidy might not be the right fit for this program, consider supplementing this program with a transit subsidy program (or expand the Clipper START Pilot Program) to reduce the cost of transit for low-income riders. Alternatively, consider allowing youth and seniors (or riders of all ages) to ride for free. This should be done before or coinciding with the bus speed improvement project.

Enhanced Vanpools

Favorability ranking – medium

- Many see the advantages of vanpooling as a way to reduce commute stress and improve commute time

Project Feedback/Needs

- Suggest extensive advertising of program to raise awareness (C)
  - This could include paid digital ads, billboards, and ads on buses (C)
  - Partner with CBOs and target employers (healthcare, hotel housekeeping, agriculture, etc.) to spread information about the program (E, C)
- Consider partnering with organization or employer as organizer (C)
  - CBO or employer helps to facilitate vanpool, organize carpool groups, and help to find place to park overnight (E, C)
- Include information about VTA's existing guaranteed ride home program for those signing up or interested in the program (C)
- Allow vanpools to use express lanes. Market vanpool program through express lane program. (V, C)
- Include purchase of zero emission vehicles (C)
- Allow vans to park at transit centers, park and ride lots, or other public parking areas overnight (C)

    - Partner with employers to allow for reserved parking or reduce parking price to park van at employment location (V,C)

Supportive or Additional Projects

- **Shuttle Service/On-Demand Shuttle**: We heard from nearly all groups they would prefer a shuttle program instead of or in addition to the vanpool project. A fixed shuttle or on-demand shuttle would better fill the transit gaps that exist in the county and provide access to additional destinations beyond places of work. The shuttle program was also more favorable because it is more convenient and has fewer logistic complications compared to a vanpool. We heard strong support for shuttles that were driven by a paid driver as they were perceived to be more reliable and easier to coordinate logistics compared to vanpools that would be driven by fellow co-workers or commuters. Consider a shuttle and/or on-demand shuttle program that connects residential neighborhoods to major employment centers, shopping areas, health centers, and main streets or downtown areas. Consider providing shuttle access to engagement events and council meetings. This program could also provide connections to other counties. Consider developing an app and/or phone line to allow for ease of use. This could be done in addition to the enhanced vanpool project.

Program Sponsor and Structure

In addition to the example VMT reduction projects, we also asked participants in the VTA workshop and local jurisdiction workshops to give input on the program sponsor and structure. We asked participants to rank the sponsor and structure options from most desirable (1) to least desirable (2) and provide input on their reasoning. The rankings and additional considerations are summarized below. For the local jurisdiction feedback, each jurisdiction present at the workshop was assigned one vote and we quantified the vote rankings with higher scores representing a more desirable option. Since the VTA workshop was made up of VTA staff, quantifying the ranking with scores was not appropriate; however, a general most to least desirable ranking is included.

Program Sponsor

Table 1: Program Sponsor

Rank	VTA Results	Local Jurisdiction Results
1	VTA	VTA (40 points)
2	Joint Powers Board	Joint Powers Board (23 points)
3	New Agency	New Agency (18 points)
4	Private Agency	Private Agency (14.5 points)

Fehr & Peers, 2024.

Supplementary to the rankings in **Table 1**, VTA and local jurisdiction staff shared feedback about how they ranked the sponsors and provided reasoning for why they thought VTA was the most desirable sponsor.

VTA Staff Feedback for VTA as the Sponsor

- VTA is countywide organization responsible for delivering capital projects
- VTA has the countywide perspective and already coordinates countywide
- VTA would have fewer administrative costs since much of this structure is already set up at VTA
- While VTA is set up to administer this program, there would be costs associated with administration. VTA should be the sponsor but would need to consider the cost and staffing implications

Local Jurisdiction Staff Feedback for VTA as the Sponsor

- Programs can be countywide
- VTA as a Congestion Management Agency (CMA) has countywide responsibilities and could be set up to administer this type of program. They have the staffing and existing coordination to take on this program
- Removes burden and obligation from local jurisdictions
- Ensure that there is transparent oversight that is separate from VTA
- Balance mitigation actions and funding distribution to benefit the entire county over specific cities
    - Consider return to source (i.e., the extent to which mitigation dollars can be applied outside of the jurisdiction in which they are generated.)
- Consider how VTA will staff. Will management/administration fees be covered in the exchange fee?

Program Structure

Table 2: Program Structure

Rank	VTA Results	Local Jurisdiction Results
1	Bank	Exchange (23 points)
2	Exchange	Bank (22 points)
3	Fee	Fee (16 points)

Fehr & Peers, 2024.

Supplementary to the rankings in **Table 2**, VTA and local jurisdiction staff shared feedback about how they ranked the structure and provided reasoning for why they thought either a bank or an exchange was the most desirable structure. Since VTA staff ranked the VMT bank as the most desirable option, their feedback was focused on a VMT bank, while local jurisdiction staff feedback was focused on a VMT exchange program, which was the highest ranked option for local jurisdiction staff.

VTA Staff Feedback for a VMT Bank

- This allows the funding to go to larger projects that are funded by many developers over time. This can be preferable to one developer needing to fully fund a mitigation action.
- Exchange and bank ranked relatively close – with slightly more preference for a bank over exchange. There was favor for starting with an exchange and switching to a bank later in the program life.

Local Jurisdiction Staff Feedback for a VMT Exchange

- Can accommodate a range of projects. This would help support smaller cities by addressing VMT mitigation county-wide rather than location specific.
- In support of exchange structure but anticipate concerns about administration and explaining to the public and decision-makers. Suggest developing brochure on how the exchange will work to share with developers.
- Consider moving to a bank in the long term to allow for a broader set of VMT reduction projects. Bank would better meet the needs of smaller development projects rather than requiring they fund an expensive VMT reduction project that is larger than the VMT impact because there are no projects that are scaled to their need.
- Concerns that applicants will need to fully fund a mitigation action. How will “fair share” be determined.

Questions about a VMT Exchange from VTA and Local Jurisdiction Staff

Given the newness of VMT mitigation programs, the questions listed below about a VMT exchange are a blend of legal considerations and practical considerations. Statutory requirements only provide general guidelines, and since there is no directly relevant case law available there is limited guidance that can be given at this stage. In practice, many of these

questions will be resolved through discussion and negotiations between the program sponsor and the lead agencies.

We have grouped these questions into three categories to address what will be determined within our framework and what will be resolved in later stages of the program creation.

Legal requirements are aspects of the program framework prescribed by state, regional or local regulations. These questions will be addressed in the report and alluded to in the executive slide deck. It should be noted, there is minimal precedent to draw from related to regional VMT mitigation programs so responses will speak to the overarching requirements for the program. Exact specifications for how the program meets these requirements will be negotiated by the program sponsor and lead agencies in concert with legal counsel when creating the legal documents for the program.

- Did SB 743 require a VMT bank?
- What are the administrative and reporting requirements (for VMT Exchange, etc.)?
- Could funds go toward a percentage of a project? / What does “applicants must fund entire mitigation” mean?
- Why does the VMT bank have more administrative requirements?

Administrative Procedures are details about how and by whom the program will be administered. Similar to legal requirements, foundational elements of the administrative process will be defined in the report and alluded to in the executive slide deck, while some of the specifications will need to be negotiated by the program sponsor and lead agencies in concert with legal counsel when creating the legal documents for the program.

- What would an example of the exchange’s eligibility criteria to add a new action be? (Known and options will be included in Report)
- How often would the pre-qualified list be updated? (Mentioned in Report, but specifics will be determined later between the program sponsor and lead agencies)
- How will the reduction be calculated for the projects/actions? (Assuming this is referring to post-implementation.) (Mentioned in Report, but specifics will be determined later between the program sponsor and lead agencies)

Other includes all other questions related to the program. These are likely items that can be discussed informally.

- Can the VMT mitigation be calculated/measured as GHG emission reductions?
- Can you explain further the “first-in problem” that the most cost-effective measures will be funded first?

Phase 2 Event Summary

This section summarizes who attended the Phase 2 events. For the community workshops, we also detail some demographic information about attendees including age and race. At in-person and CBO workshops, out demographic information is based on our observations. At the virtual community meeting, we collected demographic and commute mode information via a Zoom Poll. This summary reflects events through the end of June 2024; the project team held several more in-person workshops, pop-up tabling events and meetings with other organizations, largely focusing on EPC populations, before the end of Phase 2.

Table 3 shows the number of participants for Phase 2 by event type.

Table 3: Event Summary

Event Type / Quantity	Participants
In-Person Community Workshops (2)	24 community members
Virtual Community Workshop (1)	18 community members
CBO Staff Workshop (1)	14 staff from 12 organizations
Local Jurisdiction Staff Workshop (1)	21 staff from 12 of 16 local jurisdictions (+Caltrans)
VTA Staff Workshop (1)	13 staff from 4 divisions
Discussion Item at VTA Committee Meetings (5)	6 public comments and 20+ Committee comments at March 2024 TAC, CAC, BPAC, PAC and CMPP
Meetings with Individual Organizations and Jurisdictions	2 meetings with organizations (+1 scheduled); 2 meetings with cities (+1 scheduled)

Source: Fehr & Peers, 2024.

Age

- In-Person Community Workshops: Mostly older adults and seniors. Gilroy had a better mix of younger and older adults.
- Virtual Community Meeting: As shown in **Table 4**, 31% of Zoom poll participants were between 26 and 35 years of age. About 44% were over 45 years old.
- CBO Staff Workshops: Mostly adults. Missing young adults under ~25-30 years old.

Table 4: Age of Virtual Community Meeting Participants

Age	Virtual Meeting		Santa Clara County	
	Count	Percent	Count	Percent
less than or equal to 25 years old	1	6%	544,607	30%
26-34 years old	5	31%	298,826	16%
35-44 years old	3	19%	268,938	15%
45-64 years old	5	31%	476,430	26%
65 years old and older	2	13%	244,449	13%
Total	**16**	**100%**	**1,833,250**	**100%**

Notes:
1. American Community Survey, 2022 1-year.
Source: Fehr & Peers, 2024.

Race/Ethnicity

We gathered race and ethnicity information through observation and asking optional Zoom poll questions:

- In-Person Community Workshops:
  - East San José was a mix of White, Asian, and Hispanic participants
  - Gilroy was a mix of White and Hispanic participants.
- Virtual Community Meeting: As shown in **Table 5**, 38% of Zoom poll participants identified as White, 31% identified as Asian, and 31% did not specify.
- CBO Staff Workshops: Represented a range of organizations including organizations that focus in primarily Hispanic or South Asian communities. We did not have any representation from the Black community or Vietnamese communities.

Table 5: Race/Ethnicity of Virtual Community Meeting Participants

Age	Virtual Meeting		Santa Clara County	
	Count	Percent	Count	Percent
White	6	38%	511,254	27%
Black or African American			41,239	2%
American Indian and Alaska Native			2,932	1%
Asian	5	31%	753,965	40%
Native Hawaiian and Other Pacific Islander			6,534	1%
Hispanic/Latino			462,494	24%
Some other race			92,527	4%
Not Specified	5	31%	-	-
Total	**16**	**100%**	**1,870,945**	**100%**

Notes:
1. American Community Survey, 2022 1-year.
Source: Fehr & Peers, 2024.

Commute Travel Modes

We asked Virtual Community Meeting participants to identify the travel mode for their work commute or a trip they made frequently (over two trips per week) in a Zoom Poll. The results are presented below in **Table 6** Generally, most participants noted they drove alone.

Table 6: Commute Travel Modes of Virtual Community Meeting Participants

Mode	Virtual Community Meeting	
	Count	Percent
Personal Vehicle	6	38%
Transit	1	6%
Bike	5	31%
Walk	1	6%
Not Specified	3	19%
Total	**16**	**100%**

Source: Fehr & Peers, 2024.

Discussion Topics

Future discussion for the debrief includes discussing how the feedback summarized above fits into the framework and what the future of Phase 3 will look like.

How will we use the feedback?

There was some support for all VMT reduction projects, therefore we will likely include all three VMT reduction projects in the report. We will also describe considerations by VMT reduction project type and document the level of support for future decision makers.

Potential considerations by VMT reduction project type

- Subsidy programs
  - Offer education courses
  - Partner with CBOs for marketing and support
  - Allow multiple subsidies per household
  - Share materials on supportive programs that exist (such as Guaranteed Ride Home or Bike locker rental info)
- Capital projects
  - Plan at community scale
  - Consider safety and complete street best practices
  - Universal design
- Services
  - Consider avenue to advertise program and raise awareness
  - Partner with CBOs to market and administer
  - Consider affordability and cost

What is the most effective way for us to confirm the VMT Mitigation Program Specifications in Phase 3?

- Goal of Phase 3:
  - Confirm program framework and provide feedback on the draft report
- Meeting types in Phase 3:
  - Virtual meeting
  - Meetings with others
- Key conversations for Phase 3:
  - Who is the primary audience?
  - How can we structure the virtual community meetings in Phase 3?

Appendix J2: Community Workshop Presentation

Valley Transportation Authority

Equitable VMT Mitigation Program

Programa de mitigación de VMT equitativo de VTA

Chương trình giảm thiểu VMT mang tính công bằng của VTA

VTA 公平 VMT 缓解计划

Phase II Community Meeting

Reunión de la comunidad dentro de la Fase II

Cuộc Họp Cộng Đồng Giai Đoạn II

第二阶段社区会议

May 2024

Mayo de 2024

Tháng 5 năm 2024

2024年5月

Santa Clara Valley Transportation Authority

Solutions that move you

FEHR PEERS

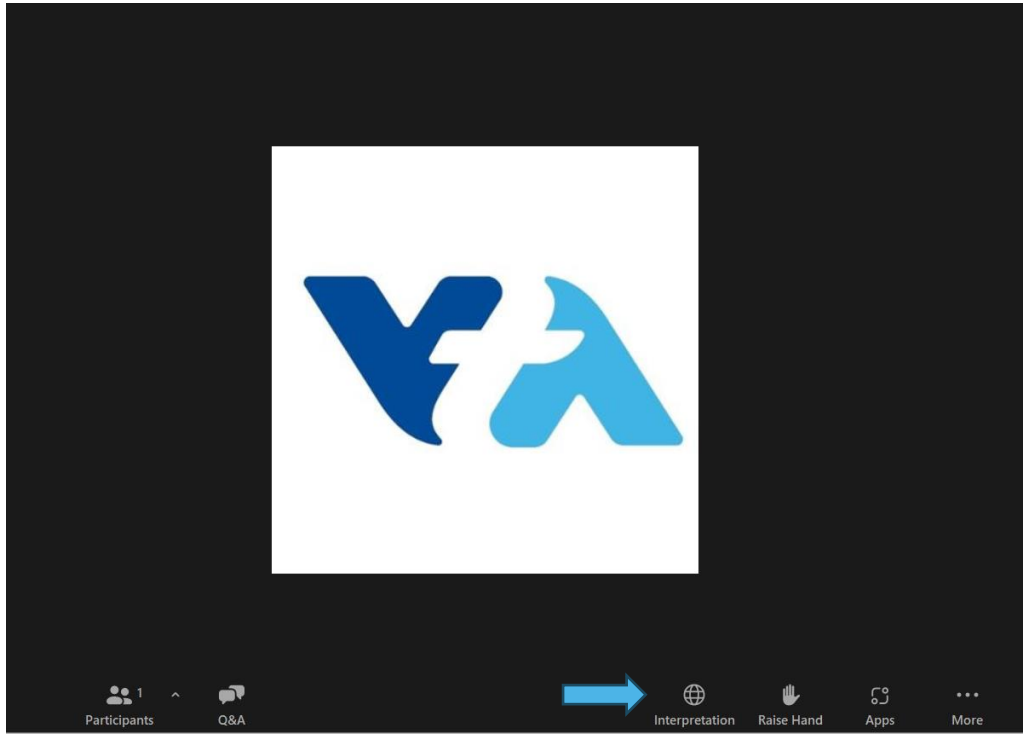
Language Channels / Interpretation
Canales de Idiomas / Interpretación
Kênh Ngôn Ngữ/Thông Dịch
語言頻道 / 口譯

Click Interpretation 🌐.
Click the language that you would like to hear; everyone should pick; do not use the default.

Haga clic en Interpretación.🌐 Seleccione el idioma que le gustaría escuchar. Todos deben elegir una de las opciones; no utilice el idioma predeterminado al inicio de la reunión.

Nhấp vào Interpretation (Thông Dịch).🌐
Chọn ngôn ngữ quý vị muốn nghe. Mỗi người nên chọn một ngôn ngữ; không sử dụng ngôn ngữ mặc định.

點擊「口譯」🌐 選擇您想聽到的語言。每個人都應選擇一個語言;不要使用預設。



Agenda

Agenda

Chương Trình

議程

- Welcome and introductions
- How reducing VMT benefits you
- What we heard from you
- What we did with the input
- Clarifying Questions
- **Small Groups:** your input on potential project types
- Next steps

- Bienvenida y presentaciones
- Cómo les beneficia reducir las millas recorridas por vehículo (VMT, por sus siglas en ingles)
- Lo que hemos escuchado de ustedes
- Qué hicimos con sus comentaros
- Preguntas aclaratorias
- **Grupos pequeños:** Su opinión sobre posibles tipos de proyectos
- Próximos pasos

- Chào mừng và giới thiệu
- Việc giảm VMT (số dặm xe đã đi) mang lại lợi ích cho quý vị như thế nào
- Những gì chúng tôi nghe được từ quý vị
- Những gì chúng tôi đã làm với ý kiến đóng góp
- Làm rõ các câu hỏi
- **Nhóm nhỏ**: Ý kiến đóng góp của quý vị về các loại dự án tiềm năng
- Các bước tiếp theo

- 欢迎辞和自我介绍
- 减少 VMT（车辆行驶里程）对您有什么好处
- 我们从你们那里听到了什么
- 我们如何处理这些意见
- 澄清疑问
- **小组讨论：**您对潜在项目类型的意见
- 下一步工作

Valley Transportation Authority

Solutions that move you

Virtual Meeting
Reunión virtual
Cuộc họp qua mạng
虚拟会议

- Camera on? We welcome seeing you!
- Please mute yourself when not speaking :)
- Questions? Use the chat! VTA staff will answer.
- We're recording this
- Facilitators taking notes

- ¿Está la cámara encendida? ¡Le damos la bienvenida!
- Silencie su micrófono cuando no esté hablando :)
- ¿Preguntas? ¡Use el chat! El personal de VTA las responderá
- Estamos grabando esta reunion
- Los facilitadores están tomando nota

- Quý vị đã mở camera chưa? Chúng tôi muốn thấy quý vị!
- Vui lòng tắt tiếng khi không nói :)
- Quý vị có câu hỏi? Hãy sử dụng tính năng chat! Nhân viên VTA sẽ trả lời.
- Chúng tôi đang ghi lại cuộc họp này
- Người hướng dẫn đang ghi chép

- 照相机打开了吗？我们欢迎您的到来！
- 不发言时请保持静音）
- 如果有任何疑问？使用聊天工具！ VTA 工作人员将回答。
- 我们正在记录
- 主持人正在做笔记

Valley Transportation Authority
Solutions that move you

Productive Meeting Tips

Consejos para tener una reunión productiva

Mẹo họp hiệu quả

高效會議技巧

- Be **respectful** of one another.
- Please **share time** to allow others to speak.
- Participants will automatically be **muted**.
- Disruptive participants **may** be removed from the meeting.

- Sean respetuosos los unos con los otros.
- Por favor comparta el tiempo de su participación para permitir que otros hablen.
- Los participantes serán silenciados automáticamente.
- Los participantes que causen perturbaciones podrán ser retirados de la reunión.

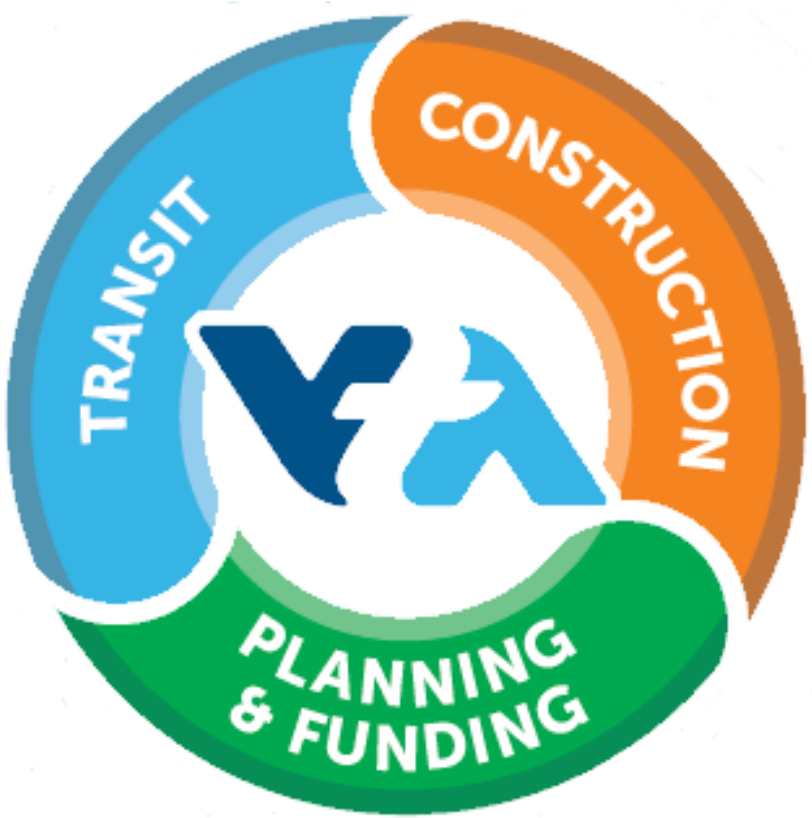
- Hãy tôn trọng lẫn nhau.
- Vui lòng chia sẻ thời gian với người khác để họ có thể nói.
- Người tham gia sẽ tự động bị tắt tiếng.
- Những người tham gia gây cản trở có thể bị mời ra khỏi cuộc họp.

- 互相尊重。
- 請給他人發言的時間。
- 參與者將被自動靜音。
- 搗亂者可能會被踢出會議。

Valley Transportation Authority
Solutions that move you

What does VTA do?
¿Cuál es la función de VTA?
VTA làm gì?
VTA 是做什么的？

- Transit
  Transporte público
  Phương tiện công cộng
  公交
- Construction
  Construcción
  Xây dựng
  建设
- Planning & Funding
  Planificación y financiación
  Lập kế hoạch & Kinh phí
  规划与筹资



Valley Transportation Authority
Solutions that move you

Workshop Goals
Objetivos del taller
Mục tiêu của buổi hội thảo
研讨会目标

- We will share the new program we are developing and potential projects
- You give us feedback on the potential projects and how to make them more valuable to you or your community

- Compartiremos el nuevo programa que estamos desarrollando y los proyectos potenciales.
- Ustedes nos brindarán su opinión sobre los proyectos potenciales y cómo hacerlos más valiosos para ustedes mismos o su comunidad.

- Chúng tôi sẽ chia sẻ chương trình mới mà chúng tôi đang phát triển và các dự án tiềm năng.We're recording this
- Quý vị cung cấp cho chúng tôi phản hồi về các dự án tiềm năng và cách làm cho các dự án này có giá trị hơn đối với quý vị hoặc cộng đồng của quý vị.

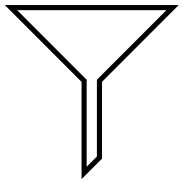
- 我们将分享正在开发的新计划和潜在项目。
- 您可以就潜在项目以及如何使其对您或您的社区更有价值向我们提供反馈意见。

Valley Transportation Authority
Solutions that move you

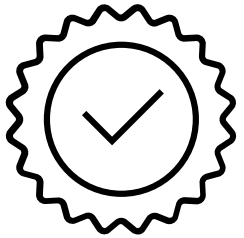
How will we use your input?
¿Cómo usaremos sus comentarios?
Chúng tôi sẽ sử dụng ý kiến đóng góp của quý vị như thế nào?
我們將如何使用您的意見?

1. **Summarize**
   Resumir
   Tóm Tắt
   總結

2. **Filter**
   Filtrar
   Sàng lọc
   篩選並加細



3. **Confirm**
   Confirmar
   Xác Nhận
   確認

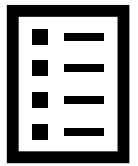


Other ideas for cities, county, VTA

Otras ideas para las ciudades, el condado y VTA

Các ý tưởng khác cho các thành phố, quận và VTA

其他針對城市、縣和VTA的想法



Valley Transportation Authority
Solutions that move you

Demographics/Poll
Demografía/Encuestas
Nhân Khẩu Học/Thăm Dò Ý Kiến
人口統計/民調

Valley Transportation Authority
Solutions that move you

How reducing VMT benefits you

Cómo les beneficia reducir las Millas Recorridas por Vehículo (VMT, por sus siglas en ingles)

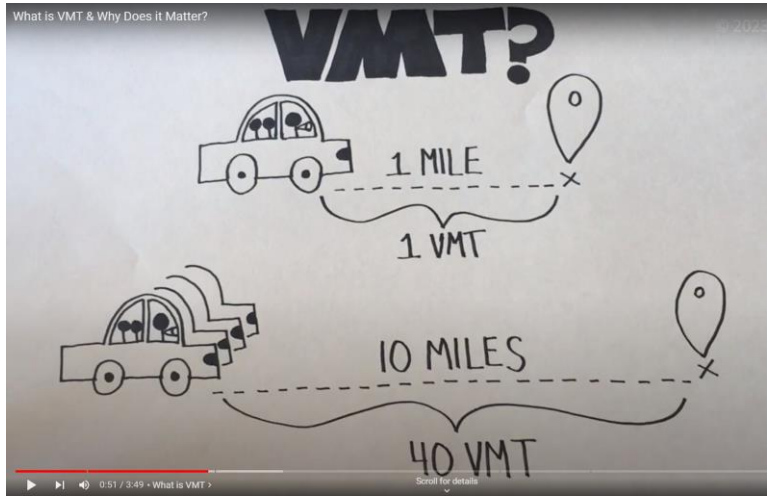
Việc giảm VMT (số dặm xe đã đi) mang lại lợi ích cho quý vị như thế nào

减少 VMT（车辆行驶里程）对您有什么好处

Santa Clara Valley Transportation Authority

Solutions that move you

What is VMT and why does it matter?
¿Qué son las VMT y por qué son importantes?
VMT là gì và tại sao nó lại quan trọng?
什么是 VMT? 为什么它很重要?



Better Air Quality
Mejor calidad del aire
Chất lượng không khí tốt hơn
更好的空氣質量

Less Noise
Menos ruido
Ít tiếng ồn
噪音更低

More Ways to Travel
Más formas de viajar
Nhiều cách hơn để đi du lịch
更多旅行方式

More Active Community
Comunidad más activa
Cộng đồng tích cực hơn
更活躍的社區

Safer Streets
Calles más seguras
Đường phố an toàn hơn
更安全的街道

Other
Otro
Khác
其他

Valley Transportation Authority
Solutions that move you

Project Goals
Objetivos del proyecto
Mục tiêu của dự án
项目目标

We want to **reduce driving** and **expand travel options** for people to get around Santa Clara County in a way that:

- Works across jurisdictional lines
- Improves social equity

Queremos **reducir la conducción de vehículos** y **ampliar las opciones** de viaje para que las personas se desplacen por el Condado de Santa Clara de una manera que:

- Funcione cuando se atraviese las delimitaciones jurisdiccionales
- Mejore la equidad social

Chúng tôi muốn giảm lái xe và mở rộng các lựa chọn đi lại cho mọi người đi lại quanh Quận Santa Clara theo cách:

- Hoạt động trên các ranh giới pháp lý
- Cải thiện công bằng xã hội

我们希望通过以下方式减少驾车出行，扩大人们在圣达卡拉县内的出行选择。

- 跨司法管辖区工作
- 改善社会公平

Valley Transportation Authority
Solutions that move you

Why is this project important?
¿Por qué es importante este proyecto?
Tại sao dự án này lại quan trọng?
该项目为何重要？

- This program could generate millions of dollars in the coming 25 years.
- How do you think these funds should be used to both reduce VMT and benefit your community?

- Este programa podría generar millones de dólares en los próximos 25 años.
- ¿Cómo creen que deberían usarse estos fondos para reducir las VMT y beneficiar a sus comunidades?

- Chương trình này có thể tạo ra hàng triệu đô la trong 25 năm tới.
- Quý vị nghĩ những khoản tiền này nên được sử dụng như thế nào để vừa giảm VMT vừa mang lại lợi ích cho cộng đồng của quý vị?

- 该项目在未来 25 年内将产生数百万美元的收益。
- 您认为应如何使用这些资金来减少 VMT 并造福您所在的社区？

Valley Transportation Authority
Solutions that move you

What we heard from you

Lo que hemos escuchado de ustedes

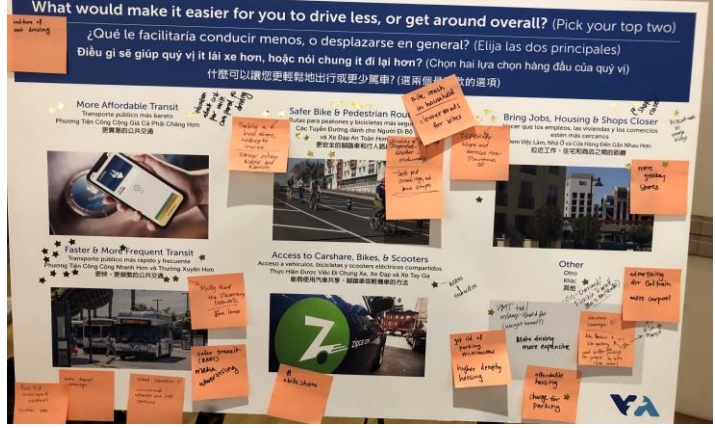
Những gì chúng tôi nghe được từ quý vị

我们从您那里听到了什么

Santa Clara Valley Transportation Authority

Solutions that move you

Broad Community Feedback
Gran cantidad de opiniones dentro de la comunidad
Phản hồi rộng rãi của cộng đồng
广泛的社区反馈



- 730+ comments
- Top Feedback Topics
  - Transit's time and cost
  - Lack of efficient bike/ped routes
  - Safety concerns
  - Need to accommodate kids, pets
  - Driving reduces time and stress - but not everyone is able to drive

- Más de 730 comentarios
- Temas principales de los comentarios
  - Tiempo y costo del Transporte Público
  - Falta de rutas eficientes para bicicletas y peatones
  - Preocupaciones de seguridad
  - Necesidad de acomodos para niños y mascotas
  - Conducir reduce el tiempo y el estrés, pero no todo el mundo sabe conducir

- 730+ bình luận
- Các chủ đề phản hồi hàng đầu
  - Thời gian và chi phí của phương tiện công cộng
  - Thiếu các tuyến đường xe đạp hiệu quả
  - Mối quan tâm về an toàn
  - Cần hỗ trợ trẻ em, vật nuôi
  - Lái xe làm giảm thời gian và căng thẳng - nhưng không phải ai cũng có thể lái xe

- 730 多条评论
- 反馈最多的主题
  - 公交的运营时间和成本
  - 缺乏有效的自行车/步行路线
  - 安全问题
  - 需要照顾孩子和宠物
  - 开车可以节约时间和减压--但并不是每个人都能开车

Valley Transportation Authority
Solutions that move you

Community Feedback
Comentarios de la comunidad
Phản hồi của cộng đồng
社区反馈

"What strategies best solve your biggest transportation challenge?"

"¿Qué estrategias resuelven mejor su mayor dificultad con el transporte?"

"Chiến lược nào giải quyết tốt nhất những khó khăn lớn nhất về giao thông của quý vị?"

"哪些策略最能解决您在交通方面遇到的最大挑战？

389 Responses
Respuestas
phản hồi
条回复

Frequent and Fast Transit Service
Servicio de transporte público frecuente y rápido
Dịch vụ xe công cộng thường xuyên và nhanh chóng
频繁、快速的交通服务

288 Responses
Respuestas
phản hồi
条回复

Biking and Walking Paths
Vías para caminar y utilizar bicicleta
Lối đi xe đạp và đi bộ
腳踏車道和步道

242 Responses
Respuestas
phản hồi
条回复

Many Things To Do Close By
Muchas cosas para hacer cerca
Nhiều điều cần làm gần đó
附近有很多可以做的事

107 Responses
Respuestas
phản hồi
条回复

Change Travel Cost
Cambiar el costo de viaje
Thay đổi chi phí đi lại
改變行程費用

72 Responses
Respuestas
phản hồi
条回复

On-Demand Mobility
Movilidad a través de servicios por pedido
Đi lại dùng nhiều phương tiện khác nhau
按需交通工具

70 Responses
Respuestas
phản hồi
条回复

Transit, Bike & Carpool Incentives
Incentivos para utilizar el transporte público, bicicleta y hacer viajes compartidos
Ưu đãi khi đi xe công cộng, xe đạp & đi chung xe hơi
交通、騎腳踏車和共乘獎勵

Valley Transportation Authority
Solutions that move you

What we did with the input

Qué hicimos con sus comentaros

Những gì chúng tôi đã làm với ý kiến đóng góp

针对该意见，我们做了哪些工作

Santa Clara Valley Transportation Authority

Solutions that move you

What we did with the input
Qué hicimos con sus comentaros
Những gì chúng tôi đã làm với ý kiến đóng góp
针对该意见，我们做了哪些工作

Developed a list of projects that could be funded by this program

1. Prioritize reduction categories
2. Compare to VTA's project list
3. Filter to meet program needs

Se desarrolló una lista de proyectos que podrían ser financiados por este programa

1. Priorización de las categorías referidas a la reducción de las VMT
2. Comparación con la lista de proyectos de VTA
3. Filtrar las ideas para satisfacer las necesidades del programa

Phát triển danh sách các dự án có thể được tài trợ bởi chương trình này

1. Ưu tiên các danh mục để giảm VMT
2. So sánh với danh sách dự án của VTA
3. Sàng lọc để đáp ứng nhu cầu của chương trình

制定了可由该计划资助的项目清单

1. • 优先考虑减少 VMT 的类别
2. • 与 VTA 的项目清单进行比较
3. • 筛选以满足计划需求

Valley Transportation Authority
Solutions that move you

1. Prioritize Reduction Categories
Priorización de las categorías referidas a la reducción
Ưu tiên các danh mục làm giảm
确定减排类别的优先次序

- Does the project meet a community travel challenge?
- Is there a VMT reduction potential?
- Does the project work across jurisdictions?
- Is there city support?

- ¿El proyecto responde a la dificultad que tiene la comunidad con el transporte?
- ¿Existe potencial de reducción de las VMT?
- ¿El proyecto funciona en todas las jurisdicciones?
- ¿Hay apoyo de la ciudad?

- Dự án có đáp ứng được khó khăn đi lại của cộng đồng hay không?
- Có tiềm năng làm giảm VMT không?
- Dự án có hoạt động trên các khu vực pháp lý không?
- Thành phố có hỗ trợ không?

- 项目是否能应对社区出行挑战？
- 是否有减少 VMT 的潜力？
- 该项目是否可跨辖区实施？
- 是否有城市支持？

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Solutions that move you

1. Prioritize **Automobile Travel** Reduction Categories
Priorización de categorías para reducir los viajes por automóvil
Ưu tiên các danh mục làm giảm
确定减排类别的优先次序

1. Transit Infrastructure Improvements

Mejoras a la infraestructura del transporte público

Dự án Transit Capital

公交資本项目

2. Transit Service Improvements

Mejoras en el servicio del transporte público

Cải tiến dịch vụ của phương tiện công cộng

公交服务改善项目

3. Many Things to do Close-By

Mas actividades y cosas que hacer alrededor cercanos

Nhiều hoạt động gần đó

附近有许多活动

4. Bike and Walking Facilities

Infraestructura para caminar y andar en bicicleta

Tiện nghi dành cho xe đạp và đi bộ

自行车和步行设施

5. On-Demand Mobility

Movilidad bajo demanda

Đi lại theo nhu cầu

按需出行

6. Transit, Bike & Carpool Incentives

Incentivos para el uso del transporte público, bicicletas y viajes compartidos

Ưu đãi dành cho phương tiện công cộng, xe đạp & đi chung xe

公交、自行车和拼车激励措施

7. Change in Travel Costs

Cambio en los costos de transporte

Thay đổi chi phí đi lại

出行成本的变化

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Solutions that move you

2. Compare to VTA's Project List
Comparación con la lista de proyectos de VTA
So sánh với Danh sách dự án của VTA
与 VTA 项目清单比较

- King Rd. Bus Speed Improvements
- Senter Rd. Bus Speed Improvements
- VTA Better Bus Stops
- Enhanced Vanpools
- E-Bike Subsidies
- Housing Subsidies
- Incentives to Use Other Modes

- Mejoras en la velocidad de los autobuses en King Road
- Mejoras en la velocidad de los autobuses en Senter Road
- Mejores paradas de los autobús de VTA
- Mejoras de los viajes compartidos en van
- Subsidios para bicicletas eléctricas
- Subsidios de Vivienda
- Incentivos para utilizar otros modos de transporte

- Cải thiện tốc độ xe buýt trên King Road
- Cải thiện tốc độ xe buýt trên Senter Road
- Điểm dừng xe buýt VTA tốt hơn
- Nâng cao việc đi chung xe van
- Trợ cấp xe đạp điện
- Trợ cấp nhà ở
- Ưu đãi khi sử dụng các phương thức vận chuyển khác

- King路公交车提速改进
- Senter路公交车提速改进
- VTA巴士站改进
- 加强拼车服务
- 电动自行车补贴
- 住房补贴
- 鼓励使用其他交通方式

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Solutions that move you

3. Filter to Meet Program Needs
Filtrar las ideas para satisfacer las necesidades del programa
Sàng lọc để đáp ứng nhu cầu của chương trình
为满足计划需求进行筛选

Does project reduce VMT?	¿Este proyecto reduce las VMT?	Dự án này có làm giảm VMT không?	该项目是否能减少VMT？
Could project be implemented quickly?	¿Podría implementarse este proyecto rápidamente?	Dự án này có thể được thực hiện nhanh chóng không?	该项目能否快速实施？
Could project be done in chunks – matching uneven funding?	¿Podría realizarse este proyecto en fases debido al carácter intermitente de la financiación?	Dự án này có thể được thực hiện theo từng giai đoạn do nguồn vốn không liên tục không?	由于拨款时断时续，该项目能否分阶段实施？
Is there already another funding source?	¿Existe ya otra fuente de financiación?	Đã có nguồn tài trợ khác chưa?	是否已有其他筹资来源？

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3. Filter to Meet Program Needs - Results
Filtrar las ideas para satisfacer las necesidades del programa - Resultados
Sàng lọc để đáp ứng nhu cầu của chương trình - Kết quả
为满足计划需求进行筛选 - 结果

- **King Rd. Bus Speed Improvements**
- ~~Senter Rd. Bus Speed Improvements~~
- ~~VTA Better Bus Stops~~
- **Enhanced Vanpools**
- **E-Bike Subsidies**
- ~~Housing Subsidies~~
- ~~Incentives to Use Other Modes~~

- **Mejoras en la velocidad de los autobuses en King Road**
- ~~Mejoras en la velocidad de los autobuses en Senter Road~~
- ~~Mejores paradas de los autobús de VTA~~
- **Mejoras de los viajes compartidos en van**
- **Subsidios para bicicletas eléctricas**
- ~~Subsidios de Vivienda~~
- ~~Incentivos para utilizar otros modos de transporte~~

- **Cải thiện tốc độ xe buýt trên King Road**
- ~~Cải thiện tốc độ xe buýt trên Senter Road~~
- ~~Điểm dừng xe buýt VTA tốt hơn~~
- **Nâng cao việc đi chung xe van**
- **Trợ cấp xe đạp điện**
- ~~Trợ cấp nhà ở~~
- ~~Ưu đãi khi sử dụng các phương thức vận chuyển khác~~

- **King路公交车提速改进**
- ~~Senter路公交车提速改造~~
- ~~VTA巴士站改进~~
- **加强拼车服务**
- **电动自行车补贴**
- ~~住房补贴~~
- ~~鼓励使用其他交通方式~~

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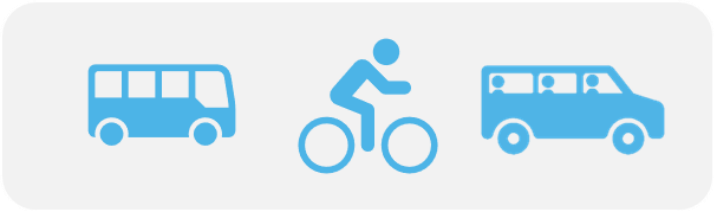
Project Phasing
Fases del proyecto
Giai đoạn dự án
项目分期



- Near-Term
  - Projects that are ready to implement
- A corto plazo
  - Proyectos que están listos para implementarse
- Ngắn hạn
  - Các dự án đã sẵn sàng được thực hiện
- 近期
  - 准备实施的项目

- Long-Term
  - Projects that are more complex and need more study
- A largo plazo
  - Proyectos que son más complejos y necesitan más estudio
- Dài hạn
  - Các dự án phức tạp hơn và cần nghiên cứu thêm
- 长期
  - 更为复杂、需要更多研究的项目

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Clarifying Questions?

Preguntas aclaratorias

Làm rõ các câu hỏi

结果

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Your input on potential project types

Su opinión sobre los tipos de proyectos potenciales

Ý kiến đóng góp của quý vị về các loại dự án tiềm năng

您对潜在项目类型的意见

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Bus Speed Improvements

Mejoras en la velocidad de los autobuses

Cải thiện tốc độ xe buýt

公交车提速

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Bus Speed Improvements
Mejoras en la velocidad de los autobuses
Cải thiện tốc độ xe buýt
公交车提速

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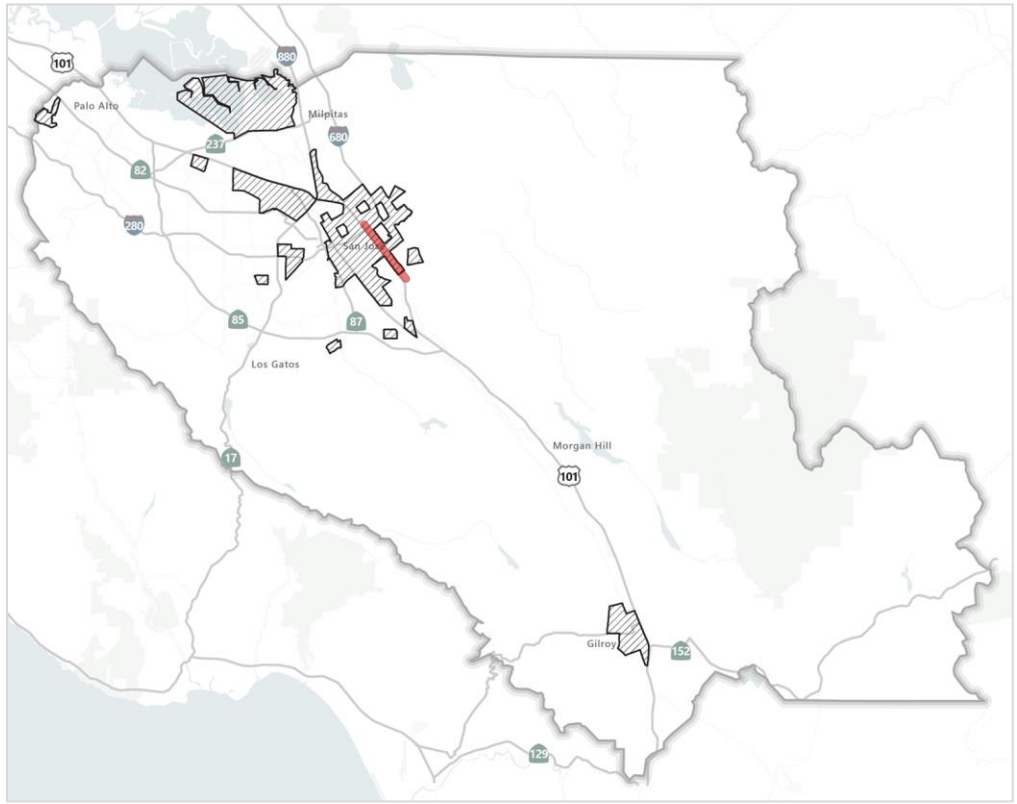
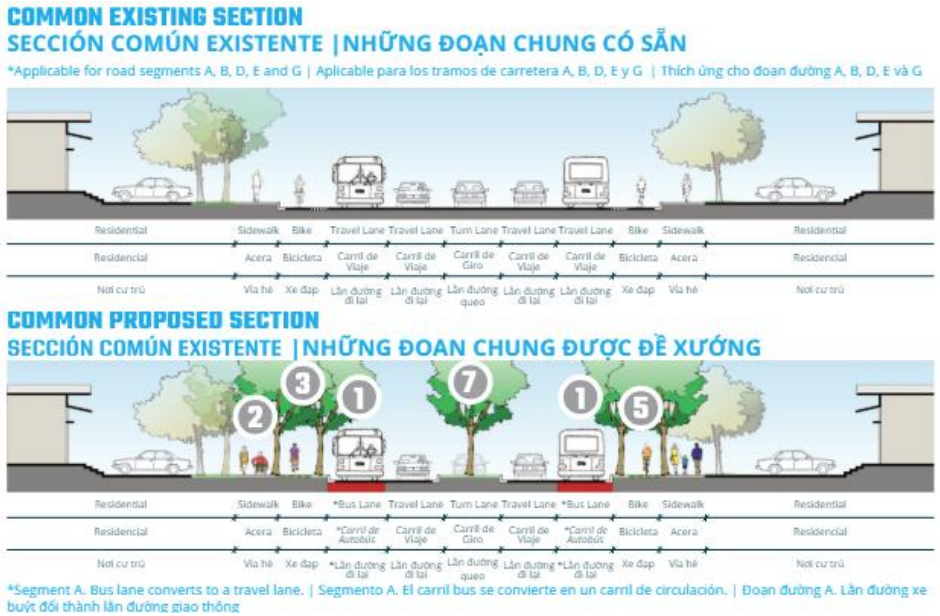
Bus Speed Improvements, Example
Mejoras en la velocidad de los autobuses, ejemplo
Cải thiện tốc độ xe buýt, ví dụ:
公交车提速, 示例

King Road



- Side-running dedicated bus lanes
- Transit boarding islands



Preliminary Designs, City of San José (2023)

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Bus Speed Improvements
Mejoras en la velocidad de los autobuses
Cải thiện tốc độ xe buýt
公交车提速

VTA High-Capacity Corridors Map

Figure 8 shows the investments needed to create VTA's high-capacity transit network. Designations are provided for each corridor segment to identify the anticipated implementation period (i.e., Near Term or Long Term) and level of investment (i.e., Tier 1 or 2).

- Tier 1, Near Term
- Tier 1, Long Term
- Tier 2

TIER 1
Bus only lanes, bus stop enhancements (including first/last mile accessibility), and transit signal priority measures.

TIER 2
Transit signal priority, queue jump lanes, and bus stop enhancement measures.

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E-Bike Subsidies

Subsidios para bicicletas eléctricas

Trợ cấp xe đạp điện

电动自行车补贴

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E-Bike Subsidies
Subsidios para bicicletas eléctricas
Trợ cấp xe đạp điện
电动自行车补贴

- Electric assisted bike (e-bike)
- 15-28 mph, 3-10 miles/trip
- Use for social outings, appointments, errands, school, work commuting
- Can be implemented throughout the region

- Bicicleta que cuenta con energía eléctrica (e-bike)
- 15-28 mph, 3-10 millas por viaje
- Úsela para salidas sociales, citas, mandados, escuela, transporte al trabajo
- Se puede implementar en toda la región

- Xe đạp điện (e-bike)
- 15-28 mile/giờ, 3-10 mile/chuyến
- Sử dụng cho các chuyến đi chơi bên ngoài, các cuộc hẹn, việc vặt, đi học, đi làm
- Có thể triển khai trên toàn khu vực

- 电动辅助自行车（电动自行车）
- 15-28 mph, 3-10 英里/出行
- 用于社交活动、约会、差事、上学、上下班通勤
- 可在整个地区推行

Applies to regular, cargo, adaptive e-bikes

Se aplica a bicicletas eléctricas normales, de carga y adaptadas

Áp dụng cho xe đạp điện thông thường, xe đạp điện chở hàng và xe đạp điện dành cho người khuyết tật

适用于普通电动自行车、货运电动自行车和自适应电动自行车

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E-Bike Subsidies, Example
Subsidios para bicicletas eléctricas, ejemplo
Trợ cấp xe đạp điện, ví dụ:
电动自行车补贴, 示例

Mountain View E-Bike Voucher

- $1,000-$1,500 voucher for low to moderate income residents to purchase a new electric bike
- Voucher amount adjusted for household size and income
- Purchase facilitated by local shop

Cupón para bicicletas eléctricas de la Ciudad de Mountain View

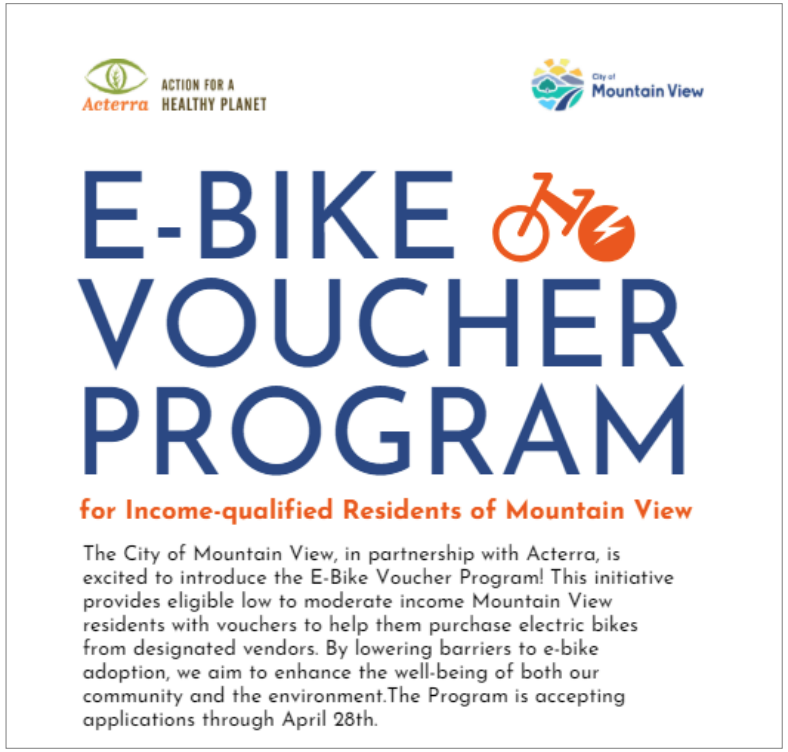
- Cupón de $1,000 a $1,500 para residentes con ingresos bajos a moderados para comprar una nueva bicicleta eléctrica
- Monto del cupón ajustado según el tamaño de la familia y los ingresos
- Compra facilitada a través de una tienda local

Phiếu giảm giá xe đạp điện của Thành phố Mountain View

- Phiếu giảm giá xe đạp điện mới $1,000-$1,500 dành cho cư dân có thu nhập từ thấp đến trung bình
- Số tiền phiếu giảm giá được điều chỉnh theo số người trong gia đình và thu nhập
- Việc mua hàng được hỗ trợ bởi cửa hàng địa phương

山景城(Mountain View)电动自行车代金券

- 为中低收入居民提供 $1,000-$1,500 的代金券，用于购买一辆新的电动自行车
- 根据家庭人口和收入调整代金券金额
- 由当地商店协助购买



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Enhanced Vanpools

Mejoras de los viajes compartidos en van

Nâng cao việc đi chung xe van

增强型拼车

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Existing Vanpools
Viajes compartidos en van actuales
Trợ cấp xe đạp điện, ví dụ:
电动自行车补贴, 示例

Bay Area Vanpool Program

- 7-15 people commuting together and sharing driving responsibilities
- $900 subsidy ($500 from MTC, $400 from VTA)
- Partnership with Enterprise Rent-a-Car

Programa de viajes compartidos en van del área de la Bahía

- 7-15 personas viajan juntas y comparten responsabilidades en cuanto a la conducción
- Subsidio de $900 ($500 de la Comisión de Transporte Metropolitano, $400 de VTA)
- Asociación con Enterprise Rent-a-Car

Chương trình đi chung xe van của Bay Area

- 7-15 người đi lại cùng nhau và chia sẻ trách nhiệm lái xe
- Trợ cấp $900 ($500 từ Ủy ban Giao thông Đô thị, $400 từ VTA)
- Hợp tác với Enterprise Rent-a-Car

湾区拼车计划

- 7-15 人一起通勤并分担驾驶责任
- $900 补贴（$500 来自大都会交通委员会，$400 来自 VTA）
- 与企业型租车公司合作

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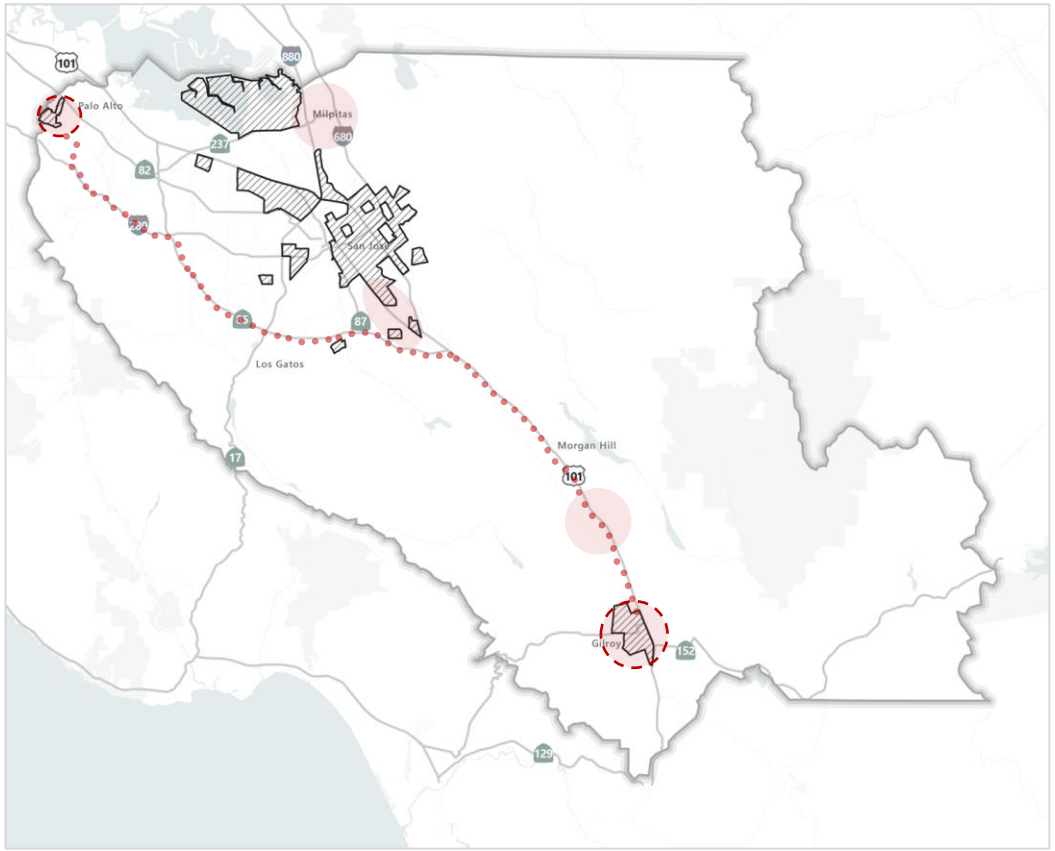
Enhanced Vanpools, Example
Mejoras de los viajes compartidos en van, ejemplo
Nâng cao việc đi chung xe van, ví dụ:
增强型拼车，示例



- Larger subsidies for shift worker vanpools (e.g., agricultural, warehouse / industrial)
- Assistance in forming vanpools with co-workers who live nearby
- Applies countywide

- Mayores subsidios para los viajes compartidos en van de trabajadores que laboran por turnos (por ejemplo, agrícolas, industriales)
- Asistencia en la organización de viajes compartidos en van con compañeros de trabajo que viven cerca
- Se aplica en todo el Condado

- Trợ cấp nhiều hơn cho việc đi chung xe van của công nhân làm việc theo ca (ví dụ: nông nghiệp, công nghiệp)
- Hỗ trợ thiết lập việc đi chung xe van với đồng nghiệp sống gần đó
- Áp dụng trên toàn quận

- 为轮班工作（如农业、工业）的工人拼车提供更多补贴
- 协助与住在附近的同事组成拼车小组
- 适用于全县

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What Do We Need Input on?
¿Sobre qué necesitamos información?
Chúng tôi cần ý kiến đóng góp về điều gì?
我们需要哪方面的意见？

- How valuable are these project types to you or your community?
- How can the projects be tailored to meet your needs or your community's needs?
- How can these project types most advance social equity in Santa Clara County?

- ¿Qué valor tienen estos tipos de proyectos para usted o su comunidad?
- ¿Cómo se pueden adaptar los proyectos para satisfacer sus necesidades o las de su comunidad?
- ¿Cómo pueden estos tipos de proyectos promover más la equidad social en el Condado de Santa Clara?

- Những loại dự án này có giá trị như thế nào đối với quý vị hoặc cộng đồng của quý vị?
- Làm thế nào các dự án có thể được điều chỉnh để đáp ứng nhu cầu của quý vị hoặc nhu cầu của cộng đồng của quý vị?
- Làm thế nào các loại dự án này có thể thúc đẩy công bằng xã hội nhất ở Quận Santa Clara?

- 这些项目类型对您或您所在社区的价值有多大？
- 如何调整这些项目以满足您或您社区的需求？
- 这些项目类型如何才能最大程度地促进圣达卡拉县的社会公平？

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Bus Speed Improvements
Mejoras en la velocidad de los autobuses
Cải thiện tốc độ xe buýt
公交车提速

- Group feedback
- Comentarios del grupo
- Phản hồi của nhóm
- 小组反馈

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E-Bike Subsidies
Subsidios para bicicletas eléctricas
Trợ cấp xe đạp điện
电动自行车补贴

- Group feedback
- Comentarios del grupo
- Phản hồi của nhóm
- 小组反馈

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Enhanced Vanpools
Mejoras de los viajes compartidos en van
Nâng cao việc đi chung xe van
增强型拼车

- Group feedback
- Comentarios del grupo
- Phản hồi của nhóm
- 小组反馈

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Social Equity
Equidad Social
Công bằng xã hội
社会公平

- How can these project types most advance social equity in Santa Clara County?
- ¿Cómo pueden estos tipos de proyectos promover más la equidad social en el Condado de Santa Clara?
- Làm thế nào các loại dự án này có thể thúc đẩy công bằng xã hội nhất ở Quận Santa Clara?
- 这些项目类型如何能最大程度地促进圣达卡拉县的社会公平？

Next Steps

Próximos pasos

Các bước tiếp theo

下一步计划

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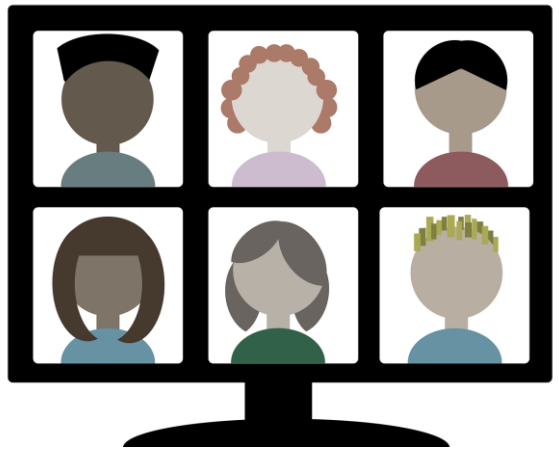
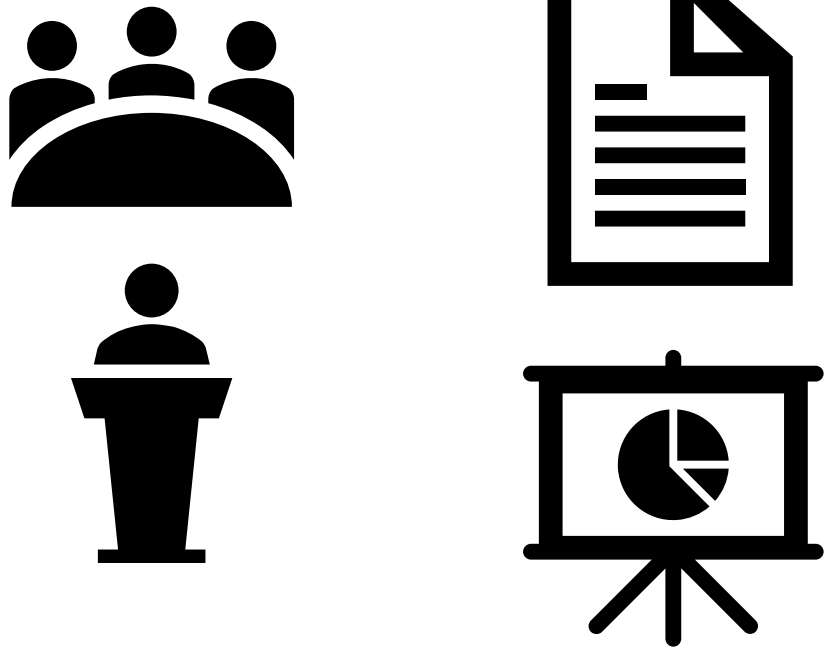
How will we use your input?
¿Cómo usaremos sus comentarios?
Chúng tôi sẽ sử dụng ý kiến đóng góp của quý vị như thế nào?
我們將如何使用您的意見?





Thank you!
¡Gracias!
Cảm ơn quý vị!
谢谢!

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Stay tuned on
Entérese de todo lo que pasa en
Tiếp tục theo dõi trên
請繼續關注

Website: www.vta.org/EquitableVMT
Email: community.outreach@VTA.org

Appendix J3: VTA and Local Jurisdiction Workshop Presentation

Valley Transportation Authority

Equitable VMT Mitigation Program for Santa Clara County

Local Jurisdiction Staff Workshop
May 13, 2024

Santa Clara Valley Transportation Authority
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FEHR PEERS

Agenda

Welcome & Project Team Introductions	1:30 pm
Summary of Phase I Engagement	1:35 pm
What we did with the Phase I Input	1:45 pm
Exercise: Example VMT Mitigation Actions	2:00 pm
Exercise: Draft Program Structure Recommendation	2:20 pm
Exercise: Who is the Sponsor?	2:40 pm
Schedule Update and Next Steps	2:55 pm

Summary of Phase I Engagement

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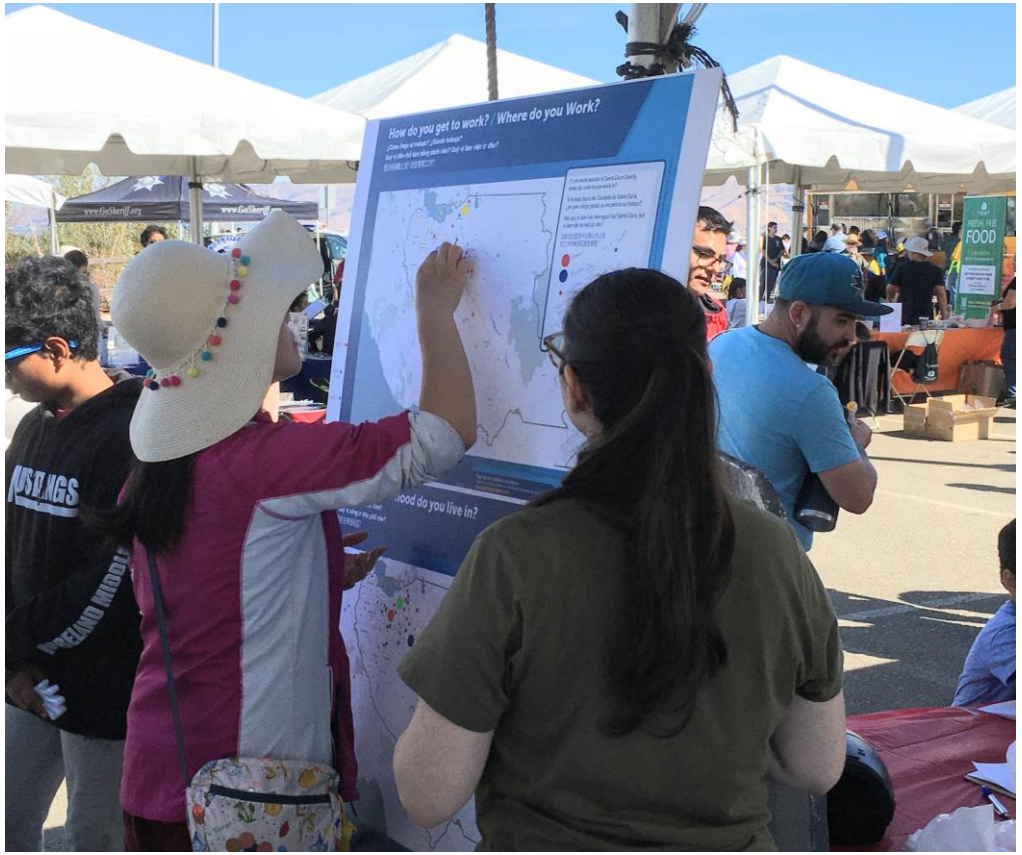
Goals

- Solicit **broad feedback** from an extensive spectrum of stakeholders and community members.
- Gather information on existing travel behaviors, challenges, and needs. (Community)
- Gather information on existing VMT mitigation practices. (Local Jurisdictions)
- Combine feedback into a broad set of **VMT reduction projects**. (Everyone)



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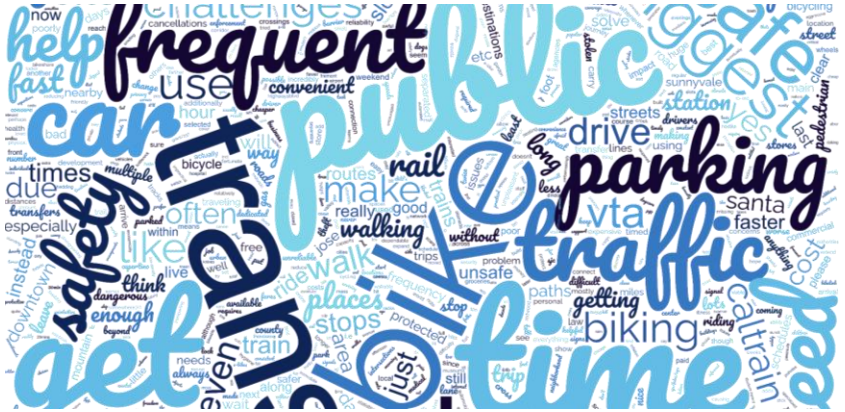
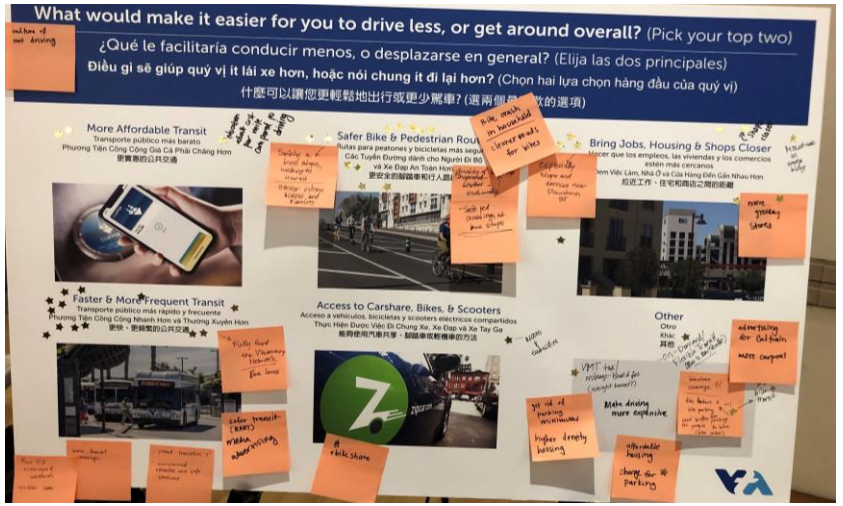
Broad Community Feedback

- 730+ unique pieces of feedback
- Sample feedback topics
  - Transit's travel time and financial burden
  - Lack of efficient bike/ped routes
  - Safety concerns
  - Need to accommodate kids, pets
  - Using a car reduces time and stress but not everyone is able to drive





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Community Feedback

"What strategies best solve your biggest transportation challenge?"

- **Frequent and Fast Transit (389)**
- **Biking and Walking Paths (288)**
- **Many Things to do Close-By (242)**
- Change Travel Costs (107)
- On-Demand Mobility (72)
- Transit, Bike and Carpool Incentives (70)

CBO Focus Group Feedback

"What transportation challenges do your community members face?"

- High cost of transit with low frequency and long travel times
- Difficulty accessing transit stops and/or key amenities
- Limited neighborhood walkability/ bikeability, poor lighting

"What would solve the biggest challenges community members face?"

- Enhanced bike/ped facilities
- Improved frequency of transit
- Increased visibility of the range of transit services, fare options
- Education about transit and micromobility incentives

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Local Jurisdiction Feedback

"Most useful VMT mitigation measures?"

- **Access to Vehicles (80)**
- **Mobility Services (58)**
- **TDM Programs and Incentives (45)**
- Transit Services (40)
- Land Use Strategies (37)
- Active Transportation Facilities (34)

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What we did with the Phase I Input

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What we did with the Phase I Input

Selection process for VMT mitigation actions:

1. VMT reduction category priorities
2. Example VMT reduction projects
3. Example VMT mitigation actions

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VMT Reduction Categories: Prioritization Scheme

- Meeting community travel challenge
- VMT reduction potential
- Inter-jurisdictional
- Local jurisdiction support
- Implementation challenge for a countywide agency
- Project type (capital vs. operations)

VMT Reduction Category Priorities

What are the results of the VMT reduction category prioritization?

- Transit: Capital Enhancements
- Transit: Operational Enhancements
- Many Things to do Close-By
- Bike and Walking Facilities
- On-Demand Mobility
- Transit, Bike and Carpool Incentives
- Change in Travel Costs

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Sample Projects and Plan Sources

- VTA TDM Program
- Multimodal Improvement Plans
- City/County Bike and Ped Plans
- Microtransit Service Plans
- VTA High-Capacity Transit Study

- Valley Transportation Plan (VTP) 2040
- Community Based Transportation Plans
- MTC Regional Vanpool Program
- Many more!

Filtering Example VMT Reduction Projects

Could be implemented relatively quickly and are applicable to a variety of locations around the County?

- King Road Transit Speed and Reliability
- Senter Road Transit Priority Improvements
- VTA Better Bus Stops
- Enhanced Vanpools
- Subsidies for E-Bikes
- Housing Relocation Subsidy Program
- Incentives & Promotions to Use Other Modes

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Filtering Example VMT Reduction Projects

Are relatively inexpensive and/or can be scaled up or down easily?

- King Road Transit Speed and Reliability
- Senter Road Transit Priority Improvements
- VTA Better Bus Stops
- Enhanced Vanpools
- Subsidies for E-Bikes
- ~~Housing Relocation Subsidy Program~~
- Incentives & Promotions to Use Other Modes

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Filtering Example VMT Reduction Projects

Align with the community input from Phase I and can be designed to benefit EPC areas or populations?

- King Road Transit Speed and Reliability
- Senter Road Transit Priority Improvements
- VTA Better Bus Stops
- Enhanced Vanpools
- Subsidies for E-Bikes
- ~~Housing Relocation Subsidy Program~~
- ~~Incentives & Promotions to Use Other Modes~~

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Filtering Example VMT Reduction Projects

Have substantive VMT reduction potential?

- King Road Transit Speed and Reliability
- Senter Road Transit Priority Improvements
- ~~VTA Better Bus Stops~~
- Enhanced Vanpools
- Subsidies for E-Bikes
- ~~Housing Relocation Subsidy Program~~
- ~~Incentives & Promotions to Use Other Modes~~

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Filtering Example VMT Reduction Projects

Do not already have funding from other sources?

- King Road Transit Speed and Reliability
- ~~Senter Road Transit Priority Improvements~~
- ~~VTA Better Bus Stops~~
- Enhanced Vanpools
- Subsidies for E-Bikes
- ~~Housing Relocation Subsidy Program~~
- ~~Incentives & Promotions to Use Other Modes~~

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Example VMT Mitigation Actions

Bus Speed Improvements

Street improvements in equity priority communities

E-Bike Subsidies

For equity priority communities to purchase an e-bike

Enhanced Vanpools

For agriculture, manufacturing, service, healthcare workers, etc.

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Exercise: Example VMT Mitigation Actions

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Input on Example VMT Mitigation Actions

- Are these VMT mitigation actions best delivered by a countywide program? Why or why not?
- Can the VMT mitigation actions be refined?

Bus Speed Improvements

E-Bike Subsidies

Enhanced Vanpools

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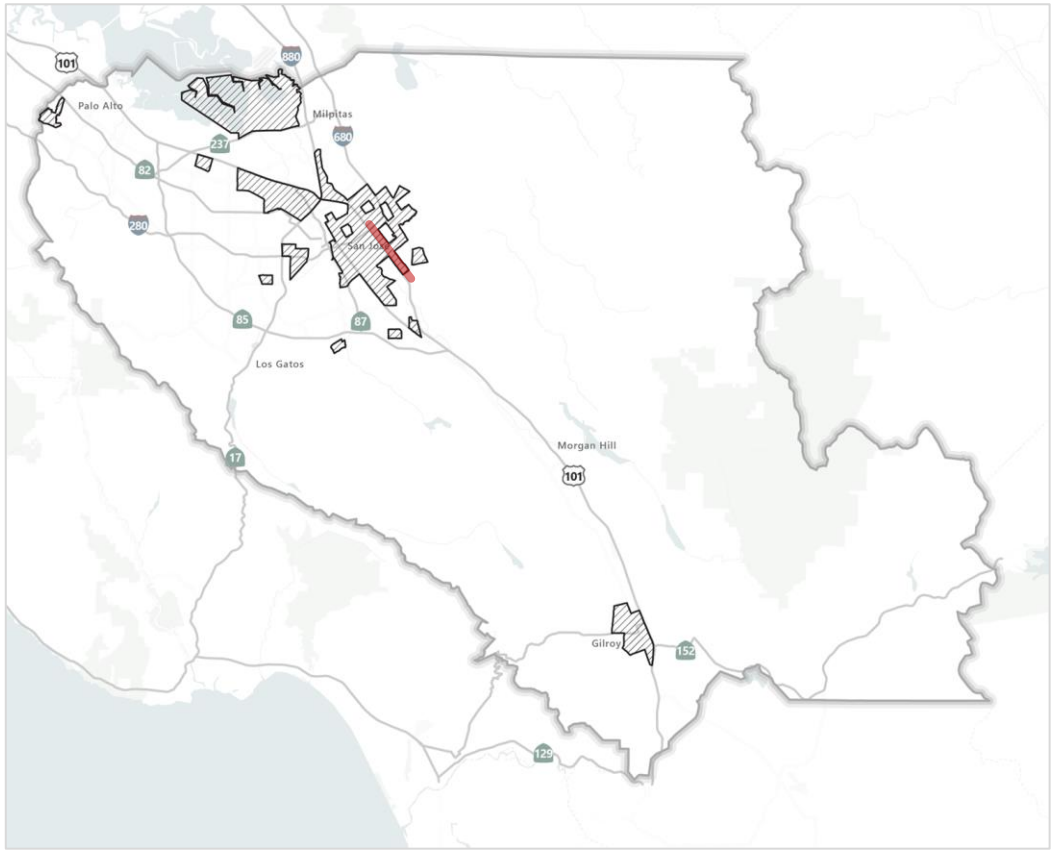
Solutions that move you

Bus Speed Improvements

Santa Clara Valley Transportation Authority

Solutions that move you

Bus Speed Improvements

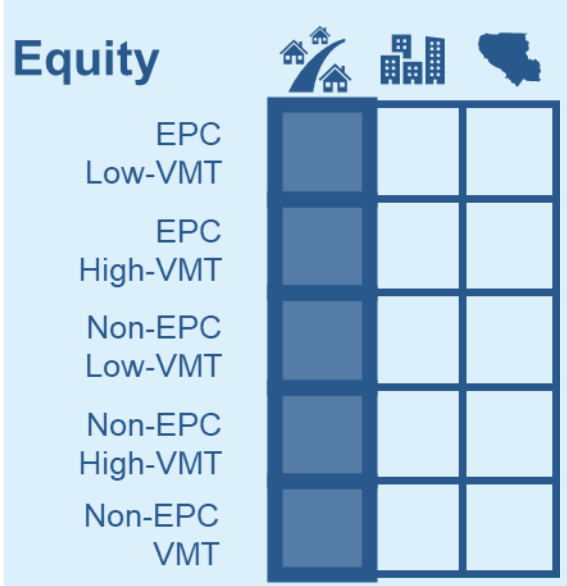


VMT Reduction Cost

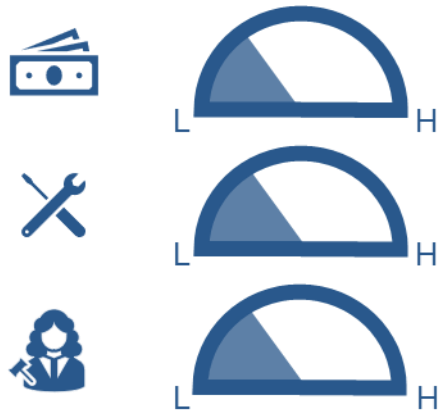
<100 VMT

>$15 / VMT

Equity



Feasibility Challenge



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Bus Speed Improvements

VTA High-Capacity Corridors Map

Figure 8 shows the investments needed to create VTA's high-capacity transit network. Designations are provided for each corridor segment to identify the anticipated implementation period (i.e., Near Term or Long Term) and level of investment (i.e., Tier 1 or 2).

- Tier 1, Near Term
- Tier 1, Long Term
- Tier 2

TIER 1
Bus only lanes, bus stop enhancements (including first/last mile accessibility), and transit signal priority measures.

TIER 2
Transit signal priority, queue jump lanes, and bus stop enhancement measures.

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E-Bike Subsidies

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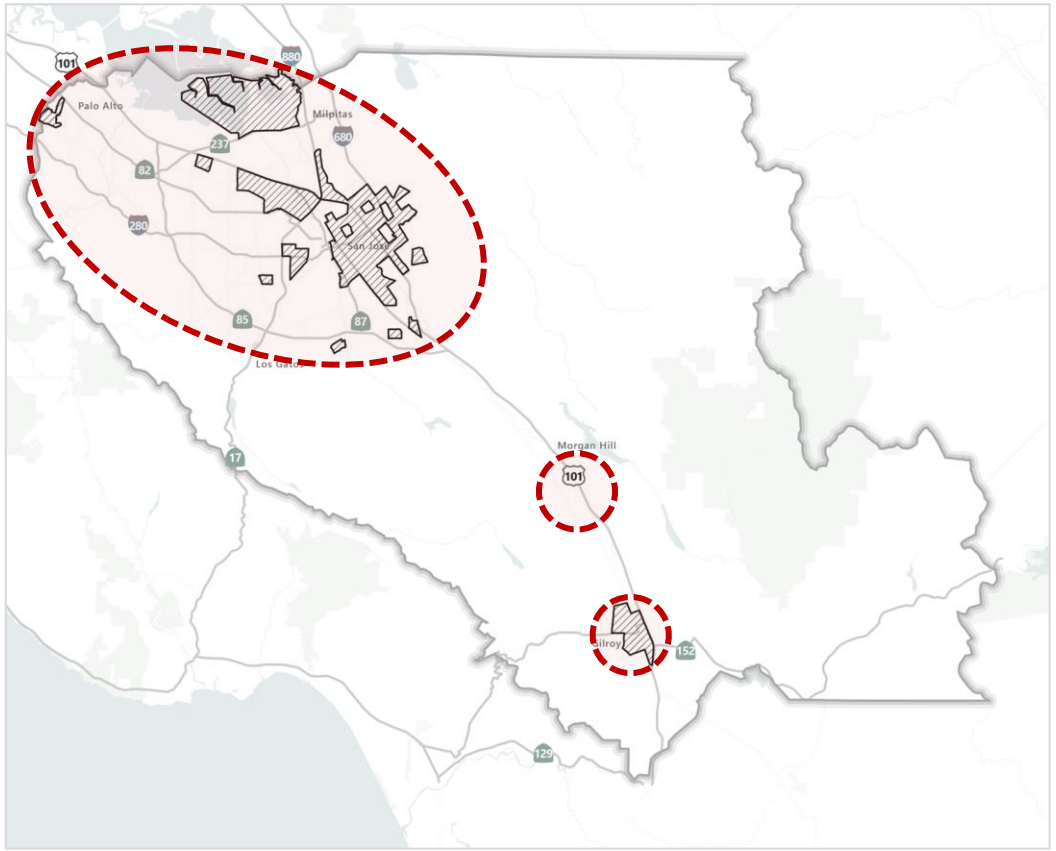
E-Bike Subsidies



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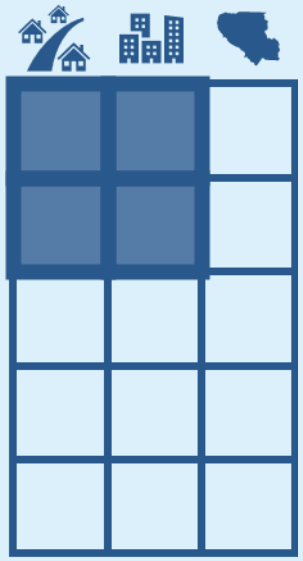
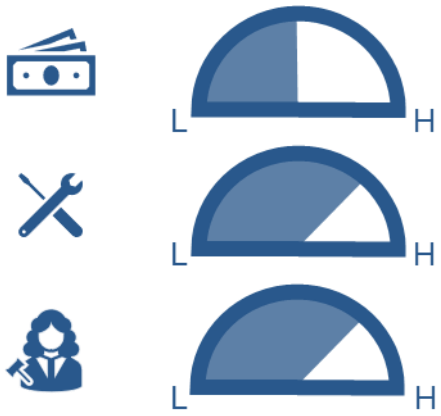


VMT Reduction Cost

7,500-13,000 VMT

$0.60-$0.30/VMT

Feasibility Challenge



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Enhanced Vanpools

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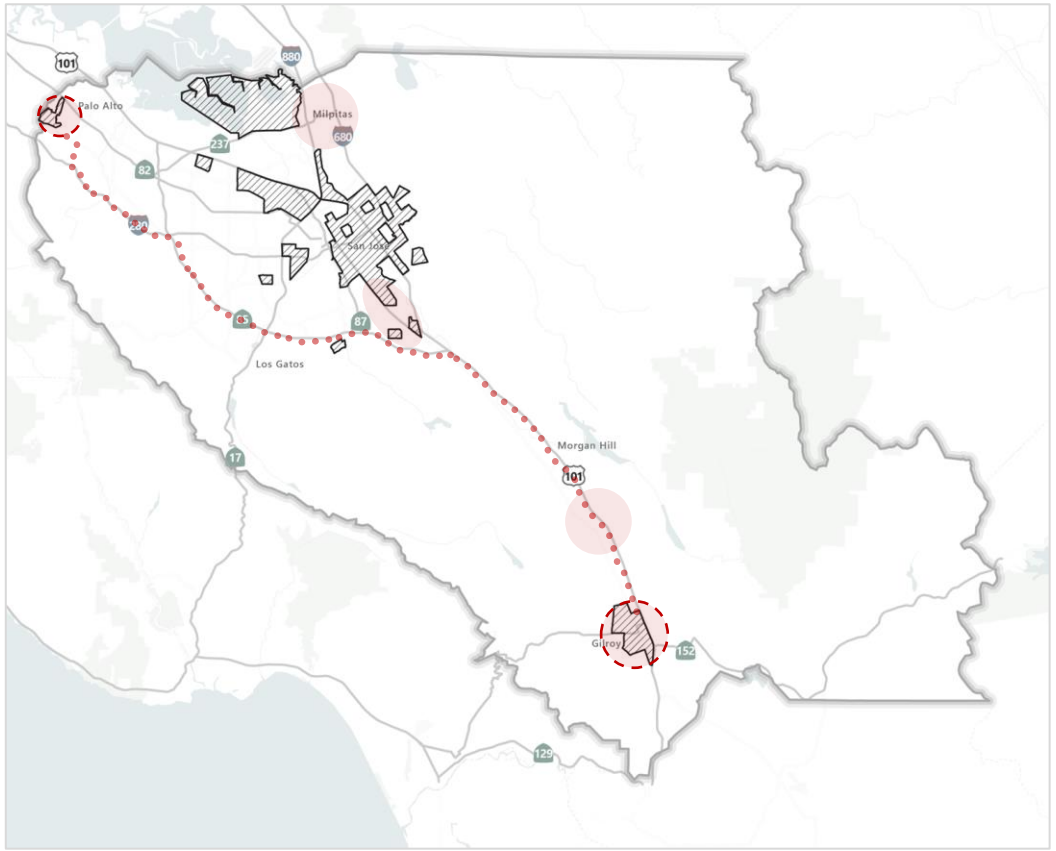
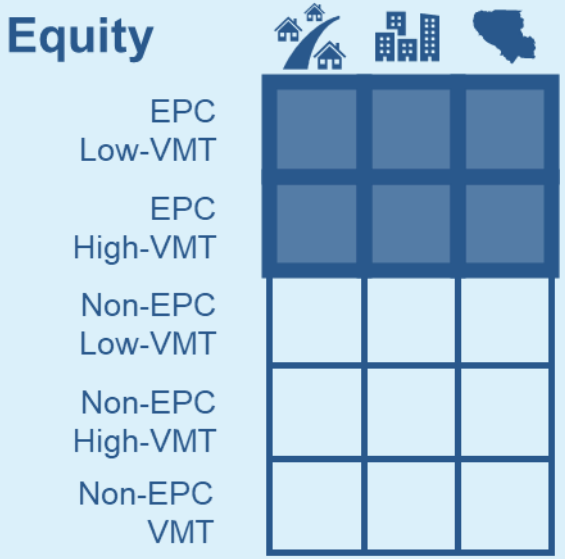
Enhanced Vanpools



Equity

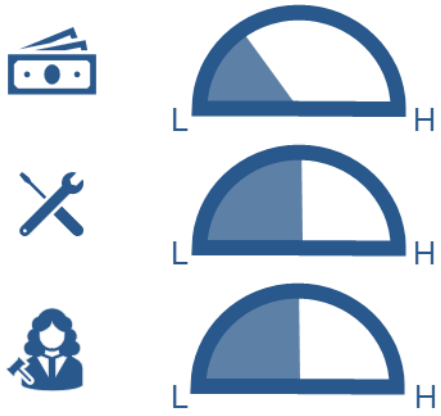


VMT Reduction Cost

11,800-34,700 VMT

$0.50/VMT

Feasibility Challenge



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Exercise: Draft Program Structure Recommendation

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Solutions that move you

Example VMT Mitigation Actions Evaluated

Bus Speed Improvements

Roadway improvements in equity priority communities

E-Bike Subsidies

For equity priority communities to purchase an e-bike

Enhanced Vanpools

For agriculture, manufacturing, service, healthcare workers, etc.

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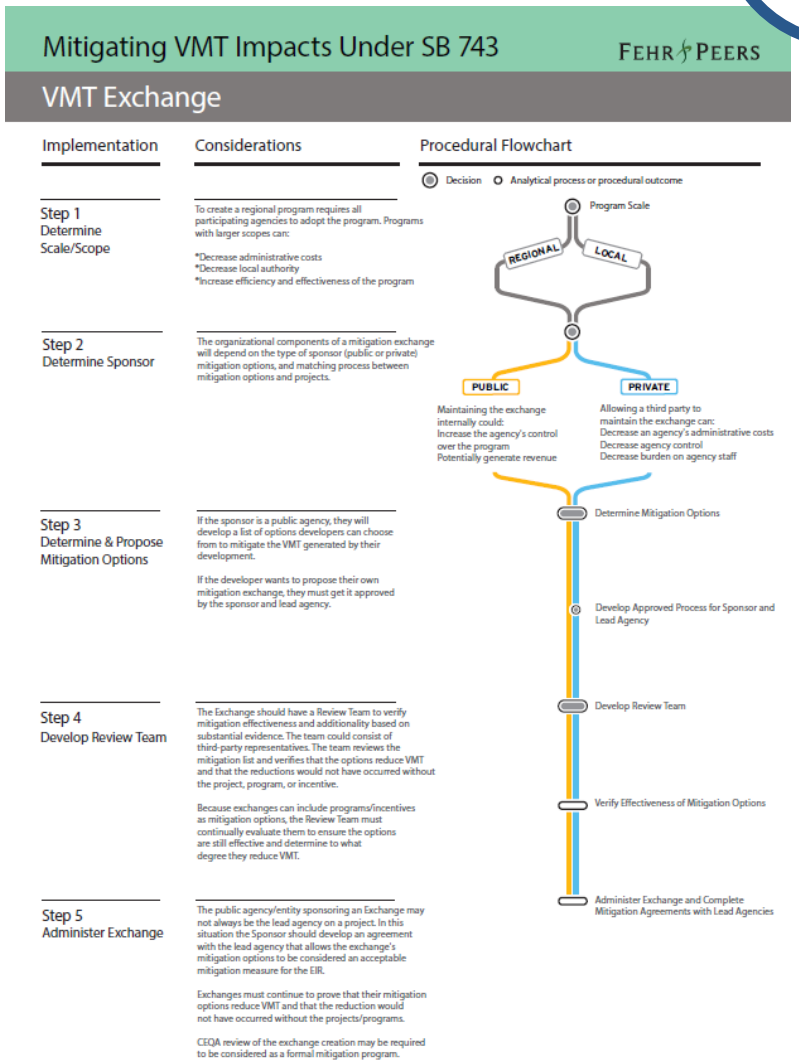
Draft Program Structure Recommendation

- Countywide VMT exchange adopted by participating agencies
- Sponsor organization?
- List of VMT mitigation actions
- Review team for effectiveness and additionality
- On-going monitoring and CEQA for program



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Why a VMT Exchange?

VMT-Based Impact Fee	VMT Exchange	VMT Bank
✓ Easy to understand	✓ Flexible	✓ Flexible
✓ Modest administrative burden (many agencies are already familiar with administering impact fee programs)	✓ Moderate administrative burden (less than a Bank)	✓ Can split funding between applicants
✓ Funds tangible improvements	✓ Can fund programs and operations	✓ Can fund programs and operations
– Can only be used toward capital improvements	– Applicants must fund entire mitigation	– High administrative burden
	– First-in problem, the most cost-effective measures will be funded first	

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VMT Exchange?

- What else do you need to know about a VMT exchange?
- Would a VMT exchange benefit your community?
  - Yes, what do you like?
  - No, what would you prefer?
- Polling Question: Rank the program type options from 1 (most desirable) to 3 (least desirable).

Exercise: Who is the sponsor?

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Who is the sponsor?

- What are the options?
  - VTA
  - Joint Powers Board – like Caltrain
  - New Agency – like Santa Clara Valley Habitat Agency
  - Private Agency – untried approach

Who is the sponsor?

- Knowing the VMT reduction projects the program would deliver and the draft program structure:
  - What are the benefits of VTA being the sponsor of the program?
  - What are the challenges?
- Polling Question: Rank the sponsor options from 1 (most desirable) to 4 (least desirable).

Next Steps

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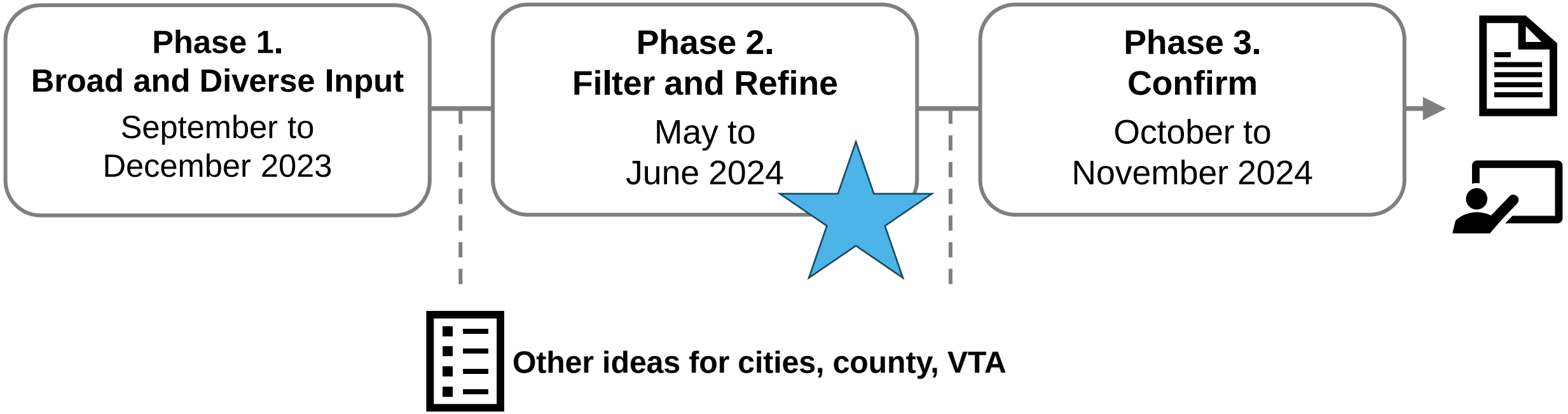
How will we use your input?



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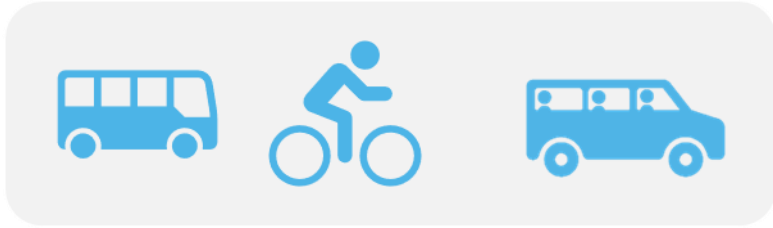
VMT Mitigation Action Phasing

- Near-Term
  - Mitigation actions that are ready to implement



- Long-Term
  - Mitigation actions that are more complex to implement and will need additional study

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Phase II Engagement Events – Help Spread the Word!

Event	Date	Time	Location	Audience
VTA Staff Workshop	Thursday 5/2	1-2:30 PM	Virtual – Teams	VTA Staff
Local Jurisdiction Workshop	Monday 5/13	1:30-3 PM	Virtual – Teams	Local jurisdiction staff
CBO Staff Workshop	Thursday 5/16	2:30-4 PM	Virtual – Teams	CBO Staff
SJSU Mineta Research Snaps webinar	Tuesday 5/21	12-12:30 PM	Virtual – Zoom	Students, researchers, agency staff, general public
East San José Community Workshop	Tuesday 5/21	6:30-8 PM	Alum Rock Branch Library	General public, Catalyze SV constituents
South County Community Workshop	Thursday 5/23	6-7:30 PM	Gilroy Senior Center	General public, Carry the Vision constituents
Virtual Community Workshop	Thursday 5/30	6-7:30 PM	Virtual – Zoom	General Public

Plus individual meetings
with agencies and organizations, ongoing

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Thank you!

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Program Administration

Santa Clara Valley Transportation Authority

Solutions that move you

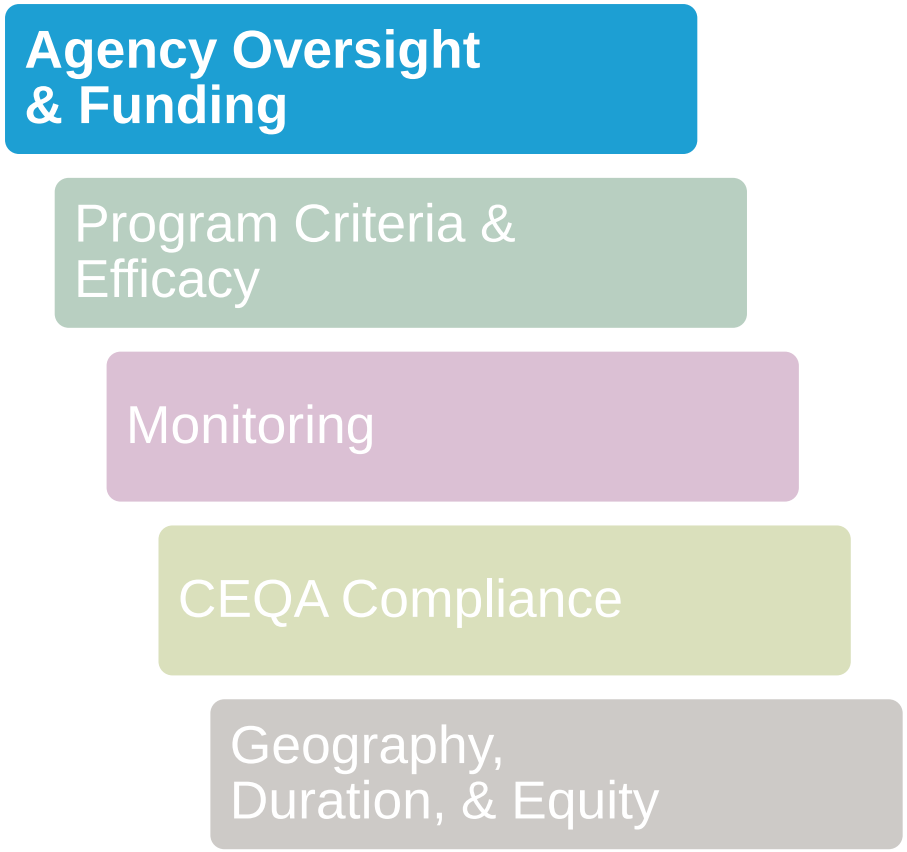
Program Administration Recommendations:
Agency Oversight Funding

Who pays who?

- Project applicant pays the VMT exchange agent (the sponsor)

Who implements the mitigation action?

- VMT exchange agent/ implementing agency



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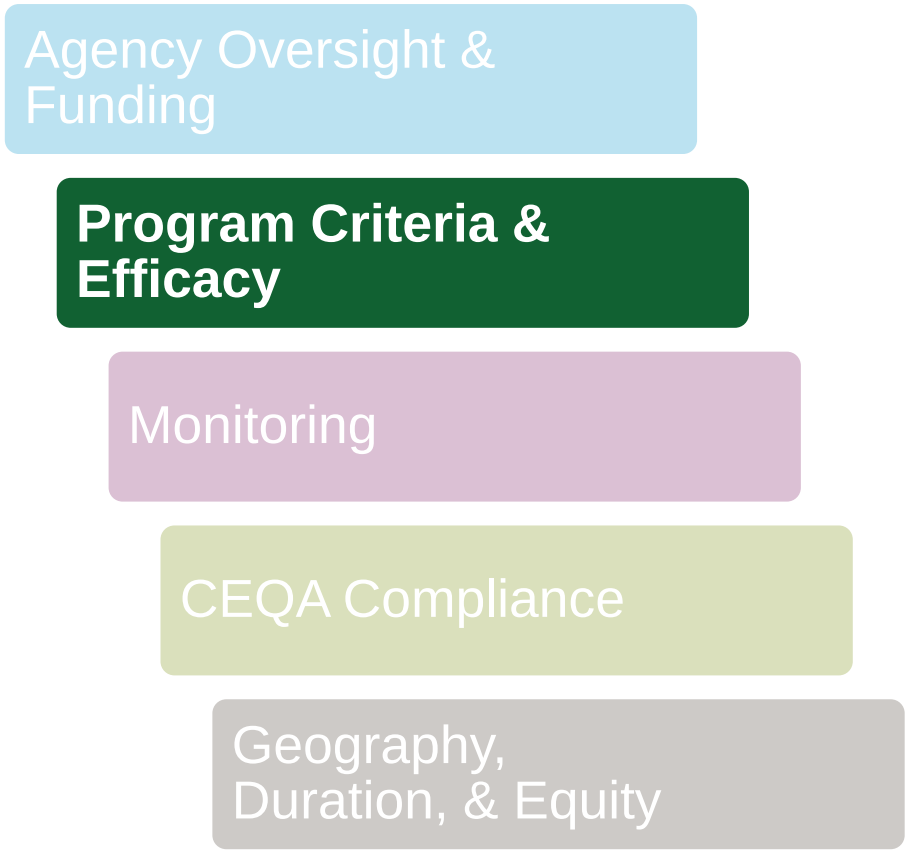
Program Administration Recommendations:
Program Criteria and Efficacy

What types of mitigation actions can be funded?

- Capital improvements
- Programs
- Services
- Operations and maintenance efforts



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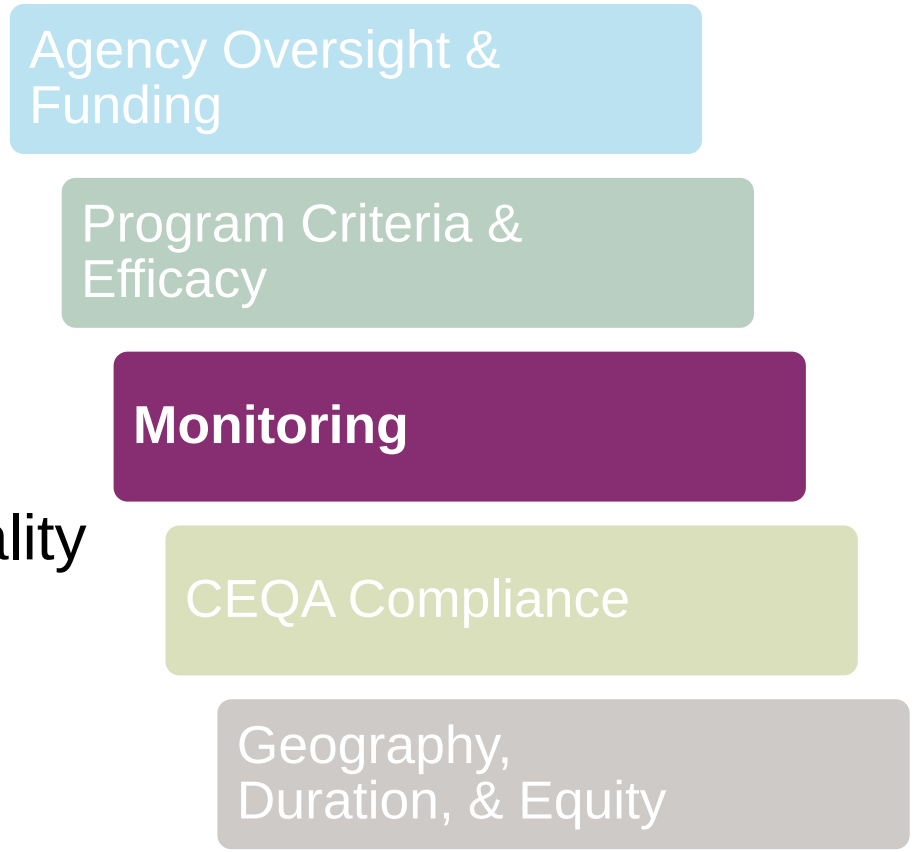
Program Administration Recommendations:
Monitoring

Agreement between sponsor and lead agency on what is evaluated:

- Timing of implementation
- Evidence and frequency of monitoring for VMT reduction effectiveness and additionality
- Mitigation life span
- On-going monitoring
- Method for unique MMRP requirements



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Program Administration Recommendations:
Monitoring

Who evaluates the mitigation action?

- Exchange agent review team evaluates the mitigation action

How frequently does evaluation occur?

- Evaluation frequency established in the agreement between the sponsor and the lead agency

Agency Oversight & Funding

Program Criteria & Efficacy

Monitoring

CEQA Compliance

Geography, Duration, & Equity

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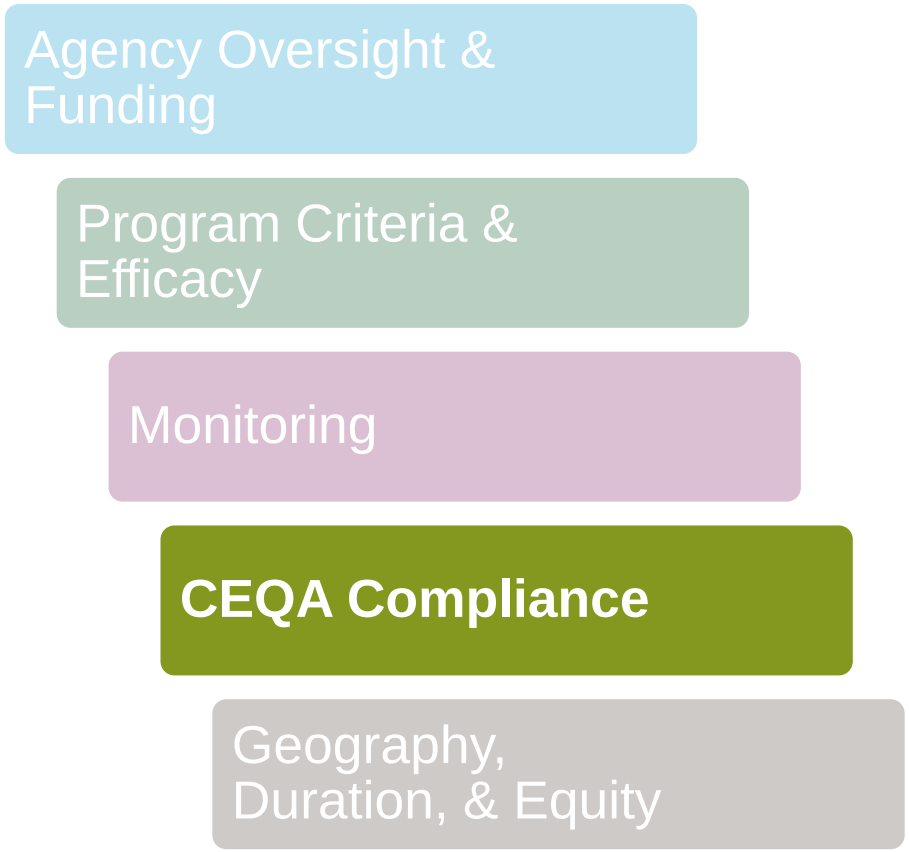
Program Administration Recommendations:
CEQA Compliance

What is the CEQA mitigation potential?

- Potential for full mitigation to less-than-significant, depending on magnitude and duration of VMT reduction activities selected.
- Agreement to define availability and life span of VMT mitigation.



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Solutions that move you

Program Administration Recommendations:
Other Requirements

Other requirements

- Address statutory law
- Consistency with other plans and programs
- This project's equity framework

Agency Oversight & Funding

Program Criteria & Efficacy

Monitoring

CEQA Compliance

Geography, Duration, & Equity

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Appendix K:
Phase 3 - Confirm

Valley Transportation Authority

Phase 3 Engagement Summary

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Content to be provided after the

conclusion of Phase 3 engagement

Appendix L: Technical Advisory Group

Valley Transportation Authority

Technical Advisory Group

Roster

The Technical Advisory Group for the VTA Equitable VMT Mitigation Program is comprised of the following individuals representing agencies across Santa Clara County, the region and State of California.

TAG Membership

Agency	Name
Caltrans	Mark Leong
Caltrans	Melissa Hernandez
Caltrans	Yunsheng Luo
Campbell	Matthew Jue
Campbell	Rob Eastwood
Cupertino	David Stillman
Cupertino	Gian Martire
Cupertino	Luke Connolly
Cupertino	Matt Schroeder
Cupertino	Piu Ghosh
Gilroy	Cindy McCormick
Gilroy	Erin Freitas
Gilroy	Heba El-Guindy
Gilroy	Kraig Tamborini
Gilroy	Sharon Goei
Los Altos	Aida Fairman
Los Altos	Art Williams
Los Altos	Stephanie Williams
Los Altos	Steven Son
Los Altos Hills	WooJae Kim
Los Gatos	Jennifer Armer
Los Gatos	Nicolle Burnham
Los Gatos	Tracy Wang
Milpitas	Jay Lee
Milpitas	Jessica Dai
Milpitas	Roberto Alonzo
Monte Sereno	Daryl Jordan

Agency	Name
Morgan Hill	Adam Paszkowski
Morgan Hill	Jennifer Carman
Morgan Hill	Maria Angeles
Morgan Hill	Tiffany Brown
Mountain View	Ben Pacho
Mountain View	Diana Pancholi
Mountain View	Phillip Brennan
Metropolitan Transportation Commission (MTC)	Krute Singa
Palo Alto	Amy French
Palo Alto	Charlie Coles
Palo Alto	Srupath Patel
Palo Alto	Sylvia Star-Lack
San José	Charla Gomez
San José	Manjit Banwait
San José	Ramses Madou
San José	Wilson Tam
Santa Clara	Carol Shariat
Santa Clara	John Davidson
Santa Clara	Karen Mack
Santa Clara	Lesley Xavier
Santa Clara County	Ben Aghegnehu
Santa Clara County	Leza Mikhail
Santa Clara County	Robert Cain
Santa Clara County	Samuel Gutierrez
Saratoga	Bryan Swanson
Saratoga	David Dorcich
Saratoga	John Cherbone
SJSU/MTI	Hilary Nixon, PhD
SJSU/MTI	Serena Alexander, PhD
SJSU/MTI	Luana Chen
SJSU/MTI	Maxwell Belote-Broussard
Sunnyvale	Angela Wong
Sunnyvale	Dennis Ng
Sunnyvale	George Schroeder
Sunnyvale	Lillian Tsang

Source: VTA TAG email list, Meeting Minutes for VMT Mitigation Program TAG Meetings 1 through 5, 2023-2024.
Note that some TAG members joined or left agencies over the course of the project.

Appendix M: VMT Reduction Measures Workbook

Valley Transportation Authority

Appendix M1: VMT Reductions Category Matrix

Valley Transportation Authority

Project VTA Equitable VMT Mitigation
Deliverable VMT Reductions Category Matrix
Updated On 3/22/2024
Updated By MRiddle, Fehr & Peers

Workbook Structure
This table summarizes the structure and content presented in subsequent sheets.

Sheet and Column Number	Section and/or Column Header		
2	**VMT Reduction Strategies**		
	• This sheet presents a chart of the percentage of VMT or greehouse gas (GHG) emissions which could be mitigated using each of 32 different strategies. • Measures included in the chart range from least effective VMT reduction (up to 0.02 percent for Pedal Bikeshare Program) to most effective (up to 31 percent for Transit-Oriented Development). • The purpose of this chart is to illustrate the wide range of VMT reductions associated with different measures considered for inclusion in this program. • Data for this chart is sourced from the California Air Pollution Control Officers Association (CAPCOA), Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, December 2021. • CAPCOA link: https://www.caleemod.com/documents/handbook/full_handbook.pdf		
3	**VMT Reduction Category Matrix**	**Description**	**Scoring Rubric (where applicable)**
	VMT CATEGORY OVERVIEW	**The first five columns present a brief overview of each archetype.**	
1	VMT Reduction Category Names	Category name for six VMT reduction measure archetypes	
2	Representative VMT Reduction Measures	Set of representative VMT reduction measures included in each archetype. These are representative, not exclusive.	
3	Category Maximum VMT Reduction (Plan/Community Level)	The maximum VMT or GHG emissions reduction percentage associated with each archetype for the Plan/Community scale (as opposed to the more local Project/Site scale). This value is given for the archetype as a whole, based on CAPCOA documentation for transportation measures.	
4	VMT Type (Commute vs Total VMT)	The type of VMT that can be reduced by the measure. Two options are provided as Commute (employment-based) VMT and Total VMT generated by all activity areawide.	
5	VMT Reduction Application (New VMT vs All City VMT)	The subset of future VMT which the measure could help mitigate. Two options are provided as New VMT (only VMT from new development) and All City VMT (VMT generated by all existing and future VMT areawide).	
	SUPPORTING INFORMATION	**The next seven columns present more specific information about each archetype - its representative VMT reduction measures and implemenation, feasibility, and equity considerations.**	
6	Literature Evidence (References)	Citation from CAPCOA indicating where to find further information about the evidence supporting measure-specific VMT reductions. This is provided for each of the representative VMT reduction measures. Note: though published in December 2021, CAPCOA constitutes the best distillation of research on VMT reduction measure effectiveness available. As additional information becomes available, it will be incorporated into project analysis, but CAPCOA represents a strong starting point for understanding the nuances of VMT reduction measure implementation and effectiveness calculations.	
7	VMT Reduction Range (Per Measure)	The range of VMT that could be mitigated with the implementation of each archetype's representative VMT reduction measures. This is based on CAPCOA 2021 documentation. Note: these are not necessarily additive (if multiple measures were implemented); see CAPCOA for details.	

8	Projects/Plans in Santa Clara County	VTA projects which are similar to the representative VMT reduction measures for each archetype. These are cited as examples of capital and operational projects that could be incorporated into a future VMT mitigation program. The source for these projects is the set of plan and policy documents compiled and provided by the VTA. The full list of projects and plans was reviewed and select projects chosen for inclusion here as a first step toward honing in on project types could be incorporated into a VMT mitigation program. (For internal purposes: plans and policies reviewed are saved here: W:\San Jose N Drive\Projects_SJ23_Projects\SJ23_2220_VTA_VMT_Mitigation_Program\Deliverables\144_Task_3_1_VMT_Reduction_Measures\01_FP_Internal_Draft\Plans)	
9	Cost Range (Low ($) to High ($$$))	Relative cost estimate for implementation of each archetype's VMT reduction measures. These are provided for planning purposes and given as Low ($), Medium ($$), and High ($$$) and are based on planning/engineering judgement as well as the Cost Considerations information provided in CAPCOA.	
10	Project Cost (Total Cost, Examples)	Project cost estimates provided for specific VTA and non-VTA projects. These costs are currently presented in two forms - total project cost and cost per VMT, depending on data available. Note: as more information becomes available, this content will be provided in the form of cost ($) per VMT reduced.	
11	Equity Framework Consistency	Summary of considerations regarding the equity implications of implementing each VMT reduction archetype. This is based on planning/engineering judgment, local and regional knowledge about VMT generation within Santa Clara County, and research information provided in CAPCOA.	
12	Feasibility Considerations	Summary of considerations regarding the feasibility of implementing each VMT reduction archetype generally and within the Santa Clara County (i.e., VTA) context. This is based on planning/engineering judgment, local and regional knowledge about Santa Clara County and local and regional agencies, and implementation recommendations provided in CAPCOA.	
	PRIORITIZATION	**The remaining 7 columns include details about how each VMT reduction archetype ranks relative to different measures of attractiveness to stakeholders, equity, feasibility, and type.**	
13	Equity: Meeting a Community Travel Challenge (Yes = 4, No = 0)	A ranking of the top three archetypes desired by the Community based on feedback received during Phase 1 outreach. The top three ranked archetypes are identified with a Yes, the others are identified with a No. Scores are given as: Yes = 3, No = 0.	• Yes = archetype was identified as one of the three most desireable/useful by the Community (based on Phase 1 outreach responses) • No = archetype was not identified as one of the three most desireable/useful by the Community
14	Equity & Feasibility: Reduction Potential (Low = 1, Med = 2, High = 3)	A ranking of each VMT reduction archetype with respect to its VMT reduction potential, provided as Low, Medium, and High. This is based on each archetype's Category Maximum VMT Reduction (Plan/Community Level). Scores are given as: Low = 1, Medium = 2, High = 3.	• Low = The measure has a low (<10%) GHG reduction potential • Med = The measure has a medium (between 10%-20%) GHG reduction potential • High = The measure has a high (>20%) GHG reduction potential
15	Equity & Feasibility: Inter-Jurisdictional (Yes = 2, No = 0)	A qualitative assessment of whether archetypes have the potential to be inter-jurisdictional (i.e., operate at the countywide level rather than project/site or citywide level). Given the intent of this project to provide specifications for a countywide equitable VMT mitigation program that would expand opportunities for the full mitigation of VMT impacts and appeal to a range of jurisdictions and agency partners, inter-jurisdictionality is important. Scores are given as: Yes = 2, No = 0.	• Yes = archetype represents measures which can reasonably be implemented across city borders and/or countywide • No = archetype represents measures which are not reasonably implementable across city borders and/or countywide (e.g., measures tied to a specific land use/project site)
16	Feasibility: Local Jurisdiction Support (Yes = 2, No = 0)	A ranking of the top two archetypes desired by the feedback from local jurisdictions received during Phase 1 outreach. The top two ranked archetypes are identified with a Yes, the others are identified with a No. Scores are given as: Yes = 2, No = 0. Given their relative scoring, archetypes prioritized by the community are given more points than those prioritized by jurisdictions.	• Yes = archetype was identified as one of the two most desireable/useful by local jurisdictions (based on Phase 1 local jurisdiction web survey responses) • No = archetype was not identified as one of the two most desireable/useful by local jurisdictions

17	Feasibility: Implementation Challenge for VTA/Countywide Agency (Low = 2, Med = 1, High = 0)	Identification of archetypes which present implementation challenges which are not entirely within the purview of the VTA (or a similar countywide implementing agency) to address. Challenges may include issues related to political will, collective action, and/or land rights. This is based on the Feasibility Considerations column content, and is provided as Low, Medium, High. Scores are given as: Low = 2, Medium = 1, High = 0.	• Low = VTA/other countywide implementing agency would likely be the sole or lead authority with full jurisdictional control over measure implementation (e.g., transit measures) • Medium = VTA/other countywide implementing agency may have some degree of jurisdictional control (direct or indirect) over measure implementation, but is not solely responsible for implementing or achieving the measure. The broader community or other agencies may need to be involved in action implementation, which may be subject to collective action and other momentum issues. • High = VTA/other countywide implementing agency would not have direct control over measure implementation, but may have the ability to partner, coordinate with, or inform the actions of others.
18	Feasibility: Type (Capital = 1 vs Operational = 0)	Identification of the type of project represented by each archetype, given as capital (i.e., capital improvement project) or operational (i.e., an operational or programmatic project). Given the sporadic funding stream associated with development, capital improvements which requrie a one-time investment are given more weight than operational improvments which require continuous funding. Scores are given as: Capital = 1, Operational = 0.	• Capital = project consists of improvements which require time-limited investment in material assets (e.g., physical improvements, purchase of transportation vehicles, purchase of a facility) • Operational = project consists of improvements which require recurring investments (e.g., staff salaries, recurring subsidies)
19	Total	The sum of all prioritization scores which provides a relative ranking of the proposed VMT reduction archetypes.	

4	Reduction Cost Matrix	Description	Scoring Rubric (where applicable)
	VMT REDUCTION MEASURES	**The first 12 columns pertain to proposed VMT reduction measures**	
1	Number	A number index.	
2	VMT Reduction Measure	Measure name and CAPCOA #.	
3	Description	Measure description	
4	VMT Reduction: Target Population	Population(s) whose VMT will be the target of the VMT reduction measure. Options include: EPC Low-VMT, EPC High-VMT, Non-EPC Low-VMT, Non-EPC High-VMT.	
5	VMT Reduction: Range	*See above (definintion for column of the same name under Archetype Matrix).*	
6	Literature Evidence[2]	*See above (definintion for column of the same name under Archetype Matrix).*	
7	VMT Type (Commute vs Total VMT)	*See above (definintion for column of the same name under Archetype Matrix).*	
8	VMT Reduction Application (New VMT vs All City VMT)	*See above (definintion for column of the same name under Archetype Matrix).*	
9	Sample Project	*See above (definintion for column of the same name under Archetype Matrix).*	
10	Sample Project Description	Further description of the sample project based on details from the published plan or policy or other sources.	
11	Project Source	Report in which the project is described	
12	Project Type	Indication of whether the project represents a capital or operational/programmatic improvement.	
13	Typical Project Cost (A)	Project cost presented in dollars ($). This includes capital and administrative costs. Based on documentation provided by the VTA; see in-sheet citations for more details.	
14	VMT Reduction (B)	The estimated percent VMT that could be mitigated with the implementation of the VMT reduction measure. This is based on CAPCOA 2021 documentation.	
15	Cost per VMT Reduced (A/B=C)	The estimated cost per VMT reduced based on the inputs detailed above for Typical Project Cost and VMT Reduction.	

	EQUITY CONSIDERATIONS	**The next 6 columns indicate how the VMT reduction measures relate to the six equity definitions from the Equity Framework.**	
16	1. No excess VMT would be generated by the new development in Santa Clara County.	Indication of whether the VMT reduction measure would advance the equity outcome indicated in the column title. Success/Advancement of this outcome is evaluated as a Yes or No and quantified as: "X% of 11,420 Excess VMT Reduced." Scores are given as: Yes = 20, No = 0.	• Yes = equity target is achieved • No = equity target is not achieved
17	2. EPC areas with low VMT rates would decrease, maintain, or increase their average VMT rate.	*Similar to above.* Success/Advancement of this outcome is evaluated as a Yes or No and quantified as: "X% reduction in the EPC areas with a low VMT rate of 19.2." Scores are given as: Countywide = 12, Citywide = 8, Neighborhood = 6, No = 0.	• Countywide = VMT is reduced at the county-level for this area type • Citywide = VMT is reduced at the city-level for this area type • Neighborhood = VMT is reduced at the neighborhood-level for this area type
18	3. EPC areas with high VMT rates would decrease their average VMT rate.	*Similar to above.* Success/Advancement of this outcome is evaluated as a Yes or No and quantified as: "X% reduction in the EPC areas with a high VMT rate of 45.3." Scores are given as: Countywide = 16, Citywide = 12, Neighborhood = 8, No = 0.	• Countywide = VMT is reduced at the county-level for this area type • Citywide = VMT is reduced at the city-level for this area type • Neighborhood = VMT is reduced at the neighborhood-level for this area type
19	4. Non-EPC areas with low VMT rates would decrease their average VMT rate.	*Similar to above.* Success/Advancement of this outcome is evaluated as a Yes or No and quantified as: "X% reduction in the non-EPC areas with a low VMT rate of 19.4." Scores are given as: Countywide = 4, Citywide = 2, Neighborhood = 0, No = 0.	• Countywide = VMT is reduced at the county-level for this area type • Citywide = VMT is reduced at the city-level for this area type • Neighborhood = VMT is reduced at the neighborhood-level for this area type
20	5. Non-EPC areas with high VMT rates would decrease their average VMT rate.	*Similar to above.* Success/Advancement of this outcome is evaluated as a Yes or No and quantified as: "X% reduction in the non-EPC areas with a high VMT rate of 41.2." Scores are given as: Countywide = 4, Citywide = 2, Neighborhood = 0, No = 0.	• Countywide = VMT is reduced at the county-level for this area type • Citywide = VMT is reduced at the city-level for this area type • Neighborhood = VMT is reduced at the neighborhood-level for this area type
21	6. Non-EPC areas would decrease their average VMT rate.	*Similar to above.* Success/Advancement of this outcome is evaluated as a Yes or No and quantified as: "X% reduction in the non-EPC areas with a VMT rate of 31.2." Scores are given as: Countywide = 4, Citywide = 2, Neighborhood = 0, No = 0.	• Countywide = VMT is reduced at the county-level for this area type • Citywide = VMT is reduced at the city-level for this area type • Neighborhood = VMT is reduced at the neighborhood-level for this area type
	FEASIBILITY CONSIDERATIONS	**The remaining four columns contain information pertaining to feasibility considerations for each VMT reduction measure.**	
22	Fiscal Impact	The fiscal impact (i.e., cost) of the VMT reduction measure. Presented on a spectrum of High to Low, indicated with a series of icons.	• Low = The measure has a low (<10%) GHG reduction potential • Med = The measure has a medium (between 10%-20%) GHG reduction potential • High = The measure has a high (>20%) GHG reduction potential
23	Implementation Challenge	The implementation challenge of the VMT reduction measure. Presented on a spectrum of High to Low, indicated with a series of icons.	
24	Political Challenge	The political challenge of the VMT reduction measure. Presented on a spectrum of High to Low, indicated with a series of icons.	
25	Implementation Party	Name of the party (or parties) that could implement the VMT reduction measure.	
	PRIORITIZATION	**The remaining 15 columns include details about how each VMT reduction measure ranks relative to different measures of effectiveness, cost, and level of effort to implement.**	
26	Project Type	Indication of whether the project represents a capital or operational/programmatic improvement. Scores are given as: Capital = 10, Operational = 0.	• Capital = project consists of improvements which require time-limited investment in material assets (e.g., physical improvements, purchase of transportation vehicles, purchase of a facility) • Operational = project consists of improvements which require recurring investments (e.g., staff salaries, recurring subsidies)
27	Typical Project Cost (A)	Project cost presented in dollars ($). Based on documentation provided by the VTA; see in-sheet citations for more details. No scores given (accounted for within row 29).	N/A - do not propose scoring this item since the value is included in row 29
28	VMT Reduction (B)	The estimated percent VMT that could be mitigated with the implementation of the VMT reduction measure. This is based on CAPCOA 2021 documentation.	
29	Cost per VMT Reduced (A/B=C)	The estimated cost per VMT reduced based on the inputs detailed above for Typical Project Cost and VMT Reduction. Scores given as: Low = 10, Med = 5, High = 0.	Daily Cost per VMT reduced is: • Low = Less than a dollar per VMT reduced • Med = Tens of dollars per VMT reduced • High = Hundreds of dollars per VMT reduced or greater
30	1. No excess VMT would be generated by the new development in Santa Clara County.	Indication of whether the VMT reduction measure would advance the equity outcome indicated in the column title. Success/Advancement of this outcome is evaluated as a Yes or No and quantified as: "X% of 11,420 Excess VMT Reduced." Scores are given as: Yes = 20, No = 0.	• Yes = equity target is achieved • No = equity target is not achieved

31	2. EPC areas with low VMT rates would decrease, maintain, or increase their average VMT rate.	*Similar to above.* Success/Advancement of this outcome is evaluated as a Yes or No and quantified as: "X% reduction in the EPC areas with a low VMT rate of 19.2." Scores are given as: Countywide = 12, Citywide = 8, Neighborhood = 6, No = 0.	• Countywide = VMT is reduced at the county-level for this area type • Citywide = VMT is reduced at the city-level for this area type • Neighborhood = VMT is reduced at the neighborhood-level for this area type
32	3. EPC areas with high VMT rates would decrease their average VMT rate.	*Similar to above.* Success/Advancement of this outcome is evaluated as a Yes or No and quantified as: "X% reduction in the EPC areas with a high VMT rate of 45.3." Scores are given as: Countywide = 16, Citywide = 12, Neighborhood = 8, No = 0.	• Countywide = VMT is reduced at the county-level for this area type • Citywide = VMT is reduced at the city-level for this area type • Neighborhood = VMT is reduced at the neighborhood-level for this area type
33	4. Non-EPC areas with low VMT rates would decrease their average VMT rate.	*Similar to above.* Success/Advancement of this outcome is evaluated as a Yes or No and quantified as: "X% reduction in the non-EPC areas with a low VMT rate of 19.4." Scores are given as: Countywide = 4, Citywide = 2, Neighborhood = 0, No = 0.	• Countywide = VMT is reduced at the county-level for this area type • Citywide = VMT is reduced at the city-level for this area type • Neighborhood = VMT is reduced at the neighborhood-level for this area type
34	5. Non-EPC areas with high VMT rates would decrease their average VMT rate.	*Similar to above.* Success/Advancement of this outcome is evaluated as a Yes or No and quantified as: "X% reduction in the non-EPC areas with a high VMT rate of 41.2." Scores are given as: Countywide = 4, Citywide = 2, Neighborhood = 0, No = 0.	• Countywide = VMT is reduced at the county-level for this area type • Citywide = VMT is reduced at the city-level for this area type • Neighborhood = VMT is reduced at the neighborhood-level for this area type
35	6. Non-EPC areas would decrease their average VMT rate.	*Similar to above.* Success/Advancement of this outcome is evaluated as a Yes or No and quantified as: "X% reduction in the non-EPC areas with a VMT rate of 31.2." Scores are given as: Countywide = 4, Citywide = 2, Neighborhood = 0, No = 0.	• Countywide = VMT is reduced at the county-level for this area type • Citywide = VMT is reduced at the city-level for this area type • Neighborhood = VMT is reduced at the neighborhood-level for this area type
36	Fiscal Impact	A qualitative assessment of the fiscal impact (i.e., cost) of the VMT reduction measure. Presented on a spectrum of High to Low, indicated with a series of icons. Scores are given as: High = 4, Med = 6, Low 8.	The cost per VMT reduced is: • Low = Less than $1 per VMT reduced • Med = Tens of dollars per VMT reduced • High = Hundres or more dollars per VMT reduced
37	Implementation Challenge	A qualitative assessment of the implementation challenge of the VMT reduction measure. Presented on a spectrum of High to Low, indicated with a series of icons. Scores are given as: High = 4, Med = 6, Low 8.	• Low = VTA/other countywide implementing agency would likely be the sole or lead authority with full jurisdictional control over measure implementation (e.g., transit measures) • Medium = VTA/other countywide implementing agency may have some degree of jurisdictional control (direct or indirect) over measure implementation, but is not solely responsible for implementing or achieving the measure. The broader community or other agencies may need to be involved in action implementation, which may be subject to collective action and other momentum issues. • High = VTA/other countywide implementing agency would not have direct control over measure implementation, but may have the ability to partner, coordinate with, or inform the actions of others.
38	Political Challenge	A qualitative assessment of the political challenge of the VMT reduction measure. Presented on a spectrum of High to Low, indicated with a series of icons. Scores are given as: High = 4, Med = 6, Low 8.	• Low = The VMT reduction measure would likley garner political support/face little to no political challenge based on its interjurisdictional character and potential to benefit communities throughout the county. • Medium = The VMT reduction measure would garner some political support but also face challenges due to the jurisdictions and communities it would benefit. Overall limited buy-in from the full slate of Santa Clara County jurisdictions may subject this measure to collective action and other momentum issues. • High = The VMT reduction measure would likley garner little political support/face substantial political challenges based on its limited geographic reach and/or potential to benefit relatively few communities within the county.
39	Implementation Party	Name of the party (or parties) that could implement the VMT reduction measure. No scores given (accounted for within row 37).	
40	Total	The sum of all prioritization scores which provides a relative ranking of the proposed VMT reduction measures.	Scoring is calibrated so: VMT Reduction = 20% Equity Considerations = 60% Implementation Considerations = 20%

VMT & GHG Reduction Strategies

Percentage of VMT or greenhouse gases that would be mitigated using each strategy

Filter strategies by:

Location context

Urban & Suburban **Rural**

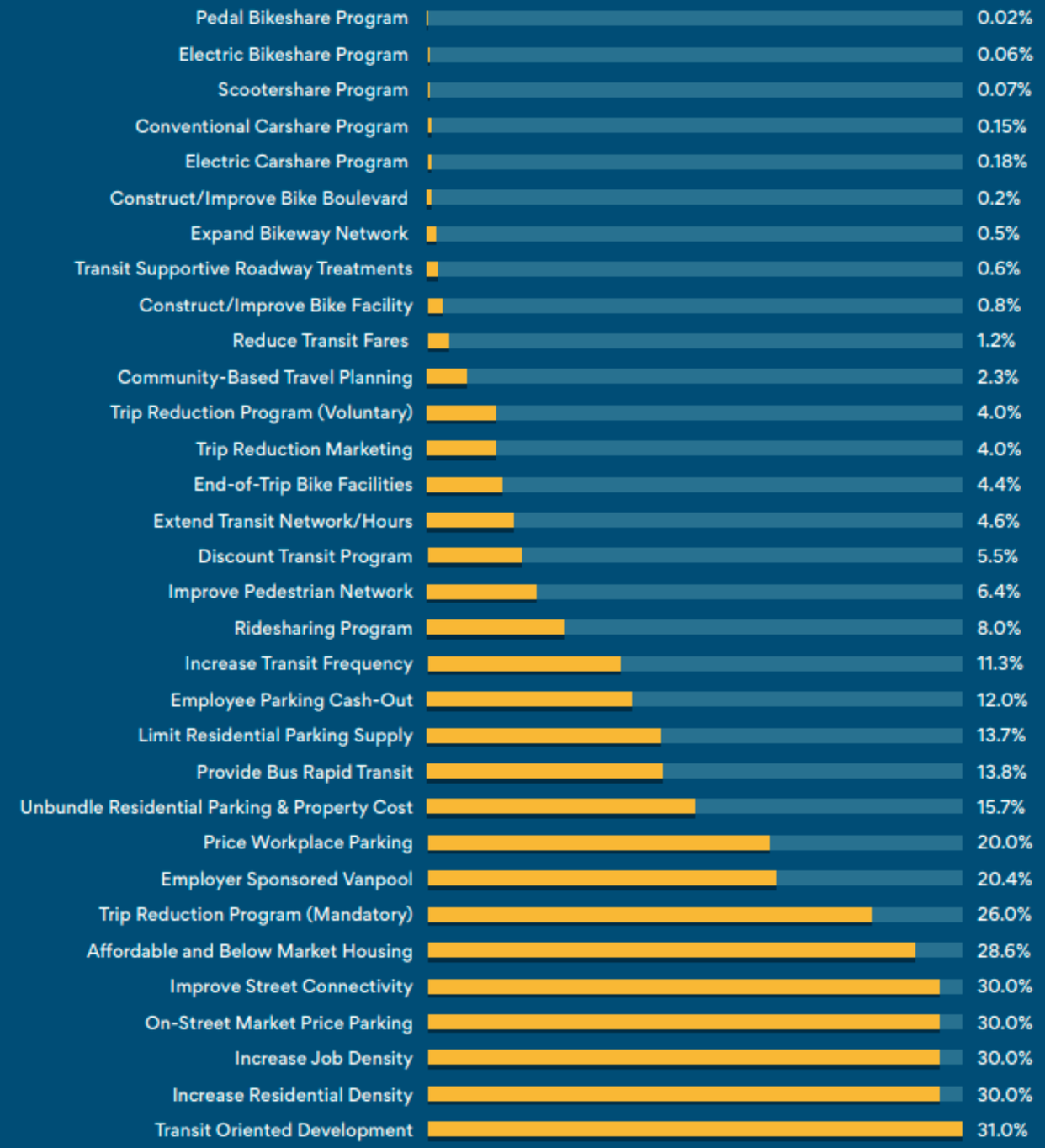
Scale of application

Project **Community**

FEHR PEERS

California Air Pollution Control Officers Association (CAPCOA)
December 2021

Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (airquality.org)



VMT REDUCTION CATEGORIES

ARCHETYPE OVERVIEW

SUPPORTING INFORMATION

PRIORITIZATION

1 Category Names	2 Representative VMT Reduction Measures	3 Category Maximum VMT Reduction (Plan/Community Level)	4 VMT Type (Commute vs Total VMT)	5 VMT Reduction Application (New VMT vs All City VMT)	6 Literature Evidence[2] (References)	7 VMT Reduction Range (Per Measure)	8 Projects/Plans in Santa Clara County	9 Cost Range (Low ($) to High ($$$))	10 Project Cost or Project Cost Effectiveness (Total Cost, Examples)[3,4,6,7]	11 Equity Framework Consistency	12 Feasibility Considerations	13 Equity: Meeting a Community Travel Challenge (Yes =4, No = 0)	14 Equity & Feasibility: Reduction Potential (Low = 1, Med = 2, High = 3)	15 Equity & Feasibility: Inter-Jurisdictional (Yes = 2, No = 0)	16 Feasibility: Local Jurisdiction Support (Yes = 2, No = 0)	17 Feasibility: Implementation Challenge for VTA/Countywide Agency (Low = 2, Med = 1, High = 0)	18 Feasibility: Type of VMT Measure (Capital = 1 vs Operational = 0)	19 Total
On-Demand Mobility	• Carshare and rental car subsidies • Bike- and scooter-share services • Ridesharing program • Implement or expand on-demand shuttle services	Less than 1 percent	• Commute • Total VMT	• All City VMT	• Carshare: T-21-A, T-21-B • Bikeshare: T-22-A, T-22-B • Scootershare: T-22-C • Ridesharing Program: T-8 • Provide Shuttles (Gas or Electric): T-44 • Provide On-Demand Microtransit: T-45	• Carshare: 0 to 0.18% • Bikeshare: 0 to 0.06% • Scootershare: 0 to 0.07% • Ridesharing Program: 0 to 8% • Provide Shuttles (Gas or Electric): Not-Quantified[8] • Provide On-Demand Microtransit: Not-Quantified[8]	• VTA TDM Program (CMP 2021, p. 51) • Milpitas SMART service • Morgan Hill MoGo service • Palo Alto Link service • Cupertino/Santa Clara Silicon Valley Hopper service	$$-$$$	• LADOT Bike Share Electrification: $19.70 per VMT reduced	Impactful for EPC Low-VMT communities which may lack access to vehicles and mobility options. Sharing services are likely to also be used by Non-EPC Low-VMT communities as alternative mobility options.	Carsharing measures may, in some cases, increase VMT by providing access to individuals who currently lack cars. The carshare measure is also based, in part, on literature analyzing one-way carsharing service with a free-floating operational model and should be applied with caution if using a different form of carsharing (e.g., roundtrip, peer-to-peer, fractional). Increasing access to bikeshare and scootershare is most beneficial in the presence of supporting facilities (e.g., bike lanes).	No	Low	Yes	Yes	High	Capital	**6**
Biking and Walking Facilities	• Expanded pedestrian network • Expanded bike network • Improved street connectivity • Implementation of publicly-accessible trip-end facilities (e.g., bike parking and other supportive amenities)	10 percent	• Commute • Total VMT	• All City VMT (publicly-accessible improvements) • New VMT (residential improvements)	• Enhance or Expand Pedestrian Network: T-18 • Enhance or Expand Bike Network: T-19-A, T-19-B, T-20 • Street Connectivity: T-17	• Enhance or Expand Pedestrian Network: 0 to 0.8% • Enhance or Expand Bike Network: 0 to 6.4% • Street Connectivity: 0 to 30%	• VTA 2021 Congestion Management Program Document (CMP 2021) • Valley Transportation Plan 2040 (VTP 2040) • Multimodal Improvement Plans developed by cities (e.g., Mountain View Citywide MIP, Santa Clara MIP) • Bike/ped projects in Countywide Bicycle Plan and/or city plans (e.g., VTA planned interchange improvements (CMP in the CMP, p. 86), Los Gatos Bicycle Master Plan projects, Santa Clara Bicycle Plan projects)	$$$	• LADOT Active Streets Connections: $3.55 per VMT reduced[9] • LADOT Active Transportation Corridors: $1.90 per VMT reduced[9] • LADOT Signal Enhancements (TOUCAN and HAWK Signals): $4.50 per VMT reduced[9] <u>VTA projects:</u> • Bernardo Caltrain Bike/Ped Undercrossing (VTA-118): $23M • Homestead Corridor Improvements (VTA-119): $14.6M • SR237/Maude Avenue Interchange Improvement: $20M	Impactful for all communities because measures provide viable alternatives to automobile use. Most impactful where facilities support non-automobile commuting and access to daily needs. Less effective if community is located very far from employment centers.	These measures are increasingly effective as network improvements are constructed and overall active transportation connectivity is improved.	Yes	Low	No	No	Med	Capital	**7**
Many Things to Do Close By	• Increased residential density • Increased job density • Transit-oriented development • Increased density of affordable and below market rate housing near transit • Housing Subsidy Program (HRSP)	30 percent	• Commute • Total VMT	• New VMT	• Increased Residential Density: T-1 • Increased Job Density: T-2 • Provide Transit-Oriented Development: T-3 • Integrate Affordable and Below Market Rate Housing: T-4 • Provide End-of-Trip Bicycle Facilities: T-10 • Housing Subsidy Program (HRSP) White Paper	• Increased Residential Density: 0 to 30% • Increased Job Density: 0 to 30% • Provide Transit-Oriented Development: 0 to 31% • Integrate Affordable and Below Market Rate Housing: 0 to 28.6% • Provide End-of-Trip Bicycle Facilities: 0 to 4.4% • HSP: 0 to 33%	• VTA TDM Program (CMP 2021, p. 51); • VTA Transit-Oriented Development Program (CMP 2021, p. 77) • City-led plans for TOD, station area development, and urban villages	$$$	• HSP (estimate): $300 to $100,000 per VMT[5]	Most impactful for EPC High-VMT communities, by bringing residential areas into closer proximity to jobs and other amenities and providing greater multimodal connectivity.	These measures depend upon new construction which faces numerous financial and political hurdles.	Yes	High	No	No	High	Capital	**8**
Transit: Capital Enhancements	• Implementation of transit-priority roadway treatments such as signal priority or dedicated lanes • Provide bus rapid transit	15 percent	• Commute • Total VMT	• All City VMT	• Transit-Supportive Roadway Improvements: T-27[10] • Provide Bus Rapid Transit: T-28[10]	• Transit-Supportive Roadway Improvements: 0 to 0.6% • Provide Bus Rapid Transit: 0 to 13.8%	• VTP 2040 • 2014 Short-Range Transit Plan • Transit Asset Management Plan (2018) Note: These projects/plans are not exclusively capital-specific, but do include some capital projects.	$-$$$	• Purchase of 48 electric buses (VTA-7): $300k • Paratransit fleet procurement (VTA-32): $3.7M • VTA estimated costs for transit priority improvements on Senter Road in San Jose (2023): - $900k-$1.2M for attached bus bulb-outs with minor signal work - $350k-$500k for Transit Boarding Islands (TBIs) with minor signal work - $180k-$240k for TBIs with no signal work	Impactful for all communities by providing viable alternatives to automobile use. Most impactful for EPC Low- and High-VMT communities where new facilities and/or services support non-automobile commuting and access to daily needs. Not effective if community remains disconnected from employment and commercial centers.	Roadway/Facility improvements require capital investment which may be very costly. Costs associated with frequency improvements can range from minor (e.g., signal enhancements) to major (e.g., larger capital investments).	Yes	Med	Yes	No	Low	Capital	**11**
Transit: Operational Enhancements	• Increased network coverage • Increased transit service frequency	15 percent	• Commute • Total VMT	• All City VMT	• Extend Transit Network Coverage or Hours: T-25 • Increase Transit Service Frequency: T-26[10]	• Extend Transit Network Coverage or Hours: 0 to 4.6% • Increase Transit Service Frequency: 0 to 11.3%	• VTA TDM Program - VTA-implemented Express Bus Partnership Program and other service partnerships (CMP 2021, p. 51) • 2023 & 2024 Transit Service Plan • VTA High Capacity Transit Study (2024) Note: These projects/plans are not exclusively operational-specific, but do include some operational projects.	$-$$$	• On-Demand Paratransit Pilot (VTA-33): $2M	*Same as above*	Expanding transit network coverage, hours or frequency would involve increases in ongoing operating costs. This would require a steady, predictable revenue given that it is undesirable (and less effective in terms of ridership and VMT reduction) to institute improved service only to scale it back soon thereafter. Additionally, increasing service frequency in particular may require hiring more vehicle operators and other staff, which can prove challenging.	Yes	Med	Yes	No	Med	Operational	**9**
Transit, Bike and Carpool Incentives	• Subsidized or free transit passes • Subsidized or free passes for bike- and scooter-share services • Subsidized or free passes for on-demand shuttles • E-bike subsidies • Vanpool • Subsidized bike leasing • Commute trip reduction (CTR) services (e.g., Guaranteed Ride Home Program)	2.3 percent	• Commute	• New VMT	• Subsidized Transit Passes: T-9 • Ridesharing Program and TMA: T-8 • Employer Vanpool: T-11 • CTR (Voluntary): T-5 • CTR (Mandatory): T-6	• Subsidized Transit Passes: 0 to 5.5% • Ridesharing Program and TMA: 0 to 8% • Employer Vanpool: 0 to 20.4% • CTR (Voluntary): 0 to 4% • CTR (Mandatory): 0 to 26%	• VTA TDM Program (CMP 2021, p. 51); includes future TDM coordination to support project/site-level implementation • VTA-implemented Vanpool Subsidy Program (CMP 2021, p. 58) • Commute trip reduction programs promoted and/or implemented by Mountain View TMA and Palo Alto TMA	$-$$$	• LADOT Transit Past Pilot Program: $9.55 per VMT reduced <u>VTA projects:</u> • TDM Program Guide (VTA-61): $900k over two years • Countywide Micromobility (Bike-Scooter) Support (VTA-56): $5M over two years	Transit subsidies would be most impactful for EPC Low-VMT communities and would likely be used by members of Non-EPC Low VMT communities as an alternative mobility option.	CTR program effectiveness requires (a) application of a suite of measures that work in concert to reduce vehicle trips and (b) regular monitoring and reporting to ensure the calculated VMT reduction matches the observed VMT reduction.	No	Low	Yes	Yes	Med	Operational	**6**
Change Travel Cost	• Unbundled parking from residential rent to dissuade new tenants from having and using personal automobiles • Market priced on-street parking to deter people from using automobiles and/or to encourage a park-once behavior • Reduced or free transit fares • Express lane pricing.	30 percent	• Commute • Total VMT	• New VMT (residential) • All City VMT (on-street parking)	• Unbundle Residential Parking Costs from Property Cost: T-16 • Market Price Parking (on-street): T-24. • Reduced Transit Fares (up to 50% reduction): T-29	• Unbundle Residential Parking: 0 to 15.7% • Market Price Parking: 0 to 30% • Reduced Transit Fares (up to 50% reduction): 0 to 1.2%	• VTA TDM Program (CMP 2021, p. 51) • Unbundled parking at recent residential developments in San Jose and other cities in Santa Clara County	$-$$	Need cost examples	Pricing of travel or parking is most impactful for Non-EPC High VMT communities, though. If implemented in the absence of alternatives to driving it would negatively impact all communities, notably EPCs. Free transit would benefit EPC communities, primarily when coupled with high-frequency and extensive transit networks.	These are some of the most effective measures but require the political appetite to price parking and decrease financial barriers to alternatives to driving. When pricing on-street parking, the best practice is to allow for dynamic adjustment of prices to ensure approximately 85 percent occupancy, which helps prevent induced VMT due to circling behaviors as individuals search for a vacant parking space.	No	High	Yes	No	High	Operational	**5**

Notes:
1. The percent reduction in VMT based on CAPCOA guidance is the same as the percent reduction in GHG emissions
2. CAPCOA refers to the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, August 2021, accessible from https://www.airquality.org/ClimateChange/Documents/Handbook%20Public%20Draft_2021-Aug.pdf.
3. For more information about project titles accompanied by a "VTA-number" designation, refer to the VTA, Strategic Capital Investment Plan (SCIP), 2022-2041, available from https://www.vta.org/sites/default/files/2022-09/SCIP_FYs22-41_Approved_6-2-2022.pdf
4. For more information about projects that do not include a "VTA-number" designation, refer to the VTA's Projects website, available from https://www.vta.org/projects
5. For more information, refer to Fehr & Peers, Priced Out, 2023, available from https://www.fehrandpeers.com/wp-content/uploads/2023/04/FP_PricedOut_HousingSubsidyPrograms_04.2023.pdf
6. LADOT project costs of dollar per VMT derived for a SCAG/LADOT VMT reduction pilot program.
7. Note, costs presented are from the year of the referenced plan/report and have not been escalated.
8. These measures are identified by CAPCOA as supporting or non-quantified. Although not quantitatively evaluated in the Handbook, these measures may achieve emissions reductions and co-benefits on their own or may enhance the ability of quantified measures to attain expanded reductions and co-benefits.
9. The LADOT cost per VMT reduced figures for active transportation improvements reflect cost-effectiveness but have a limited overall VMT reduction potential.
10. CAPCOA assumes that increasing transit service frequency (Measure T-26) and implmenenting transit-supportive roadway treatments (Measure T-27) are mutually exclusive with bus rapid transit (BRT) (Measure T-28) for the purpose of deriving a plan/community's total transit-related emissions reduction. Measure T-28 accounts for the VMT reduction associated with increased transit frequency (T-26) and decreased transit travel time from transit supportive roadway treatments (T-27). It was assumed that bus rapid transit (BRT) (T-28) would cover all of the community's transit routes, and therefore no additional frequency or time improvements would be attainable (T-26 and T-27).

REDUCTION COST MATRIX

VMT Mitigation Actions for the Equitable VMT Mitigation Program Framework Specifications

VMT REDUCTION COST EVALUATION

EQUITY CONSISTENCY EVALUATION

1 Number	2 VMT Reduction Measure	3 Description	4 VMT Reduction: Target Population	5 VMT Reduction: Range	6 Literature Evidence[1,2]	7 VMT Type	8 VMT Reduction Application	9 Starting Project	10 Sample Project Description	11 Project Source	12 Project Type	13 Daily Project Cost (A)	14 Daily VMT Reduction (B)	15 Daily Cost per VMT Reduced (A/B=C)	16 1. No excess VMT would be generated by the new development in Santa Clara County.	17 2EPC areas with low VMT rates would decrease, maintain, or increase their average VMT rate.	18 3EPC areas with high VMT rates would decrease their average VMT rate.
Options			EPC Low-VMT, EPC High-VMT, Non-EPC Low-VMT, Non-EPC High-VMT	Percentage Based on Literature Evidence	CAPCOA Citation	Commute VMT, Total VMT	New VMT, All City VMT				Capital, Operational Prioritization values: (Capital = 10 vs Operational = 0)	Dollars ($) per Day (Includes capital and administrative costs) Prioritization Value: Captured in column 15	Daily VMT Reduced per Project Lifespan Prioritization Value: Captured in column 15	Dollars per VMT Reduced per Day Prioritization values: (Low = 10, Med = 5, High = 0)	Yes (Low-High) or No Portion of 11,420 Excess VMT Reduced Prioritization Value: Yes= 20; No = 0	Yes (Low-High) or No VMT reduction in the EPC areas with a low VMT rate of 19.2. Prioritization Value (Scale of VMT affected): Yes: Countywide = 12, Citywide, 8, Neighborhood = 6; No = 0	Yes (Low-High) or No VMT reduction in the EPC areas with a high VMT rate of 45.3. Prioritization Value (Scale of VMT affected): Yes: Countywide = 16, Citywide, 12, Neighborhood = 8; No = 0
1	Implement Transit-Supportive Roadway Treatments (CAPCOA T-27)	This measure will implement transit-supportive treatments on the transit routes serving the plan/community. Transit-supportive treatments incorporate a mix of roadway infrastructure improvements and/or traffic signal modifications to improve transit travel times and reliability.	EPC Low-VMT	Up to 0.6% percent	T-27 - Implement Transit-Supportive Roadway Treatments	Total VMT	All City VMT	King Road Transit Speed & Reliability Improvements	Install side-running dedicated bus lanes and Transit Boarding Islands on King Road corridor from Mabury Road in the north to Capitol Expressway in the south. Assume that all current stops (approximately 40) would be upgraded with Transit Boarding Islands and associated amenities (e.g., shelters, benches, and either PCC or thicker AC bus pads), use existing transit priority system, and lower-infrastructure side-running bus lanes would be added (i.e., no change to curb and gutter, no red pavement coloring).	VTA studied King Road transit priority improvements in the VTA High-Capacity Transit Study, 2024. City of San Jose is currently completing the King Road Complete Streets Plan which would include pedestrian, bicycle and transit improvements - complete late spring 2024.	Capital	$1,681	25	$ 67	No	Neighborhood VMT Reduction	Neighborhood VMT Reduction
2	Implement Electric Bike Subsidy (Precedent Programs in California and Colorado; Literature Review)[3]	This measure will establish an electric bikeshare program. Electric bikeshare programs provide users with on-demand access to electric pedal assist bikes for short-term rentals.	EPC Low-VMT, EPC High-VMT, Non-EPC Low-VMT, Non-EPC High-VMT	Up to 3.1 VMT reduced per day per bicycle[3]	Non-CAPCOA literature review: California E-Bike Incentive Project (2023); Revisiting Average Trip Length Defaults and Adjustment Factors for Quantifying VMT Reductions from Car Share, Bike Share, and Scooter Share Services (2020); Denver E-Bike Voucher Project; Motives, perceptions and experiences of electric bicycle owners and implications for health, wellbeing and mobility (2016); Impacts of E-bike Ownership on Travel Behavior: Evidence from three Northern California rebate programs (2023)	Total VMT	All City VMT	Means-based Subsidies for Purchase of E-Bikes	Improve access to e-bikes by providing subsidies for Santa Clara County residents to purchase e-bikes. Subsidies would be means-based provide a greater subsidy to lower-income households and equity community areas. Program would expand the reach of current/planned e-bike subsidy programs which are generally limited geographically or have limited budgets.	Based on concept of the current Denver E-bike Rebate Voucher Program, the upcoming California E-Bike Incentive Project, and the the City Chrysallis pilot project in Gilroy in 2021.	Capital	$4,343	7,500-13,040	$0.33-$0.58	Yes	Citywide VMT Reduction	Citywide VMT Reduction
3	Provide Employer-Sponsored Vanpools (CAPCOA T-11)	This measure will implement an employer-sponsored vanpool service. Vanpooling is a flexible form of public transportation that provides groups of 5 to 15 people with a cost-effective and convenient rideshare option for commuting	EPC Low-VMT, EPC High-VMT, Non-EPC High-VMT	Up to 20.4 percent	T-11 - Provide Employer-Sponsored Vanpool	Commute VMT	All City VMT	Organize and Subsidize Vanpools for Non-Office Workers in Santa Clara County	Conduct outreach to large non-office employers (e.g., warehouses, food processing facilities, medical centers) to facilitate the formation of vanpools, and fully subsidize the costs of vanpooling from home to worksite. Vans can be purchased or leased. Vanpools would have to start or end in Santa Clara County.	Based on a concept in Community-Based Transportation Plan for Gilroy, 2006, and extending the existing MTC Regional Vanpool Subsidy Program and VTA's supplemental subsidy program.	Operational	$5,983-$17,596	11,807-34,725	$0.51	Yes	Countywide VMT Reduction	Countywide VMT Reduction
PROPOSED MEASURES NOT QUANTIFIED AT THIS TIME																	
4	VTA Better Bus Stops Passenger Facilities & Amenities Improvements	This measure will implement transit-supportive treatments on the transit routes serving the plan/community. Transit supportive treatments incorporate a mix of roadway infrastructure improvements and/or traffic signal modifications to improve transit travel times and reliability.	Reason measure is not yet quantified: The proposed project consists of bus stop amenity replacements, and repairs. There is not strong literature support for such improvements generating substantial VMT reductions in and of themselves (i.e., in the absense of wholesale changes to transit frequency and geographic coverage). These measures may generate GHG emissions reductions based on some reduction in dwell time at stops, however, a direct link from this to VMT reduction is not documented. Further, per Phase I engagement, community wanted to see transit service frequency, coverage, and reliablity improvements.					VTA Better Bus Stops Passenger Facilities & Amenities Improvements	Install new shelters and shelter benches; sidewalk expansion for transit landing area, shelters, other amenities; sidewalk repair as necessary, and bus pads at higher-ridership bus stops around the VTA system. Amenities may be new, or may be replacing old/deteriorated items.	VTA Better Bus Stops Program, ongoing	Capital	$7,840					
5	Integrate Affordable and Below Market Rate Housing (CAPCOA T-4)	This measure requires below market rate (BMR) housing. BMR housing provides greater opportunity for lower income families to live closer to job centers and achieve a jobs/housing match near transit. It is also an important strategy to address the limited availability of affordable housing that might force residents to live far away from jobs or school, requiring longer commutes.	Reason measure is not yet quantified: Measure not well defined, and would delay the launch of the VMT mitigation program. This VMT reduction measure is multifaceted and would need extensive evaluation to determine if it feasible for a VMT mitigation program focused on land development VMT mitigation only. This measure is not conducive to delivering a countywide VMT mitgation program quickly, because the mechanism for delivering affordable housing is unknown. Caltrans is beginng to support affordable housing as mitigation for transportation projects. State legislation and local jurisdictions housing elements will also help accelerate delivery of additional housing in the county. There is growing consensus that any VMT mitigation to deliver housing should use an existing mechanism like MTC's TOD program.					Means-based Housing-Relocation Subsidy Program	Provide grants, zero-interest loans, or monthly subsidies to offset the housing cost differential between high accessibility areas/low VMT and low accessibility areas/high VMT areas.	Based on the concept in the Fehr & Peers 2023 paper "Priced Out" (available at https://www.fehrandpeers.com/wp-content/uploads/2023/04/FP_Priced Out_HousingSubsidyPrograms_04.2023.pdf) and employer-assised housing subsidy programs at the University of California, University of Chicago, and other locations.	Operational	Costs will depend on market rates for housing in low VMT and high VMT areas; examples are shown in Fehr & Peers Priced Out paper.					
6	Implement Commute Trip Reduction Program (Voluntary) (CAPCOA T-5)	This measure will implement a voluntary commute trip reduction (CTR) program with employers. CTR programs discourage singleoccupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions.	Reason measure is not yet quantified: Based on conversations to date the project team agreed to not quantify this measure.					Funding for Incentives & Promotions to Use Alternative Modes	Provide additional funding for incentives for commuters to use alternative modes, building on an existing platform / platform such as VTA SmartCommute or Palo Alto TMA "BikeLove" program. Funds could be used to increase the amount of the incentives, expand to new populations/areas, or both.	Based on the VTA SmartCommute program (in soft launch for internal VTA employees in early 2024), and the Palo Alto TMA "Bike Love" incentive program (see https://www.paloaltotma.org/bikelove).	Operational	Cost of incentives can be variable; for instance PATMA Bike Love program allows $5 per day, up to $600 per year. Additional admnistration costs.					

Notes:
1. The percent reduction in VMT based on CAPCOA guidance is the same as the percent reduction in GHG emissions
2. CAPCOA refers to the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, August 2021, accessible from https://www.airquality.org/ClimateChange/Documents/Handbook%20Public%20Draft_2021-Aug.pdf.
3. The following reports and research articles were consulted for the VMT reduction quantification for the means-based subsidies for purchase of e-bikes:
California E-Bike Incentive Project (2023): https://ebikeincentives.org/
Can Do Colorado eBike Pilot Program (2020-21): https://energyoffice.colorado.gov/transportation/ebikes/can-do-colorado-ebike-pilot-program
CARB, Revisiting Average Trip Length Defaults and Adjustment Factors for Quantifying VMT Reductions from Car Share, Bike Share, and Scooter Share Services (2020): https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/sharedmobility_technical_052920.pdf
Denver e-Bike Voucher Report (2023): https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Climate-Action-Sustainability-Resiliency/News-Events/News/2023/Denver-E-Bike-and-E-Cargo-Bike-Rebate-Returns-January-31%20
Jones et al, Motives, perceptions and experiences of electric bicycle owners and implications for health, wellbeing and mobility (2016): https://nam12.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.sciencedirect.com%2Fscience%2Farticle%2Fpii%2FS0966692316301934%3Fvia%253Dihub&data=05%7C02%7CM.Riddle%40fehrandpeers.com%7Cf631a19164fc444ebddc08dc38bcb2ab%7C087dca4b49c742c6a76649a3f29fc3f4%7C1%7C0%7C638447630306499136%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2lUaMzliLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=oCbTfvVfkdlttvQMU5W4LBegbg8RhYYo
MacArthur, North American Survey of Electric Bicycle Owners (2017): https://pdxscholar.library.pdx.edu/trec_reports/161/
UC Davis, Impacts of E-bike Ownership on Travel
Behavior: Evidence from three Northern California
rebate programs (2023):
https://escholarship.org/uc/item/5kb4b8jx

REDUCTION COST MATRIX

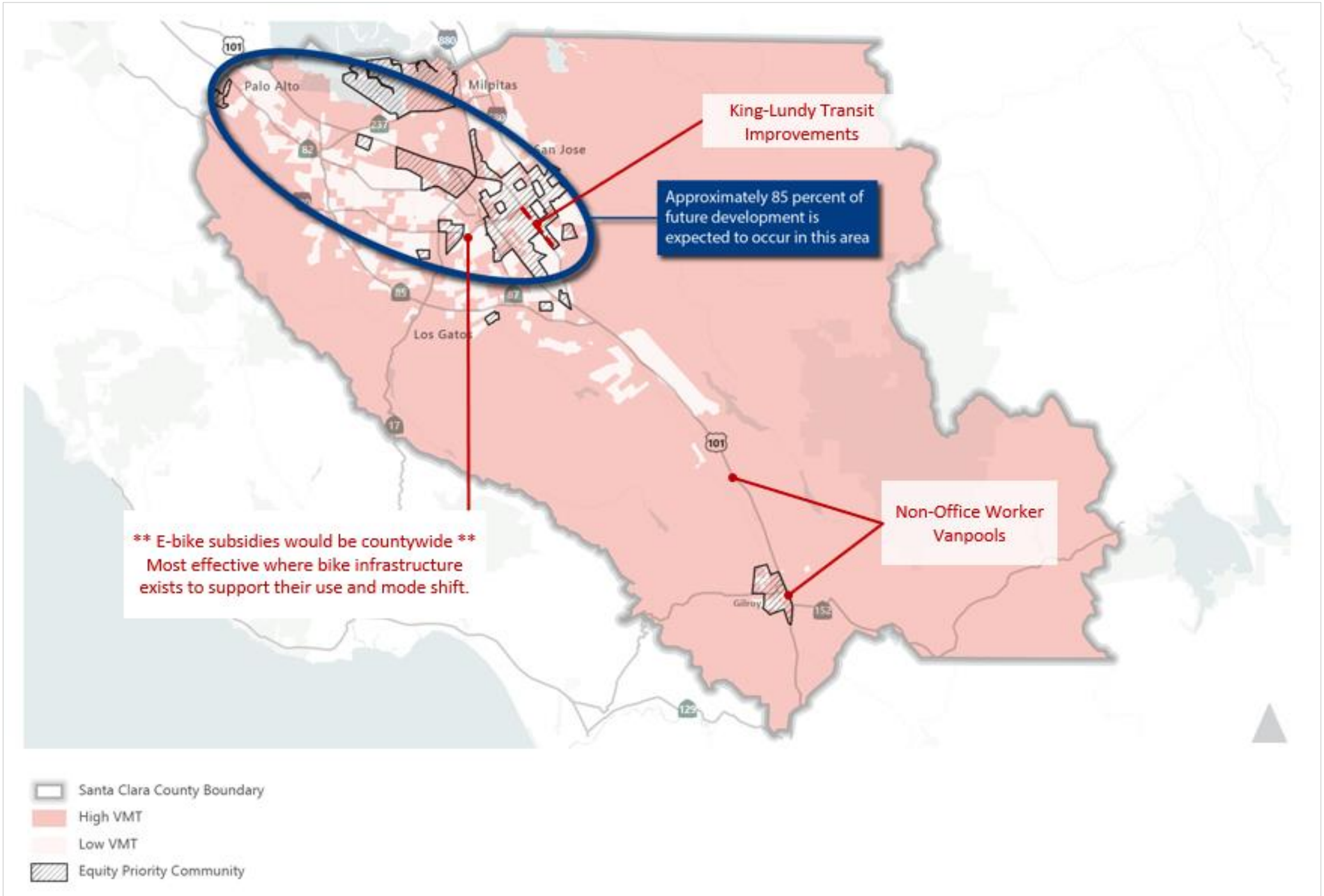
VMT Mitigation Actions for the					FEASIBILITY CONSIDERATIONS EVALUATION				
1 **Number** *Options*	2 **VMT Reduction Measure**	19 **4Non-EPC areas with low VMT rates would decrease their average VMT rate.** Yes (Low-High) or No VMT reduction in the non-EPC areas with a low VMT rate of 19.4. Prioritization Value (Scale of VMT affected): Yes: Countywide = 4, Citywide, 2, Neighborhood = 0; No = 0	20 **5Non-EPC areas with high VMT rates would decrease their average VMT rate.** Yes (Low-High) or No VMT reduction in the non-EPC areas with a high VMT rate of 41.2. Prioritization Value (Scale of VMT affected): Yes: Countywide = 4, Citywide, 2, Neighborhood = 0; No = 0	21 **6The non-EPC areas would decrease their average VMT rate.** Yes (Low-High) or No VMT reduction in the non-EPC areas with a VMT rate of 31.2. Prioritization Value (Scale of VMT affected): Yes: Countywide = 4, Citywide, 2, Neighborhood = 0; No = 0	22 **Fiscal Impact** Prioritization Value: High = 4, Med = 6, Low = 8	23 **Implementation Challenge** Prioritization Value: High = 4, Med = 6, Low = 8	24 **Political Challenge** Prioritization Value: High = 4, Med = 6, Low = 8	25 **Implementation Party** Prioritization Value: N/A, addressed under column 23 Agency Name	40 **Total**
1	Implement Transit-Supportive Roadway Treatments (CAPCOA T-27)	Neighborhood VMT Reduction	Neighborhood VMT Reduction	Neighborhood VMT Reduction	Low	Low	Low	City of San Jose, with VTA assistance	**49**
2	Implement Electric Bike Subsidy (Precedent Programs in California and Colorado; Literature Review)[3]	No VMT Reduction	No VMT Reduction	No VMT Reduction	Medium	High	High	VTA could lead, in partnership with a bicycle or environmental-focused nonprofit.	**72**
3	Provide Employer-Sponsored Vanpools (CAPCOA T-11)	No VMT Reduction	No VMT Reduction	No VMT Reduction	Low	Medium	Medium	VTA could lead, potentally building on the existing MTC/Commute With Enterprise progam. Either way it might be beneficial to partner with a local CBO/nonprofit for outreach and multilingual assistance.	**75**
PROPOSED MEASURES NOT QUANTIFIED AT									
4	VTA Better Bus Stops Passenger Facilities & Amenities Improvements							VTA	
5	Integrate Affordable and Below Market Rate Housing (CAPCOA T-4)							VTA, in partnerships with cities and/or non-profits?	
6	Implement Commute Trip Reduction Program (Voluntary) (CAPCOA T-5)							VTA, perhaps in partnership with existing TMAs such as Palo Alto TMA or MV TMA	

ncentives.org/

//energyoffice.colorado.gov/transportation/ebikes/can-do-colorado-ebike-pilot-program

justment Factors for Quantifying VMT Reductions from Car Share, Bike Share, and Scooter Share Services (2020): https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/sharedmobility_technical_052920.pdf

rgov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Climate-Action-Sustainability-Resiliency/News-Events/News/2023/Denver-E-Bike-and-E-Cargo-Bike-Rebate-Returns-January-31%20


King-Lundy Transit Improvements
Approximately 85 percent of future development is expected to occur in this area
Non-Office Worker Vanpools
** E-bike subsidies would be countywide **
Most effective where bike infrastructure exists to support their use and mode shift.
Palo Alto
Milpitas
San Jose
Los Gatos
Gilroy
Santa Clara County Boundary
High VMT
Low VMT
Equity Priority Community

Appendix M2: VMT Mitigation Actions Quantification

Valley Transportation Authority

Project VTA Equitable VMT Mitigation
Deliverable VMT Reductions Categories Matrix
Updated On 3/19/2024
Updated By MRiddle, Fehr & Peers

Workbook Structure
This table summarizes the structure and content presented in subsequent sheets.

Sheet and Column Number	Section and/or Column Header	
2	**Mitigation Summary**	Summary of the VMT reductions and costs associated with potential mitigation actions.
3	**Mitigation Info**	Summary of the program structure and assumptions incorporated into VMT reduction quantification.
4	**King Transit**	VMT reduction calculation for King-Lundy Enhanced Transit: Enhance Local Transit Frequency, Capacity, and Reliability.
5	**E-Bike Subsidies**	VMT reduction calculation for e-bike subsidies.
6	**Vanpool**	VMT reduction calculation for non-office worker vanpool service.

MITIGATION SUMMARY

Tables below present a summary and comparison of VMT reductions, costs, and other program attributes of each proposed VMT reduction measure. VMT figures are currently based on Year 2015 travel.

#	Mitigation Action Name	Mitigation Type	Project Lifespan (Years)	Daily VMT Reduction (Avg Day)	Annual VMT Reduction (Avg Year)	Lifespan VMT Reduction	Daily Cost of Mitigation Action (Avg Day)	Annual Cost of Mitigation Action (Avg Year)	Lifespan ost of Mitigation Action	Daily Cost per VMT (Avg Day)	Annual Cost per VMT (First Year ROI)	Annual Cost per VMT (Avg Year)	Lifespan Cost per VMT
1	King Road Transit Speed & Reliability Improvements	Capital	25	25	8,745	218,631	$ 1,348	$ 467,680	$ 11,692,000	$ 53.48	$ 1,336.96	$ 53.48	$ 53.48
2	Countywide Means-Based Subsidies for Purchase of E-Bikes (Program funded fro 25 years with ebikes replaced every 7 years)	Capital	25	7,500 - 13,040	2,602,500 - 4,524,880	18,217,500 - 31,674,160	$ 4,343	$ 1,507,143	$ 10,550,000	$0.33 - $0.58	$2.33 - $4.05	$0.33 - $0.58	$0.33 - $0.58
3	Organize and Subsidize Vanpools for Non-Office Workers in Santa Clara County	Operational	25	11,807 - 34,725	3,069,724 - 9,028,600	76,743,098 - 225,714,995	$5,983 - $17,596	$1,555,500 - $4,575,000	$38,887,500 - $114,375,000	$ 0.51	$ 0.51	$ 0.51	$ 0.51

	HOLD		
4	VTA Better Bus Stops Passenger Facilities & Amenities Improvements	Capital	**Reason measure is not yet quantified:** The proposed project consists of bus stop amenity replacements, and repairs. There is not strong literature support for such improvements generating substantial VMT reductions in and of themselves (i.e., in the absence of wholesale changes to transit frequency and geographic coverage). These measures may generate GHG emissions reductions based on some reduction in dwell time at stops, however, a direct link from this to VMT reduction is not documented. Further, per Phase I engagement, community wanted to see transit service frequency, coverage, and reliability improvements.
5	Senter Rapid Transit Priority Project	Capital	**Reason measure is not yet quantified:** The proposed project consists of bus bulbout stops and bus boarding island improvements. There is not strong literature support for such improvements generating substantial VMT reductions in and of themselves (i.e., in the absence of wholesale changes to transit frequency and geographic coverage). These measures may generate GHG emissions reductions based on some reduction in dwell time at stops, however, a direct link from this to VMT reduction is not documented. There is also a question of additionality given that the VTA appears to be pursuing grant funding for this project. If these improvements would occur in the absence of the Equitable VMT Mitigation Program, it does note meet additionality requirements.
6	Means-based Housing-Relocation Subsidy Program	Operational	**Reason measure is not yet quantified:** Measure not well defined, and would delay the launch of the VMT mitigation program. This VMT reduction measure is multifaceted and would need extensive evaluation to determine if it feasible for a VMT mitigation program focused on land development VMT mitigation only. This measure is not conducive to delivering a countywide VMT mitigation program quickly, because the mechanism for delivering affordable housing is unknown. Caltrans is beginning to support affordable housing as mitigation for transportation projects. State legislation and local jurisdictions housing elements will also help accelerate delivery of additional housing in the county. There is growing consensus that any VMT mitigation to deliver housing should use an existing mechanism like MTC's TOD program.
7	Implement Commute Trip Reduction Program (Voluntary)	Operational	**Reason measure is not yet quantified:** Based on conversations to date the project team agreed to not quantify this measure.

MITIGATION SUMMARY

Tables below present a summary and comparison of VMT reduction measures based on mitigation type, quantification method, source materials, etc.

#	Mitigation Action Name	Mitigation Type	Include Mitigation Action? (yes/no)	Description	Quantification Method	Source	Analysis Approach Status
1	King Road Transit Speed & Reliability Improvements	Capital	Yes	Install side-running dedicated bus lanes and Transit Boarding Islands on King Road corridor from Mabury Road in the north to Capitol Expressway in the south	CAPCOA T-25 OR T-26 (depending on scope of improvement)	VTA High-Capacity Transit Study, 2024	*Quantitative analysis based on CAPCOA T-27*
2	Countywide Means-based Subsidies for Purchase of E-Bikes	Capital	Yes	Increased Access and Means-based Subsidies for E-Bikes	Multiple literature review sources including but not limited to: Denver E-bike Voucher Report (2023), UC Davis Impacts of E-Bike Ownership on Travel Behavior (2023)	Based on a concept in Community-Based Transportation Plan for Gilroy, 2006	*Quantitative analysis based on literature review of existing e-bike subsidy programs.*
3	Organize and Subsidize Vanpools for Non-Office Workers in Santa Clara County	Operational	Yes	Conduct outreach to large non-office employers (e.g., warehouses, food processing facilities, medical centers) to facilitate the formation of vanpools, and fully subsidize the costs of vanpooling from home to worksite. Vans can be purchased or leased.	CAPCOA T-11	Based on a concept in Community-Based Transportation Plan for Gilroy, 2006	*Quantitative analysis based on MTC's Regional Vanpool program data and use of CAPCOA measure T-11.*
	HOLD						
4	VTA Better Bus Stops Passenger Facilities & Amenities Improvements	Capital	No	Install new shelters and shelter benches; sidewalk expansion for transit landing area, shelters, other amenities; sidewalk repair as necessary, and bus pads at higher-ridership bus stops around the VTA system. Amenities may be new, or may be replacing old/deteriorated items.	CAPCOA T-27 (proxy - not 100% aligned with this proposed project)	VTA Better Bus Stops Program, ongoing.	*Quantitative analysis based on CAPCOA measure T-27. This is a proxy only - this calculation is not recommended for this kind of improvement.*
5	Senter Rapid Transit Priority Project	Capital	No	Install Transit Boarding Islands and/or bus bulbout stops along Senter Road corridor from Story Road in the north to Monterey Road in the south.	n/a	VTA / City of San Jose Senter Road grant applications, late 2023 - early 2024	*Hold for now*
6	Integrated Affordable and Below-Market Rate Housing	Operational	No	Provide grants, zero-interest loans, or monthly subsidies to offset the housing cost differential between high accessibility areas/low VMT and low accessibility areas/high VMT areas.	CAOCOA T-4	Based on the concept in the Fehr & Peers 2023 paper "Priced Out" (available at https://www.fehrandpeers.com/wp-content/uploads/2023/04/FP_PricedOut_HousingSubsidyPrograms_04.2023.pdf) and employer-assisted housing subsidy programs at the University of California, University of Chicago, and other locations.	*Hold for now*
7	Implement Commute Trip Reduction Program (Voluntary)	Operational	No	Provide additional funding for incentives for commuters to use alternative modes, building on an existing platform / platform such as VTA SmartCommute or Palo Alto TMA "BikeLove" program. Funds could be used to increase the amount of the incentives, expand to new populations/areas, or both.	CAPCOA T-5	Based on the VTA SmartCommute program (in soft launch for internal VTA employees in early 2024), and the Palo Alto TMA "Bike Love" incentive program (see https://www.paloaltotma.org/bikelove).	*Hold for now*

King Road Transit Speed & Reliability Improvements

Description

This mitigation action would fund the installation of side-running dedicated bus lanes and Transit Boarding Islands on King Road corridor from Mabury Road in the north to Capitol Expressway in the south.
Assume that all current stops (approximately 40) would be upgraded with Transit Boarding Islands and associated amenities (e.g., shelters, benches, and either PCC or thicker AC bus pads), and lower-infrastructure side-running bus lanes would be added (i.e., no change to curb and gutter, no red pavement coloring).

This project is based on the King Road Transit Speed & Reliability Improvements project from the VTA's High-Capacity Transit Study (2024).
The City of San Jose is currently completing the King Road Complete Streets Plan which would include pedestrian, bicycle and transit improvements - complete late spring 2024.

Project source materials:
VTA Route 77 Map: https://www.vta.org/go/routes/77
VTA High-Capacity Transit Study (2024): link forthcoming, project details provided by VTA in February-March 2024

VMT Calculation Methodology

Approach: Based on application of the CAPCOA strategy *T-27 - Implement Transit-Supportive Roadway Treatments* to calculate the VMT reduction potential. See: https://www.airquality.org/ClimateChange/Documents/Handbook%20Public%20Draft_2021-Aug.pdf
Inputs: Calculations use constants provided by CAPCOA as well as VMT and population data from the VTA Travel Demand Model. See calculations for details.

Instructions

User Input VMT and cost calculations are based on the values in these yellow highlighted cells. User inputed assumptions must be supported by evidence.

SUMMARY RESULTS

	Year 2015 Estimates	Year 2040 Estimates	
Daily VMT Reduction (Avg Day)	25	61	
Annual VMT Reduction (Avg Year)	8,745	21,257	
Lifespan VMT Reduction	218,631	531,430	
Daily Cost of Mitigation Action (Avg Day)	$ 1,347.78	$ 1,347.78	*same for both years*
Annual Cost of Mitigation Action (Avg Year)	$ 467,680	$ 467,680	*same for both years*
Lifespan Cost of Mitigation Action	$ 11,692,000	$ 11,692,000	*same for both years*
Daily Cost per VMT (Avg Day)	$ 53.48	$ 22.00	
Annual Cost per VMT (First Year ROI)	$ 1,336.96	$ 550.03	
Annual Cost per VMT (Avg Year)	$ 53.48	$ 22.00	
Lifespan Cost per VMT	$ 53.48	$ 22.00	

Notes (for whole table):
1. Average daily or annual VMT reductions and costs are based on 347 days in a year and 25 years in the mitigation action lifespan. The one exception is Annual Cost per VMT (First Year ROI) which reflects the total cost required in Year 1 divided by the VMT reduction estimated for that first year.
2. Cost assumptions: All costs are in 2024 dollars; improvements are assumed to not require environmental clearance; costs include design and construction management; costs include a 15% contingency.

ADDITIONALITY The assumption is that this project would not occur in the absence of the VTA Equitable VMT Mitigation Program. If this is not the case, it does not meet additionality requirements.

EQUITY CONSIDERATIONS This measure would apply to TAZs in east San José, 50 percent of which are identified as EPC areas.

VMT REDUCTION POTENTIAL CAPCOA research suggests installation of dedicated bus lanes and bus boarding islands could support VMT reductions; bus stop amenities in an of themselves would likely not.
King Road has transit signal priority, so the VMT reduction is for the dedicated bus lanes.
VMT reductions are currently based on an assumed speed improvement based on a similar project in San José. More accurate quantification could be provided if speed modeling data could be provided for this segment.
In the event complete streets improvements are installed along this transit corridor, depending upon what those are, they may affect the speed reductions anticipated to accompany these project improvements.

CALCULATIONS

This mitigation action estimates the VMT reduction effect of adding side-running dedicated bus lanes to the King Road/Lundy Avenue transit corridor, from Mabury Road in the north to Capitol Expressway in the south.
These calculations present a scenario in which the whole corridor receives specified treatments.

STEP 1 - CALCULATE VMT REDUCTIONS

The following calculations are based on the CAPCOA *T-27 - Implement Transit-Supportive Roadway Treatments approach*. A hidden tab includes screenshots of relevant pages from the CAPCOA manual.
Source: CAPCOA, 2021, accessible from: https://www.airquality.org/ClimateChange/Documents/Handbook%20Public%20Draft_2021-Aug.pdf

VMT Reduction Formula

Percent Reduction (A) $A = -1 \times \frac{B \times C \times D \times E \times G}{F}$

YEAR 2015 ANALYSIS

Variable	Value	Source	Note
B - Percent of plan/community transit routes that receive treatments	100.0%	Based on user assumption	Based on the whole corridor described above receiving the treatment.
C - Percent change in transit travel time due to treatments	23.0%	VTA (project team)	Based on the VTA's estimated increase in average speed from 13 mph to 16 mph (+23%). This is the speed increase modeled for the Monterey Road bus lanes/TBIs project, and in the range suggested by a TCRP report. Speed increase might be less if bus stops or mid-block crossings are added based on Complete Streets Plan.
D - Elasticity of transit ridership with respect to transit travel time	-40.0%	CAPCOA Constant Variable	
E - Transit mode share in plan/community[1]	2.3%	Year 2015 VTA Travel Demand Model Data	Note: the CAPCOA Mode Share Value, per Table T-3.1 = 6.69 percent.
F - Vehicle mode share in plan/community[2]	86.6%	Year 2015 VTA Travel Demand Model Data	Note: the CAPCOA Mode Share Value, per Table T-3.1 = 91.32 percent.
G - Statewide mode shift factor	57.8%	CAPCOA Constant Variable	FHWA 2017b
Daily VMT Reduction Percentage	0.1%		

Notes:

YEAR 2040 ANALYSIS

Variable	Value	Source	Note
B - Percent of plan/community transit routes that receive treatments	100.0%	Based on user assumption	Based on the whole corridor described above receiving the treatment.
C - Percent change in transit travel time due to treatments	23.0%	VTA (project team)	Based on the VTA's estimated increase in average speed from 13 mph to 16 mph (+23%). This is the speed increase modeled for the Monterey Road bus lanes/TBIs project, and in the range suggested by a TCRP report. Speed increase might be less if bus stops or mid-block crossings are added based on Complete Streets Plan.
D - Elasticity of transit ridership with respect to transit travel time	-40.0%	CAPCOA Constant Variable	
E - Transit mode share in plan/community[1]	4.1%	Year 2040 VTA Travel Demand Model Data	Note: the CAPCOA Mode Share Value, per Table T-3.1 = 6.69 percent.
F - Vehicle mode share in plan/community[2]	83.6%	Year 2040 VTA Travel Demand Model Data	Note: the CAPCOA Mode Share Value, per Table T-3.1 = 91.32 percent.
G - Statewide mode shift factor	57.8%	CAPCOA Constant Variable	FHWA 2017b
Daily VMT Reduction Percentage	0.3%		

Notes:

1. This represents the Year 2015 Transit mode share for TAZs within a 1/2-mile of the King Road corridor to receive treatments under this project.
2. This represents the Year 2015 vehicle mode share for TAZs within a 1/2-mile of the King Road corridor to receive treatments under this project (i.e., sum of 48.1 percent drive-alone mode share and 38.5 percent shared-ride/carpool mode share).

1. This represents the Year 2040 Transit mode share for TAZs within a 1/2-mile of the King Road corridor to receive treatments under this project.
2. This represents the Year 2040 vehicle mode share for TAZs within a 1/2-mile of the King Road corridor to receive treatments under this project (i.e., sum of 48.1 percent drive-alone mode share and 38.5 percent shared-ride/carpool mode share).

STEP 2 - CALCULATE THE VMT WITHIN 0.5 MILES OF BUS STOPS SERVED BY ROUTE IMPROVEMENTS

Population and VMT data applied to these calculations was pulled by City from the VTA Travel Demand Model. Data is included within hidden tabs, referenced using formulas below.

Number of TAZs	28	*Formula (pulled from data table)*
Population in Area (for reference only)[1]	76,326	*Formula (pulled from data table)*
Total Daily VMT at Bus Stop Areas[2]	17,845	*Formula (pulled from data table).*

Notes:
1. The Year 2015 residential population of TAZs within a 1/2-mile of route improvements.
2. This represents 1% of Year 2015 Total Daily VMT associated with TAZs within a 1/2-mile of the route improvements (i.e., internal-internal, internal-external, and external-internal trips). Total Daily VMT rates for these TAZs are only slightly lower than those for the City and County, thus we estimate about 1% would serve internal trips along this corridor.

Number of TAZs	28	*Formula (pulled from data table)*
Population in Area (for reference only)[1]	96,776	*Formula (pulled from data table)*
Total Daily VMT at Bus Stop Areas[2]	23,490	*Formula (pulled from data table).*

Notes:
1. The Year 2040 residential population of TAZs within a 1/2-mile of route improvements.
2. This represents 1% of Year 2040 Total Daily VMT associated with TAZs within a 1/2-mile of the route improvements (i.e., internal-internal, internal-external, and external-internal trips). Total Daily VMT rates for these TAZs are only slightly lower than those for the City and County, thus we estimate about 1% would serve internal trips along this corridor.

STEP 3 - APPLY THE CAPCOA PERCENTAGE REDUCTION TO AREA VMT TO CALCUATE A DAILY, ANNUAL, AND LIFESPAN VMT REDUCTION

This calculation presents the daily VMT reduction converted to an annual VMT reduction and lifespan VMT reduction based on user inputs.

Total Daily VMT at Bus Stop Areas	17,845	*Formula. Input from Step 2 above.*
CAPCOA Percentage Reduction	0.1%	*Formula. Input from Step 1 above.*
Daily VMT Reduction (Avg Day)	25	*Formula*
Days in a Year[1]	347	*User input.*
Annual VMT Reduction (Avg Year)	8,745	*Formula*
Project Lifespan (Years)[2]	25	*User input.*
Lifespan VMT Reduction	218,631	

Notes:
1. Number of days used to annualize VMT based on daily VMT reduction values. 347 is the number of days per year applied in most Climate Action Plans for this purpose.
2. This is the assumed project lifespan and timeframe for which cost estimates were developed.

Total Daily VMT at Bus Stop Areas	23,490	*Formula. Input from Step 2 above.*
CAPCOA Percentage Reduction	0.3%	*Formula. Input from Step 1 above.*
Daily VMT Reduction (Avg Day)	61	*Formula*
Days in a Year[1]	347	*User input.*
Annual VMT Reduction (Avg Year)	21,257	*Formula*
Project Lifespan[2]	25	*User input.*
Lifespan VMT Reduction	531,430	

Notes:
1. Number of days used to annualize VMT based on daily VMT reduction values. 347 is the number of days per year applied in most Climate Action Plans for this purpose.
2. This is the assumed project lifespan and timeframe for which cost estimates were developed.

STEP 5 - CALCULATE ANNUAL PROJECT COST

Annual project costs are estimated based on content from the VTA's High-Capacity Transit Study (2024) shared with Project staff for the sake of this exercise. All costs represent 2024 dollars.

Lifespan Cost of Mitigation Action[1]	$ 11,692,000	*Removed bus stop initial and renewal costs from the VMT reduction project cost (~$3mil).*
Project Lifespan (Years)	25	*Formula. User input from Step 3 above.*
Annual Cost (Avg Year)	$ 467,680	*Formula*
Days in a Year	347	*Formula. User input from Step 3 above.*
Daily Cost of Mitigation Action (Avg Day)	$ 1,347.78	

Notes:
1. Based on cost estimates provided by VTA. These include construction and administrative costs as well as a 15% contingency. All costs are in 2024 dollars.
2. This is the assumed project lifespan and timeframe for which cost estimates were developed.

CURRENTLY COSTS ARE THE SAME FOR THE 2015 AND 2040 ANALYSIS SCENARIOS.

Countywide Means-based Subsidies for Purchase of E-Bikes

Description

This mitigation action would improve access to e-bikes by providing subsidies for Santa Clara County residents to purchase e-bikes.
Subsidies would be means-based (i.e., provide a greater subsidy to lower-income households and equity community areas).
The program would expand the reach of current/planned e-bike subsidy programs which are generally limited geographically or have limited budgets.

Project source materials:

California E-Bike Incentive Project (2023): https://ebikeincentives.org/
Can Do Colorado eBike Pilot Program (2020-21): https://energyoffice.colorado.gov/transportation/ebikes/can-do-colorado-ebike-pilot-program
CARB, Revisiting Average Trip Length Defaults and Adjustment Factors for Quantifying VMT Reductions from Car Share, Bike Share, and Scooter Share Services (2020): https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/sharedmobility_technical_052920.pdf
Denver e-Bike Voucher Report (2023): https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Climate-Action-Sustainability-Resiliency/News-Events/News/2023/Denver-E-Bike-and-E-Cargo-Bike-Rebate-Returns-January-31
Jones et al, Motives, perceptions and experiences of electric bicycle owners and implications for health, wellbeing and mobility (2016): https://nam12.safelinks.protection.outlook.com/
MacArthur, North American Survey of Electric Bicycle Owners (2017): https://pdxscholar.library.pdx.edu/trec_reports/161/
UC Davis, Impacts of E-bike Ownership on Travel Behavior: Evidence from three Northern California rebate programs (2023): https://escholarship.org/uc/item/5kb4b8jx

VMT Calculation Methodology

Approach: Based on the range of VMT reductions documented in source materials cited above. Value-specific citations are provided below, as needed.
Inputs: Calculations use inputs derived from source materials and cost figures provided by the VTA. See calculations for details.

Instructions

User Input — VMT and cost calculations are based on the values in these yellow highlighted cells. User inputed assumptions must be supported by evidence.

SUMMARY RESULTS

	Low Estimate	High Estimate	Range
Daily VMT Reduction (Avg Day)	7,500	13,040	7,500 - 13,040
Annual VMT Reduction (Avg Year)	2,602,500	4,524,880	2,602,500 - 4,524,880
Lifespan VMT Reduction	18,217,500	31,674,160	18,217,500 - 31,674,160
Daily Cost of Mitigation Action (Avg Day)	$ 4,343	$ 4,343	$ 4,343
Annual Cost of Mitigation Action (Avg Year)	$ 1,507,143	$ 1,507,143	$ 1,507,143
Lifespan Cost of Mitigation Action	$ 10,550,000	$ 10,550,000	$ 10,550,000
Daily Cost per VMT (Avg Day)	$ 0.58	$ 0.33	$0.33 - $0.58
Annual Cost per VMT (First Year ROI)	$ 4.05	$ 2.33	$2.33 - $4.05
Annual Cost per VMT (Avg Year)	$ 0.58	$ 0.33	$0.33 - $0.58
Lifespan Cost per VMT	$ 0.58	$ 0.33	$0.33 - $0.58

Notes (for whole table):
1. Average daily or annual VMT reductions and costs are based on 347 days in a year and 7 years for each bicycle's lifespan; the mitigation action could last 25 years. The one exception is Annual Cost per VMT (First Year ROI) which reflects the total cost required in Year 1 divided by the VMT reduction estimated for that first year.
2. Costs are based on the lifespan of bicycles and the assumption that X number of bikes (currently set to 5,000) would be purchased over that timeframe.

ADDITIONALITY

This project would introduce a novel means of acquiring e-bikes not otherwise available. This achieves the additionality requirement.

EQUITY CONSIDERATIONS

E-bike subsidies could apply to all geographies throughout the county - EPC and non-EPC area - but will be means-based and therefore apply to populations characteristic of EPC areas.
E-bike subsidies, though adjusted for income, would likely still require investment from recipients. CBOs report these subsidies would not 'go far enough' for low-income households.

VMT REDUCTION POTENTIAL

The VMT reduction potential of e-bikes is presented as a range based on literature evidence available.
Evidence suggests lower-income recipients of e-bike subsidies generate greater than average VMT reductions. Per the Denver study, income-qualified residents replaced 32 miles of vehicle trips/week (4.5 VMT/day) compared to an average of 22 miles of vehicle trips/week (3.1 VMT/day).
Evidence also suggests VMT reductions peak in the near-term and may decrease in the long-term as the initial enthusiasm for using e-bikes wanes.

CALCULATIONS

This mitigation action estimates the VMT reduction effect of providing means-based e-bike subsidies to moderate and low-income individuals throughout Santa Clara County.

STEP 1 - CALCULATE DAILY VMT REDUCTION PER E-BIKE SUBSIDY

The following calculations are based on the documented VMT reduction associated with existing e-bike subsidy programs. Results reflect a low and high estimate of VMT reduction effectiveness.

VMT Reduction Formula

Daily VMT Reduction = [VMT replaced per day] x [days of use per year adjusted]

Low Estimate

Daily VMT Reduction per E-Bike Subsidy[1]	1.5	*UC Davis (2023); CARB (2020)*
Weather adjustment[2]	n/a	
Daily VMT Reduction per E-Bike Subsidy (Adjusted)	1.5	

Notes:
1. Participants in three northern California e-bike rebate programs replaced and average of at least 35 percent of their VMT, equivalent to 45 VMT per month or 1.5 VMT per day. Lower income users replaced car trips more regularly for greater VMT reductions.
2. This daily VMT reduction per e-bike subsidy is based on studies from the San Francisco Bay Area (Contra Costa County). Therefore, no weather adjustment is applied.

High Estimate

Daily VMT Reduction per E-Bike Subsidy	3.1	*Denver e-bike Voucher Report (2023)*
Weather adjustment[1]	307	*CAPCOA Table T-19.4*
Daily VMT Reduction per E-Bike Subsidy (Adjusted)	2.6	

Notes:
1. Per the Denver E-Bike Rebate program, recipients of e-bike vouchers replaced an average of 22 miles of vehicle trips per week or 3.1 VMT per day. Income-qualified voucher recipients replaced an average of 32 miles of vehicle trips per week for greater VMT reductions.
2. This weather adjustment converts this daily VMT reduction to the Santa Clara County context (per CAPCOA research).

STEP 2 - ESTIMATE THE DAILY, ANNUAL AND LIFESPAN VMT REDUCTION FOR THE PROGRAM

The annual VMT reduction based on the total number of bicycles delivered by the program.

Low Estimate

Daily VMT Reduction per e-bike Subsidy (Adjusted)	1.5	*Result from Step 1.*
Number of Bicycles	5,000	*User assumption*
Daily VMT Reduction for Program	7,500	*Formula*
Days in a Year[1]	347	*User assumption*
Annual VMT Reduction for Program	2,602,500	
E-Bike Lifespan[2]	7	*User assumption*
Lifespan VMT Reduction for Program	18,217,500	

Notes:

1. Number of days used to annualize VMT based on daily VMT reduction values. 347 is the number of days per year applied in most Climate Action Plans for this purpose.
2. Estimates for e-bike lifespan vary widely from 3 to 10 years or more. Lifespan depends on the initial quality of bicycle parts, user characteristics, trip characteristics, user maintenance, and more.

High Estimate

Daily VMT Reduction per e-bike Subsidy (Adjusted)	2.6	*Result from Step 1.*
Number of Bicycles	5,000	*User assumption. Formula for consistency with Low Estimate.*
Daily VMT Reduction for Program	13,040	*Formula*
Days in a Year	347	*User assumption. Formula for consistency with Low Estimate.*
Annual VMT Reduction for Program	4,524,880	*Formula*
E-Bike Lifespan[1]	7	*User assumption. Formula for consistency with Low Estimate.*
Lifespan VMT Reduction for Program	31,674,160	

Notes: same as those for the Low Estimate

STEP 3 - ESTIMATE THE COST PER E-BIKE

The program cost estimate based on the average e-bike subsidy and number of bicycles provided.

Average E-Bike Subsidy (One-Time Cost)[1]	$ 1,625	*California E-Bike Subsidy Program*
Administrative Cost (Percentage)[2]	30%	*People for Bikes*
Average E-Bike Subsidy *(with admin costs)*	$ 2,110	*Formula*

Notes:

1. Based on subsidies to be provided by the California E-Bike Incentive Project. This represents the average e-bike subsidy for moderate-income and low-income bike subsides for both regular and cargo bicycles. Data provided by VTA.
2. People for Bikes reported the California E-Bike Incentive Project will have a total cost of $13 million, $3 million of which will cover administrative costs (leaving $10 million to be applied to subsidies). $3 million / $10 million = 0.3.

STEP 4 - CALCULATE THE DAILY, ANNUAL AND LIFESPAN PROGRAM COST

Program cost estimates based on

Number of Bicycles Purchased (Year 1)	$ 5,000	*Formula. Input from Step 3.*
Average E-Bike Subsidy *(with admin costs)*	$ 2,110.00	*Formula. Input from Step 3.*
Lifespan Cost of Mitigation Action[1]	$ 10,550,000	*Formula*
Project Lifespan (Years)	7	*Formula. Input from Step 2.*
Annual Cost (Avg Year)	$ 1,507,143	*Formula*
Days in a Year	$ 347	*Formula. Input from Step 2.*
Daily Cost of Mitigation Action (Avg Day)	$ 4,343	*Formula*

Note:

1. Number of days used to annualize costs. 347 is the number of days per year applied in most Climate Action Plans.

Organize and Subsidize Vanpools for Non-Office Workers in Santa Clara County

Description

This measure includes organizing and subsidizing vanpools for non-office workers in Santa Clara County.
The VMT estimate is based on CAPCOA measure T-11. Provide Employer-Sponsored Vanpool.
Based on a concept to extend the existing MTC Regional Vanpool Subsidy Program and VTA's supplemental subsidy program to include means-based subsidies.

Project source materials:

Community-Based Transportation Plan for Gilroy, 2006
MTC Regional Vanpool Subsidy Program (MTC/Commute With Enterprise)
VTA Supplemental Subsidy Program (for MTC's Regional Vanpool Subsidy Program)

VMT Calculation Methodology

Approach: Based on the documented range of VMT reductions observed in project source materials cited above. Specific citations are provided below, as needed.
Inputs: Calculations use constants provided by CAPCOA, VMT and population data from the VTA Travel Demand Model, and costs from MTC and the VTA. See calculations for details.

Instructions

User Input — VMT and cost calculations are based on the values in these yellow highlighted cells. User inputed assumptions must be supported by evidence.

SUMMARY RESULTS

	Year 2015 Estimates			Year 2040 Estimates		
	Low Estimate	High Estimate	Range	Low Estimate	High Estimate	Range
Daily VMT Reduction (Avg Day)	11,807	34,725	11,807 - 34,725	11,798	34,725	11,798 - 34,725
Annual VMT Reduction (Avg Year)	3,069,724	9,028,600	3,069,724 - 9,028,600	3,067,508	9,028,600	3,067,508 - 9,028,600
Lifespan VMT Reduction	76,743,098	225,714,995	76,743,098 - 225,714,995	76,687,690	225,714,995	76,687,690 - 225,714,995
Daily Cost of Mitigation Action (Avg Day)	$ 5,983	$ 17,596	$5,983 - $17,596	$ 5,982.69	$ 17,596	$5,983 - $17,596
Annual Cost of Mitigation Action (Avg Year)	$ 1,555,500	$ 4,575,000	$1,555,500 - $4,575,000	$ 1,555,500	$ 4,575,000	$1,555,500 - $4,575,000
Lifespan Cost of Mitigation Action	$ 38,887,500	$ 114,375,000	$38,887,500 - $114,375,000	$ 38,887,500	$ 114,375,000	$38,887,500 - $114,375,000
Daily Cost per VMT (Avg Day)	$ 0.51	$ 0.51	$ 0.51	$ 0.51	$ 0.51	$ 0.51
Annual Cost per VMT (First Year ROI)	$ 0.51	$ 0.51	$ 0.51	$ 0.51	$ 0.51	$ 0.51
Annual Cost per VMT (Avg Year)	$ 0.51	$ 0.51	$ 0.51	$ 0.51	$ 0.51	$ 0.51
Lifespan Cost per VMT	$ 0.51	$ 0.51	$ 0.51	$ 0.51	$ 0.51	$ 0.51

Notes (for whole table):
1. Average daily or annual VMT reductions and costs are based on 347 days in a year and a 25-year mitigation action lifespan. Note: since this program requires annual investment of equal value the Annual Cost per VMT (First Year ROI) is the same as Annual Cost per VMT (Average Year).
2. A range is presented for Low and High Estimates of vanpool usage based on user inputs for number of vans leased (under Step 4).
2. Cost assumptions: All costs are in 2024 dollars.

ADDITIONALITY — This project would provide access to vanpools not otherwise available to this worker population, thus achieving the additionality requirement.

EQUITY CONSIDERATIONS — This measure would apply to a range of geographies - EPC and non-EPC areas. However, the expectation based on the vanpool subsidy being means-based is that this measure would target lower-income, and likely higher VMT, employee populations within these geographies.

VMT REDUCTION POTENTIAL — The VMT reduction potential of a vanpool may be substantial though CAPCOA literature evidence is based on relatively few studies and calculations should be scrutinized closely and updated with context-specific inputs as much as possible.

CALCULATIONS

This mitigation action estimates the VMT reduction effect of providing novel vanpool service for non-office workers in Gilroy and Morgan Hill in Santa Clara County.

STEP 1 - CALCULATE PERCENT VMT REDUCTION FOR VANPOOL SERVICE

The following calculations are based on the CAPCOA measure T-11. Provide Employer-Sponsored Vanpool. A hidden tab includes screenshots of relevant pages from the CAPCOA manual.
Source: CAPCOA, 2021, accessible from: https://www.airquality.org/ClimateChange/Documents/Handbook%20Public%20Draft_2021-Aug.pdf

VMT Reduction Formula

A = GHG/VMT Reduction
(Assumes 1:1 relationship for VMT and GHG emissions reductions.)

$$A = \frac{((1-B)\times C\times F)+\left(B\times\frac{D}{E}\times G\right)}{((1-B)\times C\times F)+(B\times D\times F)}-1$$

Variable	Value	Source
B - Percent of employees that participate in vanpool program	2.7	SANDAG 2019[1]
C - Average length of one-way vehicle commute trip in region (miles)	12.44	CAPCOA Table T-11.[2]
D - Average length of one-way vanpool commute trip (miles)	42	SANDAG 2019[1]
E - Average vanpool occupancy (including driver) (occupants)	6.25	SANDAG 2019[1]
F - Average emission factor of average employee vehicle (g CO2e per mile)	307.5	CARB 2020
G - Vanpool emission factor (g CO2e per mile)	763.4	CARB 2020
Daily VMT reduction potential (%)[2]	**-0.7**	

Notes:
1. Source from a survey of commuters in San Diego County. If a context-specific input can be provided, replace this default with that value. Note, However, the percent of employees that participate in the vanpool program is capped at 15 percent, which is based on the high end of vanpool participation survey data for several successful programs in the U.S.
2. The maximum percent reduction, according to CAPCOA, is 20.4 percent.

STEP 2 - CALCULATE THE DAILY VMT REDUCTION PER VAN

The daily VMT reduction per van is based on inputs from the VTA travel demand model.

YEAR 2015 ANALYSIS

Percentage of County Workforce Population that is Non-Office and Located within Service Areas[1]	19.8%	Year 2015 VTA Travel Demand Model	*Formula (pulled from data table).*
Total Daily Commute VMT Attributable to Vanpool Service Areas (Year 2015)[2]	733,907	Year 2015 VTA Travel Demand Model	*Formula (pulled from data table).*
Portion of Eligible Non-Office Worker Population to Participate in Vanpool	25%	Estimate	
Eligible Non-Office Worker Population	1,832		
Maximum of Vans Required to Serve Eligible Worker Population	262		
Daily Commute VMT Reduction per Van	139		

Notes:
1. This is based on the portion of the Year 2015 Santa Clara County employee population represented by agricultural, industrial and wholesale workers.
   Calculation: [Agricultural Employees Countywide + Industrial Employees Countywide + Wholesale Employees Countywide] / All Employees Countywide
2. Based on the Year 2015 Commute VMT (i.e., Home-Based-Work VMT per Employee) for the service areas of Gilroy and Morgan Hill.
   Calculation: [HBW VMT for Gilroy + HBW VMT for Morgan Hill] / HBW VMT Countywide

YEAR 2040 ANALYSIS

Percentage of County Workforce Population that is Non-Office and Located within Service Areas[1]	19.2%	Year 2040 VTA Travel Demand Model	*Formula (from other tab). Data summarized for VMT Reductions Memo.*
Total Daily Commute VMT Attributable to Vanpool Service Areas (Year 2040)[2]	733,900	Year 2040 VTA Travel Demand Model	*Formula (from other tab). Data summarized for VMT Reductions Memo.*
Portion of Eligible Non-Office Worker Population to Participate in Vanpool	25%	Estimate	
Eligible Non-Office Worker Population	1,776		
Maximum of Vans Required to Serve Eligible Worker Population	254		
Daily Commute VMT Reduction per Van	139		

Notes:
1. This is based on the portion of the Year 2040 Santa Clara County employee population represented by agricultural, industrial, and wholesale workers.
   Calculation: [Agricultural Employees Countywide + Industrial Employees Countywide + Wholesale Employees Countywide] / All Employees Countywide
2. Based on the Year 2040 Commute VMT (i.e., Home-Based-Work VMT per Employee) for the service areas of Gilroy and Morgan Hill.
   Calculation: [HBW VMT for Gilroy + HBW VMT for Morgan Hill] / HBW VMT Countywide

STEP 3 - ESTIMATE THE DAILY, ANNUAL, AND LIFESPAN VMT REDUCTION (BASED ON A LOW- AND HIGH-ESTIMATE OF VANPOOL USAGE)

Estimate of daily, annual, and lifespan VMT reduction based on scaling of daily VMT reduction.

Low Estimate

Daily Commute VMT Reduction per Van	139	*Formula. Input from Step 2 above.*
Number of Vans Leased per Year - **Low Estimate**[1]	85	*User input.*
Daily Commute VMT Reduction per Program	11,807	*Formula*
Days in a Year (Workdays)[2]	260	*User input.*
Annual VMT Reduction per Program	3,069,724	*Formula*
Lifespan of Mitigation Action (Years)	25	*User input.*
Lifespan VMT Reduction per Program	76,743,098	*Formula*

Notes:
1. The number of vanpools served by the Program. This is a user input and should be less than the maximum number served (calculated under Step 1).
2. Number of days used to annualize VMT based on daily VMT reduction values. 260 is based on the number of weekdays in a year: 52 weeks per year x 5 days per week.

High Estimate

Daily Commute VMT Reduction per Van	139	
Number of Vans Leased per Year - **High Estimate**[1]	250	
Daily Commute VMT Reduction per Program	34,725	
Days in a Year (Workdays)[2]	260	*User assumption. Formula for consistency with Year 2015 Low Estimate analysis.*
Annual VMT Reduction per Program	9,028,600	
Lifespan of Mitigation Action (Years)	25	
Lifespan VMT Reduction per Program	225,714,995	

Notes: same as those for the Low Estimate

Low Estimate

Daily Commute VMT Reduction per Van	139	*Formula. Input from Step 2 above.*
Number of Vans Leased per Year - **Low Estimate**[1]	85	*User assumption. Formula for consistency with Year 2015 analysis.*
Daily Commute VMT Reduction per Program	11,798	
Days in a Year[2]	260	*User assumption. Formula for consistency with Year 2015 analysis.*
Annual VMT Reduction per Program	3,067,508	*Formula*
Lifespan of Mitigation Action (Years)	25	*User assumption. Formula for consistency with Year 2015 analysis.*
Lifespan VMT Reduction per Program	76,687,690	

Notes: same as those for the Year 2015 analysis.

High Estimate

Daily Commute VMT Reduction per Van	139	*Formula. Input from Step 2 above.*
Number of Vans Leased per Year - **High Estimate**[1]	250	*User assumption. Formula for consistency with Year 2015 analysis.*
Daily Commute VMT Reduction per Program	34,700	
Days in a Year[2]	260	*User assumption. Formula for consistency with Year 2015 analysis.*
Annual VMT Reduction per Program	9,022,081	*Formula*
Lifespan of Mitigation Action (Years)	25	*User assumption. Formula for consistency with Year 2015 analysis.*
Lifespan VMT Reduction per Program	225,552,028	

Notes: same as those for the Year 2015 analysis.

STEP 4 - CALCULATE DAILY, ANNUAL AND LIFESPAN PROGRAM COST (BASED ON A LOW- AND HIGH-ESTIMATE OF VANPOOL USAGE)

Annual project cost is based on MTC/Commute With Enterprise data for Santa Clara County vanpools, provided by the VTA.

Low Estimate

Monthly Lease Cost per Van[1]	$ 1,525	*Formula, referencing cost data in the notes.*
Administrative Cost (percentage)[2]	0%	
Monthly Lease Cost per Van (with admin included)	$ 1,525	*Formula*
Number of Vans Leased per Year	85	*Formula. User input from Step 3 above.*
Project Lifespan (Years)	25	*Formula. User input from Step 3 above.*
Lifespan Cost of Mitigation Action[1]	$ 38,887,500	*Formula*
Annual Cost (Avg Year)	$ 1,555,500	*Formula*
Days in a Year (Workdays)	260	*Formula. User input from Step 3 above.*
Daily Cost of Mitigation Action (Avg Day)	$ 5,983	*Formula*

CURRENTLY COSTS ARE THE SAME FOR THE 2015 AND 2040 ANALYSIS SCENARIOS.

Note:
1. Based on MTC's Regional Vanpool program, the monthly cost to lease 7-passenger vans is $1,400 to $1,650. This program would subsidize the full lease cost, though, MTC and/or VTA subsidies for qualifying vanpools could further reduce the cost.
   If the program were instead layered onto the existing MTC program, vanpools may be eligible for up to $900 in additional monthly subsides from the MTC or VTA: $500 from MTC for vanpools that start or end in the Bay Area; $400 from VTA for trips that start or end in Santa Clara County.
2. Per discussions with MTC and Commute with Enterprise (CWE): MTC has negligible marketing costs; CWE has already does extensive marketing and runs a program so there would be negligible to zero additional marketing costs.
2. Based on the program only applying to workdays.

High Estimate

Monthly Lease Cost per Van[1]	$ 1,525	*Formula, referencing cost data in the notes.*
Administrative Cost (percentage)[2]	0%	
Monthly Lease Cost per Van (with admin included)	$ 1,525	*Formula*
Number of Vans Leased per Year	250	*Formula. User input from Step 3 above.*
Project Lifespan (Years)	25	*Formula. User input from Step 3 above.*
Lifespan Cost of Mitigation Action[1]	$ 114,375,000	*Formula*
Annual Cost (Avg Year)	$ 4,575,000	*Formula*
Days in a Year (Workdays)	260	*Formula. User input from Step 3 above.*
Daily Cost of Mitigation Action (Avg Day)	$ 17,596	*Formula*

Notes: same as those for the Low Estimate

Appendix N: VMT Reduction Analysis Considerations

Valley Transportation Authority

Vehicle Miles Traveled Reduction Analysis Considerations

The research on VMT mitigation is constantly evolving, and emerging studies on the effectiveness of VMT reducing projects and programs are an important consideration when developing a mitigation program. The most widespread method of calculating the VMT reductions from projects and programs is the California Air Pollution Control Officers Association (CAPCOA) 2021 *Handbook for Analyzing GHG Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* report.[1] The handbook, which was released in 2021, provides VMT and GHG quantification methods for a variety of land use and transportation strategies, such as implementing transit service expansions, installing bicycle infrastructure improvements, and providing affordable housing.

The CAPCOA methods produce the VMT reduction associated with the 'affected population'. It does not contain information necessary to understand the complete effect on the 'rest of the population'. For example, increasing transit frequency will increase ridership and some of those new riders will be former drivers. For this population of drivers, their VMT will be reduced. However, CEQA requires the impacts of mitigation to be disclosed. The shift of drivers will free up roadway capacity for other drivers and reduce their travel times causing an 'induced travel' effect that will dampen the mitigation effectiveness. How much is uncertain although understanding the built environment context, VMT trends, transit ridership trends, and the effects of transportation network companies and other emerging trends in California and Santa Clara County will help substantiate the amount of VMT reduction associated with a VMT mitigation action. The discussion below notes considerations about VMT reductions achievable in Santa Clara County.

Santa Clara County Context

The CAPCOA handbook indicates that projects in suburban areas may achieve substantial reductions in VMT, however, achieving this level of reduction requires that new land use developments implement numerous individual project-level strategies (e.g., TDM and site design strategies) and be sited in an efficient transit-adjacent location. These traits may not be feasible in all geographies within Santa Clara County, some of which are characterized by

[1] *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity: Designed for Local Governments, Communities, and Project Developers.* California Air Pollution Control Officers Association (CAPCOA). August 2021. https://www.airquality.org/ClimateChange/Documents/Handbook%20Public%20Draft_2021-Aug.pdf

dispersed, low-density, automobile-dependent land use patterns. In addition, project-level VMT reduction measures are often implemented by individual building tenants. As such, their use requires ongoing monitoring and adjusting to account for changes in tenants and their travel behavior.

Due to these project-specific implementation barriers, ad-hoc project-by-project mitigation is less effective for reducing VMT compared with larger scale program-based approaches, such as an impact fee program that funds transit expansion, or land use and zoning changes at a citywide level. The emergence of these new mitigation concepts presents opportunities to reduce VMT at a citywide or regional scale, though the measured effects of these programs (and their ability to reach desired long-term land use outcomes) are largely unknown. This, of course, is one central element of the VTA Equitable VMT Mitigation Program study.

Areas with Land Use Density to Support VMT Reduction Measures

Research behind VMT reduction indicates the built environment matters and many VMT reduction projects are effectively limited in low density communities like some portions of Santa Clara County. For example, as described in *Land Use-Based Transit Planning*,[2] there are limitations to how much transit service can reduce VMT in low density areas. Increasing frequencies, extending hours of operation, extending existing routes, providing new routes, or providing new express transit service are all considered projects that aim to provide a reliable transit service that can compete with driving. Additionally, recent comments from CARB on the environmental documents for freeway expansion projects cites research that questions the effectiveness of many traditional TDM measures and driving reduction strategies, due to backfilled traffic.[3]

Combining transit projects with improvements to active transportation networks or increased parking costs can further incentivize a mode shift toward transit and away from driving. For these types of transit improvements to be effective at reducing VMT, they need to occur in places where existing roadway congestion is high (i.e., congestion persists for multiple hours of the day), parking is limited and priced, transit travel times are both reliable and competitive with driving, and population plus employment density is great enough to support VMT reduction projects. Even under these conditions, transit expansion may not produce lower VMT levels because it will result in the same induced travel effects created by roadway capacity expansion. Basically, people shift from driving to transit, thus freeing up roadway capacity that is quickly consumed by latent demand. This effect has been analyzed and quantified in the same research used to support the National Center for Sustainable Transportation (NCST) induced travel calculator.[4]

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[2] Milam, R., & T. A. Luo, “Land Use-Based Transit Planning.” Transportation Research Record, 2063, (2008): pp.143-148.

[3] *CARB DEIR Comment Letter: I-5 Red Hill Avenue to OC/LA County Line Managed Lanes Project.* Steven S. Cliff, Executive Officer, California Air Resources Board (CARB). July 18, 2023.

[4] Duranton, G., & M. A. Turner (2011). The Fundamental Law of Road Congestion: Evidence from US Cities. American Economic Review, 101(6), 2616-2652.

Appendix O: VMT Mitigation Action Prioritization Schemes

Valley Transportation Authority

VMT Mitigation Action Prioritization Schemes

The project team tested several VMT mitigation action prioritization schemes to determine if ranking or a cut-off point system would be useful as a part of a future selection process for VMT mitigation actions (refer to Table 1 for criteria).

Table 1: VMT Mitigation Action Cost-per-VMT-Reduced Summary

Criteria	Description
VMT Reduction Cost Evaluation	
Project Type	Indication of whether the project represents a capital or operational/programmatic improvement.
Cost per VMT Reduced	The estimated cost per VMT reduced based on the inputs detailed above for Typical Project Cost and VMT Reduction.
Equity Consistency Evaluation	
1. No excess VMT would be generated by the new development in Santa Clara County.	Indication of whether the VMT reduction measure would advance the equity performance metric indicated in the column title. Success/Advancement of this outcome is evaluated as a Yes or No.
2. EPC areas with low VMT rates would decrease, maintain, or increase their average VMT rate.	*Same as above, specific to this performance metric.*
3. EPC areas with high VMT rates would decrease their average VMT rate.	*Same as above, specific to this performance metric.*
4. Non-EPC areas with low VMT rates would decrease their average VMT rate.	*Same as above, specific to this performance metric..*
5. Non-EPC areas with high VMT rates would decrease their average VMT rate.	*Same as above, specific to this performance metric.*
6. Non-EPC areas would decrease their average VMT rate.	*Same as above, specific to this performance metric.*
Feasibility Considerations Evaluation	
Fiscal Impact	A qualitative assessment of the fiscal impact (i.e., cost) of the VMT reduction measure. Presented on a spectrum of High to Low.
Implementation Challenge	A qualitative assessment of the implementation challenge of the VMT reduction measure. Presented on a spectrum of High to Low.
Institutional and Governance Challenge	A qualitative assessment of the political challenge of the VMT reduction measure. Presented on a spectrum of High to Low.

Source: Fehr & Peers, 2024.

Three prioritization schemes were tested: one put the greatest weight on achieving VMT reductions in EPC areas, one put the greatest weight on minimizing costs, and one put the greatest weight on reducing overall VMT. Points were allocated to each possible criterion value.

The conclusion was that the three example VMT mitigation actions ranked between 4 and 26 points of one another, in similar orders. The Enhanced Vanpool action typically ranks first, followed by the E-Bike Subsidies and the Transit Improvements, although the relative strength of each action varied depending on the prioritization scheme used. The use of a VMT mitigation action prioritization scheme could assist with identifying projects that are good candidates for VMT mitigation actions.

The three schemes are presented side-by-side in **Figure 1** and each on their own in **Figures 2 through 4**.

Figure 1: VMT Mitigation Action Point Scheme Summary

Title	Test Scheme #1: VMT Reductions in EPC Areas								Test Scheme #2: Low Cost VMT Reduction								Test Scheme #3: Reduce High VMT Rates							
Per Criterion	**Weight**	**Max Points**	**Points per Value**						**Weight**	**Max Points**	**Points per Value**						**Weight**	**Max Points**	**Points per Value**					
VMT Reduction Cost Evaluation	**20%**	**20**	**Capital**	**Operating**	**High**	**Medium**	**Low**		**30%**	**30**	**Capital**	**Operating**	**High**	**Medium**	**Low**		**0%**	**0**	**Capital**	**Operating**	**High**	**Medium**	**Low**	
Project Type (capital vs operating)	10%	10	10	0					15%	15	15	0					0%	0	0	0				
Daily Cost per VMT Reduced (high/med/low)	10%	10			0	5	10		15%	15			0	7.5	15		0%	0			0	0	0	
Equity Consistency Evaluation	**60%**	**60**	**Yes**	**No**	**Community**	**City**	**Nieghborhood**	**No**	**40%**	**40**	**Yes**	**No**	**Community**	**City**	**Nieghborhood**	**No**	**52%**	**52**	**Yes**	**No**	**Community**	**City**	**Nieghborhood**	**No**
1. No excess VMT would be generated by the new development in Santa Clara County. (yes/no)	20%	20	20	0					12%	12	12	0					14%	14	14	0				
2. EPC areas with low VMT rates would decrease, maintain, or increase their average VMT rate. (county/city/neigborhood)	12%	12			12	8	6	0	8%	8			8	6	4	0	4%	4			4	2	0	0
3. EPC areas with high VMT rates would decrease their average VMT rate. (same as above)	16%	16			16	12	8	0	8%	8			8	6	4	0	10%	10			10	x	2	0
4. Non-EPC areas with low VMT rates would decrease their average VMT rate. (same as above)	4%	4			4	2	0	0	4%	4			4	2	0	0	4%	4			4	2	0	0
5. Non-EPC areas with high VMT rates would decrease their average VMT rate. (same as above)	4%	4			4	2	0	0	4%	4			4	2	0	0	10%	10			10	6	2	0
6. The non-EPC areas would decrease their average VMT rate. (same as above)	4%	4			4	2	0	0	4%	4			4	2	0	0	10%	10			10	6	2	0
Feasibility Considerations Evaluation	**20%**	**20**	**Low**	**Medium**	**High**				**30%**	**30**	**Low**	**Medium**	**High**				**48%**	**48**	**Low**	**Medium**	**High**			
Fiscal Impact (high/med/low)	7%	7	8	6	4				10%	10	10	6	2				16%	16	16	12	8			
Implementation Challenge	7%	7	8	6	4				10%	10	10	6	2				16%	16	16	12	8			
Political Challenge	7%	7	8	6	4				10%	10	10	6	2				16%	16	16	12	8			
		100								**100**								**100**						

Rank Outcome

1	Enhanced Vanpool	75
2	E-Bike Subsidies	72
3	Transit Improvements	49

1	Enhanced Vanpool	65
2	E-Bike Subsidies	64
3	Transit Improvements	61

1	Enhanced Vanpool	68
2	Transit Improvements	54
3	E-Bike Subsidies	54

Tied with E-Bike Subsidies

Valley Transportation Authority

Figure 2: Test Scheme #1: VMT Reductions in EPC Areas

Title	Test Scheme #1: VMT Reductions in EPC Areas										
Per Criterion	**Weight**	**Max Points**	**Points per Value**						**Results**		
VMT Reduction Cost Evaluation	**20%**	**20**	**Capital**	**Operating**	**High**	**Medium**	**Low**		**Transit Improvements**	**E-Bike Subsidies**	**Enhanced Vanpool**
Project Type (capital vs operating)	10%	10	10	0					**10**	**10**	**0**
Daily Cost per VMT Reduced (high/med/low)	10%	10			0	5	10		**5**	**10**	**10**
Equity Consistency Evaluation	**60%**	**60**	**Yes**	**No**	**Community**	**City**	**Nieghborhood**	**No**			
1. No excess VMT would be generated by the new development in Santa Clara County. (yes/no)	20%	20	20	0					**0**	**20**	**20**
2. EPC areas with low VMT rates would decrease, maintain, or increase their average VMT rate. (county/city/neigborhood)	12%	12			12	8	6	0	**6**	**8**	**12**
3. EPC areas with high VMT rates would decrease their average VMT rate. (same as above)	16%	16			16	12	8	0	**8**	**12**	**16**
4. Non-EPC areas with low VMT rates would decrease their average VMT rate. (same as above)	4%	4			4	2	0	0	**0**	**0**	**0**
5. Non-EPC areas with high VMT rates would decrease their average VMT rate. (same as above)	4%	4			4	2	0	0	**0**	**0**	**0**
6. The non-EPC areas would decrease their average VMT rate. (same as above)	4%	4			4	2	0	0	**0**	**0**	**0**
Feasibility Considerations Evaluation	**20%**	**20**	**Low**	**Medium**	**High**						
Fiscal Impact (high/med/low)	7%	7	8	6	4				**8**	**6**	**8**
Implementation Challenge	7%	7	8	6	4				**8**	**4**	**6**
Political Challenge	7%	7	8	6	4				**8**	**4**	**6**
		100							**49**	**72**	**75**

Rank Outcome

1	Enhanced Vanpool	75
2	E-Bike Subsidies	72
3	Transit Improvements	49

Figure 3: Test Scheme #2: Low Cost VMT Reduction

Title	Test Scheme #2: Low Cost VMT Reduction										
Per Criterion	**Weight**	**Max Points**	**Points per Value**						**Results**		
VMT Reduction Cost Evaluation	**30%**	**30**	**Capital**	**Operating**	**High**	**Medium**	**Low**		**Transit Improvements**	**E-Bike Subsidies**	**Enhanced Vanpool**
Project Type (capital vs operating)	15%	15	15	0					**15**	**15**	**0**
Daily Cost per VMT Reduced (high/med/low)	15%	15			0	7.5	15		**7.5**	**15**	**15**
Equity Consistency Evaluation	**40%**	**40**	**Yes**	**No**	**Community**	**City**	**Nieghborhood**	**No**			
1. No excess VMT would be generated by the new development in Santa Clara County. (yes/no)	12%	12	12	0					**0**	**12**	**12**
2. EPC areas with low VMT rates would decrease, maintain, or increase their average VMT rate. (county/city/neigborhood)	8%	8			8	6	4	0	**4**	**6**	**8**
3. EPC areas with high VMT rates would decrease their average VMT rate. (same as above)	8%	8			8	6	4	0	**4**	**6**	**8**
4. Non-EPC areas with low VMT rates would decrease their average VMT rate. (same as above)	4%	4			4	2	0	0	**0**	**0**	**0**
5. Non-EPC areas with high VMT rates would decrease their average VMT rate. (same as above)	4%	4			4	2	0	0	**0**	**0**	**0**
6. The non-EPC areas would decrease their average VMT rate. (same as above)	4%	4			4	2	0	0	**0**	**0**	**0**
Feasibility Considerations Evaluation	**30%**	**30**	**Low**	**Medium**	**High**						
Fiscal Impact (high/med/low)	10%	10	10	6	2				**10**	**6**	**10**
Implementation Challenge	10%	10	10	6	2				**10**	**2**	**6**
Political Challenge	10%	10	10	6	2				**10**	**2**	**6**
		100							**61**	**64**	**65**

Rank Outcome

1	Enhanced Vanpool	65
2	E-Bike Subsidies	64
3	Transit Improvements	61

Figure 4: Test Scheme #3: Reduce High VMT Rates

Title	Test Scheme #3: Reduce High VMT Rates										
Per Criterion	**Weight**	**Max Points**	**Points per Value**						**Results**		
VMT Reduction Cost Evaluation	**0%**	**0**	**Capital**	**Operating**	**High**	**Medium**	**Low**		**Transit Improvements**	**E-Bike Subsidies**	**Enhanced Vanpool**
Project Type (capital vs operating)	0%	0	0	0					**0**	**0**	**0**
Daily Cost per VMT Reduced (high/med/low)	0%	0			0	0	0		**0**	**0**	**0**
Equity Consistency Evaluation	**52%**	**52**	**Yes**	**No**	**Community**	**City**	**Nieghborhood**	**No**			
1. No excess VMT would be generated by the new development in Santa Clara County. (yes/no)	14%	14	14	0					**0**	**14**	**14**
2. EPC areas with low VMT rates would decrease, maintain, or increase their average VMT rate. (county/city/neigborhood)	4%	4			4	2	0	0	**0**	**2**	**4**
3. EPC areas with high VMT rates would decrease their average VMT rate. (same as above)	10%	10			10	6	2	0	**2**	**6**	**10**
4. Non-EPC areas with low VMT rates would decrease their average VMT rate. (same as above)	4%	4			4	2	0	0	**0**	**0**	**0**
5. Non-EPC areas with high VMT rates would decrease their average VMT rate. (same as above)	10%	10			10	6	2	0	**2**	**2**	**0**
6. The non-EPC areas would decrease their average VMT rate. (same as above)	10%	10			10	6	2	0	**2**	**2**	**0**
Feasibility Considerations Evaluation	**48%**	**48**	**Low**	**Medium**	**High**						
Fiscal Impact (high/med/low)	16%	16	16	12	8				**16**	**12**	**16**
Implementation Challenge	16%	16	16	12	8				**16**	**8**	**12**
Political Challenge	16%	16	16	12	8				**16**	**8**	**12**
		100							**54**	**54**	**68**

Rank Outcome

1	Enhanced Vanpool	68	
2	Transit Improvements	54	Tied with E-Bike Subsidies
3	E-Bike Subsidies	54	

Appendix P: Equity Considerations Materials: Mineta/URBP Class Research Brief

Valley Transportation Authority

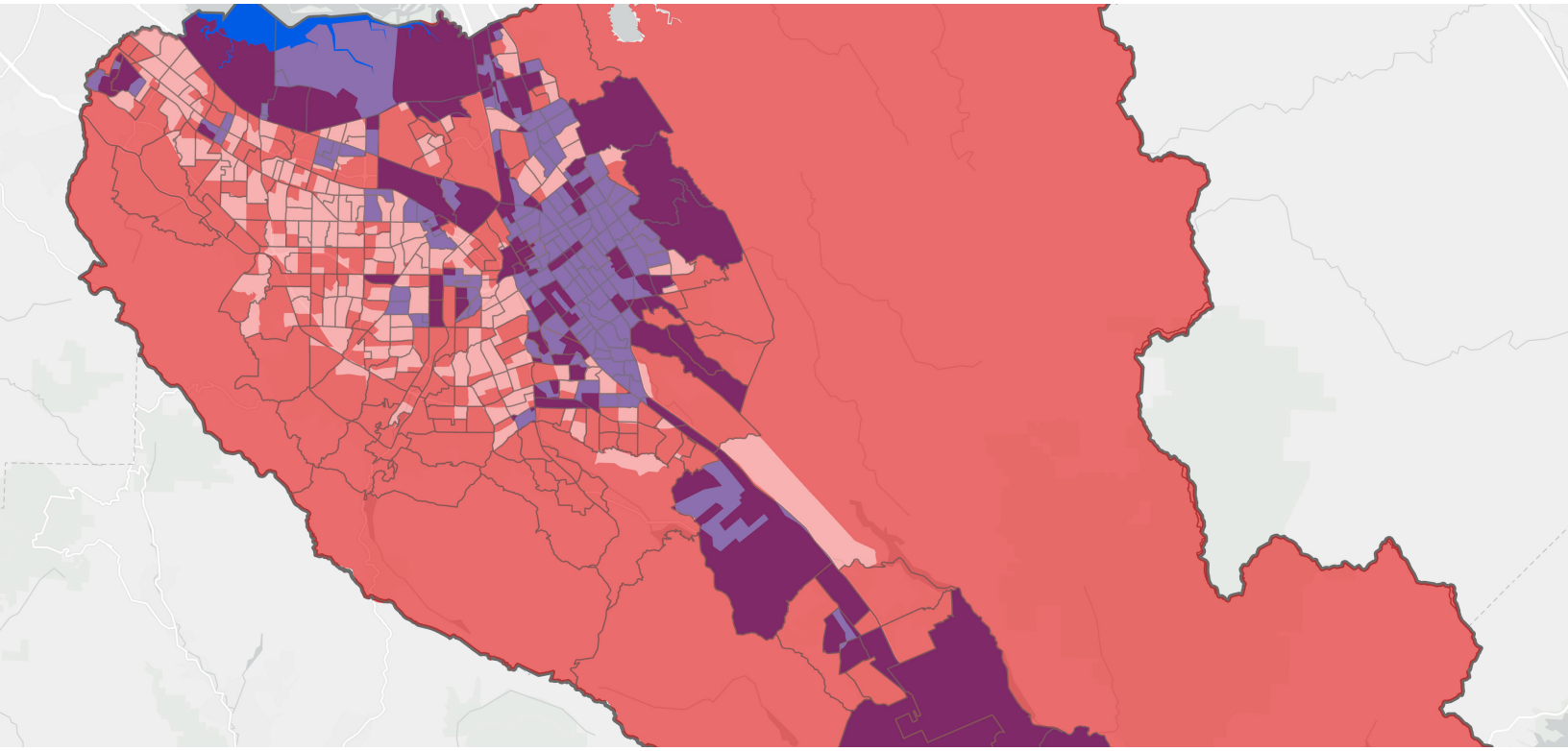
SJSU SAN JOSÉ STATE UNIVERSITY

Valley Transportation Authority

Exploring Equity Frameworks for a Cross-Jurisdictional Vehicle Miles Traveled Mitigation Program in Santa Clara County

Project 2346
May 2024

Serena E. Alexander, PhD Luana Chen Maxwell Belote-Broussard



Introduction

New developments like housing, office buildings, and stores generate vehicle trips. The Santa Clara Valley Transportation Authority (VTA) is working with partners to develop a new program called the Equitable Vehicle Miles Traveled (VMT) Program for Santa Clara County with goals of reducing driving from new developments and bringing transportation solutions to communities that need it most. The proposed program would provide a VMT mitigation option for local government agencies and developers, which would improve travel options for the community with an emphasis on cross-jurisdictional collaboration and equity. VTA enlisted the help of San José State University (SJSU) graduate students and a Mineta Transportation Institute (MTI) research team to identify ways to develop the program with equity in mind.

Study Methods

Student efforts unfolded during Phase 1 of VTA's community engagement and focused on identifying ways to advance program equity through the following: 1) a literature review to identify best practices for building equity into the program design, 2) mapping and spatial analysis of different inequities and burdens (in areas of income, health, pollution, and transportation) experienced throughout the county, 3) community engagement observations of Phase 1 community engagement events to assess VTA's community engagement approach, and 4) stakeholder interviews to gather in-depth community feedback on transportation needs, thoughts on new development, and the level of support for developments funding transportation solutions to reduce driving. Each student group had different methods for data collection and analysis to form recommendations for their respective focus areas. At the end of the semester, each group produced a policy report and presented preliminary recommendations to the VTA project team. The MTI research team continued

and refined student analysis using the same methods and linked findings from the student reports to develop a set of equity-focused recommendations for the VTA project team.

Findings

The analysis revealed that equity should be incorporated early and at multiple points throughout the program development and implementation phases. From the literature review, best practices identified for developing a program equity framework included defining program equity in a locally relevant way, embedding equity into the project selection process and program evaluation criteria, and developing an informative and implementable accountability plan. From the spatial analysis, additional areas to consider for community engagement and VMT mitigation measure selection were identified in northern Sunnyvale, Morgan Hill, and near Gilroy. Community engagement observations revealed that the VTA project team's approach to public meetings, focus groups, and surveys was excellent, but public engagement and program informational materials could be simplified for non-technical audiences and the VTA project team could better leverage social media to foster dialogue with the community. Stakeholder interviews revealed that improved transit and enhanced feelings of safety for alternative travel modes are top transportation priorities and needs identified by the community. The interview responses also revealed that most community members are conditionally supportive of development contributions to VMT mitigation measures and the main concerns are transparency and accountability in the project selection and funding processes.

Policy/Practice Recommendations

The following are key recommendations from the report:

- Develop and adopt a localized definition of VMT equity that reflects inequities experienced in the community and aligns with the transportation needs and priorities of the community. This is a best practice identified in the literature review and the process of developing a definition can be informed by this project's spatial analysis and stakeholder interview findings.
- Develop an informative and implementable accountability plan to promote good governance, strengthen relationships between VTA and the public, and measure the progress of program equity goals. This is a best practice identified in the literature review and would address concerns voiced by interviewees regarding transparency in the project selection and funding process.
- Embed equity at key decision-making points, including project prioritization and evaluation metrics. This is a best practice identified in the literature review that advances equity in the program framework by building equity considerations in the program.
- Prioritize public transit investments to improve the availability, frequency, reliability, and speed of transit to make this a more attractive mode. Improved public transit was a major transportation need identified by the community during Phase 1 of the community engagement. Interviewees voiced a need for public transit to be more competitive with travel by car in order to shift away from driving as a primary travel mode.

About the Authors

Dr. Serena Alexander is an Associate Professor of Public Policy and Environmental Engineering at Northeastern University. Her research focuses on developing cutting-edge strategies to address climate change and climate justice.

Luana Chen and **Maxwell Belote-Broussard** are graduate students in San José State University's Urban and Regional Planning Program.

To Learn More

For more details about the study, download the full report at transweb.sjsu.edu/research/2346

MTI is a University Transportation Center sponsored by the U.S. Department of Transportation's Office of the Assistant Secretary for Research and Technology and by Caltrans. The Institute is located within San José State University's Lucas Graduate School of Business.

Appendix Q: Local Questions

Valley Transportation Authority

Local Questions on Legal, Practical, and Other Considerations

Due to the relative novelty of VMT mitigation programs, local jurisdictions and VTA staff posed numerous questions about the recommended VMT exchange structure during the development of this program framework. Many of these concerns have been addressed throughout the report, with a few remaining points addressed here:

Does SB 743 require a VMT bank?

No; SB 743 is agnostic about the type of VMT mitigation program, or whether a VMT mitigation program is established at all, as discussed in **Chapter 1** of the report.

What are the administrative and reporting requirements?

These are described in this report's **Legal Basis and Justification** section.

Could funds go toward a percentage of a project? What does it mean that applicants must fund an entire mitigation action?

Under a VMT exchange structure, the VMT mitigation exchange is occurring at the level of a project (as opposed to credits that represent some amount of VMT reduced). Thus, funds must be allocated to distinct projects that in total represent an amount of VMT reduced equivalent to what the project applicant must mitigate.

Why does the VMT bank have more administrative requirements?

A VMT bank requires the administering agency to continually update its calculations of the cost of purchasing a VMT credit, depending on which VMT mitigation actions are included in the program and the cost of delivering those actions. The administering agency must also monitor each mitigation action to verify that it is producing the expected level of VMT reduction and adjust the cost of future VMT credits to account for shortfalls in actual VMT reduction. This can be a financially burdensome and technically challenging process, making this program structure harder to implement quickly.

What would be an example of the exchange's eligibility criteria to add a new action?

This is described in **Chapter 4** of the report, both related to the VMT reduction project selection and evaluation process as well as how that process would be updated over time by the VMT reduction project mitigation action review team.

How often would the pre-qualified list be updated?

The specific timetable for this will be determined in the legal agreements developed between the program sponsor and lead agencies participating in the program.

Can the VMT mitigation be calculated/measured as GHG emission reductions?

This is not necessary but could be specified within the legal agreements developed between the program sponsor and lead agencies participating in the program.

Can you further explain the "first-in problem" which states the most cost-effective measures will be funded first?

The "first-in" problem refers to the fact that applicants may flock to fund the most cost-effective measures first. Scalable VMT reduction actions like e-bike subsidies provide one way to overcome the first-in problem; the ability to provide the action can grow with demand to a degree. There are limits, however, to what the market can absorb, which would need to be evaluated by the review team.