

# APPENDIX A – 6

## *Regional Policies: Long-Range Planning / Plan Bay Area*

**MTC Public Participation Plan for  
the San Francisco Bay Area**

**MTC Resolution No. 4174**



Date: February 25, 2015  
W.I.: 1112  
Referred by: Planning  
Revised: 06/27/18-C

ABSTRACT

Resolution No. 4174, Revised

This resolution adopts the MTC Public Participation Plan.

This resolution supersedes MTC Resolution No. 3821.

Attachment A of this resolution was revised on June 27, 2018 to reflect MTC's updated public participation program.

Further discussion of the MTC Public Participation Plan is contained in the Planning Committee memorandum dated June 6, 2018.

Date: February 25, 2015  
W.I.: 1112  
Referred by: Planning

Re: MTC Public Participation Plan

METROPOLITAN TRANSPORTATION COMMISSION

RESOLUTION 4174

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code Section 66500 *et seq.* and is the federally designated metropolitan planning organization for the San Francisco Bay Area; and

WHEREAS, MTC is committed to involving Bay Area residents, as well as public agencies and officials, Tribal governments, freight providers and other interested parties in the development of transportation plans and programs in a manner consistent with federal legislation, Moving Ahead for the 21<sup>st</sup> Century (Map 21, PL 112-141) and pursuant to requirements of the Federal Highway Administration and the Federal Transit Administration that metropolitan planning organizations adopt and periodically update public participation plans [23 CFR Part 450 and 49 CFR Part 613]; and

WHEREAS, MTC is committed to implementing California Senate Bill 375 (Chapter 728, 2008 Statutes), which calls upon metropolitan planning organizations to adopt participation plans to engage the public in development of the regional transportation plan/sustainable communities strategy; and

WHEREAS, MTC in March 2006, as part of adopting principles on Environmental Justice, committed to “Create an open and transparent public participation process that empowers low-income communities and communities of color to participate in decision making that affects them”; and

WHEREAS, MTC, recognizing the value to be gained from listening to and learning from many voices from throughout the diverse nine-county Bay Area, developed the attached Public Participation Plan after numerous conversations, meetings, surveys, focus groups and a public meeting; now, therefore, be it

RESOLVED, that MTC adopts the Public Participation Plan attached hereto and incorporated herein as Attachment A; be it further

RESOLVED, that Attachment A shall be revised periodically by MTC as part of its ongoing commitment to inform and include the people of the Bay Area in its decision-making process; and be it further

RESOLVED, that this resolution supersedes MTC resolutions 3821 (Public Participation Plan, 2007), 2648 (Federal Public Involvement Procedures, 2003) and 3351 (Public Involvement Action Plan, 2001), and be it further

RESOLVED that the Executive Director is authorized to implement and administer the Commission's Public Participation Plan, and shall submit a copy of this resolution to the Federal Highway Administration and the Federal Transit Administration, and to other agencies as appropriate.

METROPOLITAN TRANSPORTATION COMMISSION



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Chair

The above resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in Oakland, California on February 25, 2015.



Date: February 25, 2015  
W.I.: 1112  
Referred by: Planning  
Revised: 06/27/18-C

Attachment A  
Resolution No. 4174

The Public Participation Plan is on file in the offices of the Metropolitan Transportation Commission, Metro Center, 375 Beale Street, Suite 800, San Francisco, CA 94105.

**METROPOLITAN TRANSPORTATION COMMISSION**  
**PUBLIC PARTICIPATION PLAN**  
for the SAN FRANCISCO BAY AREA

Metropolitan Transportation Commission  
Bay Area Metro Center  
375 Beale Street, San Francisco, CA 94105

Approved: June 27, 2018

*To request this document in other languages,  
please call 415.778.6757*

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Para solicitar una copia en español del  
Borrador Preliminar del Plan para la Participación del Público llame al 415.778.6757.



**METROPOLITAN**  
**TRANSPORTATION**  
**COMMISSION**

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# METROPOLITAN TRANSPORTATION COMMISSION PUBLIC PARTICIPATION PLAN

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# Metropolitan Transportation Commission Public Participation Plan

## Executive Summary

This document gives an overview of how interested members of the public can participate in the key transportation planning, policy and investment decisions of the Metropolitan Transportation Commission (MTC). To answer very specific state and federal requirements, it is a lengthy document. But the intent is to illuminate how MTC conducts its business so that people can have a say in important decisions that affect them. MTC is committed to early and continuous public participation opportunities, and employs these strategies to encourage an open process:

- Engage early whenever possible
- Remove language or physical barriers to participation
- Respond to written comments
- Inform Commissioners and the public about areas of agreement and disagreement
- Notify the public about outcomes

### MTC's *Public Participation Plan*...

- Explains methods for providing continuing public engagement, including the role of advisory groups as well as the Commission's own committees and meeting structure; the basics of MTC public meetings, workshops and other events; how to be notified about news, activities and public comment opportunities; and MTC's web site and social media (see pages 6-12)
- Summarizes various methods for public engagement, including techniques for involving low-income communities, communities of color and persons with disabilities as well as those with limited-English proficiency; techniques for sharing public comments with Commissioners; and relaying the impact of public comments on MTC's decisions (see pages 13-16)
- **Details the process for updating, amending and modifying MTC's long-range Regional Transportation Plan and Transportation Improvement Program (see pages 17-34)**
- Describes how MTC consults with tribal governments and other public agencies (pages 29-34)
- **Discusses the process for evaluating and updating MTC's Public Participation Plan (see page 35)**

Details the process and schedule for public engagement goals and opportunities relating to the next **update to the region's** long-range plan, known as Plan Bay Area 2050, including information about regional forecasting, the preferred land use and investment strategy process, and issuance of the draft and final plan (see Appendix A).



# Metropolitan Transportation Commission Public Participation Plan

*I know of no safe depository of the ultimate powers of the society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them but to inform their discretion.*

— Thomas Jefferson

## I. Introduction

The Metropolitan Transportation Commission (MTC) is the transportation planning and financing agency for the nine-county San Francisco Bay Area. The Commission also serves as the Bay Area Toll Authority (BATA), with oversight of **the toll revenue from the region's seven state-owned toll bridges**, and the Service Authority for Freeways and Expressways (SAFE), with oversight of a region-wide network of freeway call boxes and roving tow trucks. MTC, through agreements with various state and local transportation agencies, also has responsibility to develop, operate, and finance an Express Lane Program. In addition, in July 2017, the staffs of the Association of Bay Area Governments (ABAG) and MTC consolidated and are now working as one integrated team to promote better collaboration and integration on common goals, and to achieve operating efficiencies. This combined work force supports the governing boards of both agencies. ABAG supports regional planning and cooperation among the cities and counties of the San Francisco Bay Area.

**The Metropolitan Transportation Commission's public involvement process** aims to give the public ample opportunities for early and continuing participation in critical transportation projects, plans and decisions, and to provide full public access to key decisions. Engaging the public early and often in the decision-making process is critical to the success of any transportation plan or program, and is required by numerous **state and federal laws, as well as by the Commission's own internal procedures.**

**This Public Participation Plan spells out MTC's process for providing the public** and interested parties with reasonable opportunities to be involved in the regional transportation planning process.



## A. MTC'S COMMITMENT TO PUBLIC PARTICIPATION

### Guiding Principles

The Metropolitan Transportation Commission's public involvement procedures are built on the following guiding principles:

1. Public participation is a dynamic activity that requires teamwork and commitment at all levels of the MTC organization.
2. One size does not fit all — input from diverse perspectives enhances the process.
3. Effective public outreach and involvement requires relationship building with local governments, stakeholders and advisory groups.
4. **Engaging interested persons in 'regional' transportation issues is challenging, yet possible, by making it relevant, removing barriers to participation, and communicating in clear, compelling language and visuals.**
5. An open and transparent public participation process empowers low-income communities and communities of color to participate in decision-making that affects them (adopted as an environmental justice principle by the Commission in 2006).

MTC undertakes specific strategies to involve the public, including low-income **persons and communities of color, in MTC's planning and investment decisions.**

#### Strategy 1: Early Engagement Is Best

MTC structures its major planning initiatives and funding decisions to provide for **meaningful opportunities to help shape outcomes. For example, because MTC's** long-range Regional Transportation Plan (RTP) is the blueprint for both new policies and new investments for the Bay Area, updates to the RTP are one of the best places for interested persons to get involved.

#### Strategy 2: Access to All

MTC works to provide all Bay Area residents opportunities for meaningful participation, regardless of disabilities or language barriers. Further, we recognize that one should not need to be a transportation professional to understand our written and oral communications.

### Strategy 3: Response to Written Comments

MTC pays close attention to the views of the public. MTC is committed to responding to every letter and e-mail sent by individual members of the public.

### Strategy 4: Inform Commissioners and Public of Areas of Agreement and Disagreement

MTC staff summarizes comments heard from various parties on items going before the Commission for action so that the Commissioners and the public have a clear understanding of the depth and breadth of opinion on a given issue.

### Strategy 5: Notify Public of Proposed or Final Actions

We strive to inform participants about how public meetings and participation are **helping to shape or have contributed to MTC’s key decisions** and actions. When **outcomes don’t correspond to the views expressed, every effort is made to explain why not.**

## B. FEDERAL AND STATE REQUIREMENTS

### **Fixing America’s Surface Transportation (FAST)**

Federal funding levels and regulations are established by Congress in surface transportation acts. The most recent act, **Fixing America’s Surface Transportation (FAST)**, was signed into law by President Obama on December 4, 2015, and underscores the need for public involvement. The law requires metropolitan planning agencies such as MTC to “provide citizens, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the **disabled, and other interested parties with a reasonable opportunity to comment**” on transportation plans and programs.

The FAST Act also encourages MTC — when developing the Regional Transportation Plan and the Transportation Improvement Program (TIP) — to coordinate transportation plans with expected growth, economic development, tourism, natural disaster risk reduction, environmental protection and other related planning activities within our region. Toward this end, this Public Participation Plan outlines key decision points for consulting with affected local, regional, state and federal agencies and Tribal governments.

### **GET INVOLVED: ACCESSIBLE MEETINGS**

All Commission public meetings or events are held in locations accessible to persons with disabilities. Monthly meetings of the Commission and its standing committees usually take place at MTC’s offices.

Assistive listening devices or other auxiliary aids are available upon request. Sign-language interpreters, readers for persons with visual impairments, or language translators will be provided if requested through MTC Public Information (415.778.6757) at least three working days (72 hours) prior to the meeting (five or more days’ notice is preferred).

## Title VI of the Civil Rights Act of 1964

Title VI of the Civil Rights Act of 1964 provides that no person shall, on the basis of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. Therefore, Title VI prohibits MTC from discriminating on the basis of race, color or national origin in carrying out its transportation planning and programming activities, which receive federal funding. Title VI was further clarified and supplemented by the Civil Rights Restoration Act of 1987 and a series of federal statutes enacted in the 1990s.

## Executive Orders

An Executive Order is an order given by the president to federal agencies. As a recipient of federal revenues, MTC assists federal transportation agencies in complying with these orders.

- *Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*  
Executive Order 12898 mandates that federal agencies make achieving environmental justice part of their missions. The fundamental principles of environmental justice include:
  - Avoiding, minimizing or mitigating disproportionately high and adverse human health or environmental effects on minority and low-income populations;
  - Ensuring full and fair participation by all potentially affected communities in the transportation decision-making process; and
  - Preventing the denial, reduction or significant delay in the receipt of benefits by minority populations and low-income communities.
  
- *Executive Order 13166: Improving Access to Services for Persons with Limited English Proficiency*  
Executive Order 13166 states that people who, as a result of national origin, are limited in their English proficiency, should have meaningful access to federally conducted and federally funded programs and activities. It requires that all federal agencies identify any need for services to those with limited English proficiency and develop and implement a system to provide those services so all persons can have meaningful access to services. **MTC's** Plan for Special Language Services to Limited English Proficient Populations can be found in English, Spanish and Chinese on

MTC's website at <https://mtc.ca.gov/about-mtc/public-participation/get-language-assistance>.

- *Executive Order 12372: Intergovernmental Review of Federal Programs*  
Executive Order 12372 calls for intergovernmental review of projects to ensure that federally funded or assisted projects do not inadvertently interfere with state and local plans and priorities. The Executive Order does not replace public participation, comment, or review requirements of other federal laws, such as the National Environmental Policy Act (NEPA), but gives elected officials of state and local governments an additional mechanism to ensure federal agency responsiveness to state and local concerns.

### 2008 California Legislation

State law (SB 375, Steinberg, Chapter 728, 2008 Statutes) calls on MTC and the Association of Bay Area Governments to develop a Sustainable Communities Strategy — as part of the Regional Transportation Plan — to integrate planning for growth and housing with long-range transportation investments, and to reduce per-capita carbon dioxide (CO<sub>2</sub>) emissions from cars and light trucks. The law also calls for a separate Public Participation Plan for development of the Regional Transportation Plan and the Sustainable Communities Strategy. Appendix A contains the Public Participation Plan for Plan Bay Area **2050, the region's next** long-range transportation plan and Sustainable Communities Strategy.

### Other Requirements

A number of other federal and state laws call on MTC to involve the public in or notify the public of its decisions. MTC complies with all other public notification **or participation requirements of the state's Ralph M. Brown Act, the California** Public Records Act, the California Environmental Quality Act, the federal Americans with Disabilities Act, and other applicable state and federal laws.

## II. Continuing Public Engagement

MTC is committed to an active public involvement process that provides comprehensive information, timely public notice and full public access to key decisions. MTC provides the public with myriad opportunities for continuing involvement in the work of the agency, through the following methods:

### A. MTC'S POLICY ADVISORY COUNCIL

The Policy Advisory Council is a 27-member advisory panel that brings a range of interests to a single table to offer the Commission policy advice. Formed in 2010, the Policy Advisory Council builds on **MTC's** long tradition of advisory committees and reflects efforts to improve the effectiveness of advisors by merging what were previously three separate advisory committees. The members of the Policy Advisory Council reflect the “Three E’s” of the Economy, Environment and Social Equity.

The Council is consulted during the development of MTC policies and strategies, and its recommendations on various issues are reported directly to the Commission. The Council may pursue its own policy/program discussions and forward independent ideas to the Commission for consideration. The Council addresses Commissioners directly at MTC committee and Commission meetings. MTC Resolution No. 3931 spells out the role and responsibilities of the Policy Advisory Council, including ways to encourage more dialogue between Commissioners and the Council.

All Policy Advisory Council meetings are videocast and archived on **MTC's** website. Meetings are open to the public. In fact, tracking the agenda and discussions of **MTC's Policy Advisory Council is one of the best ways for interested persons to engage early in the major policy and fiscal issues confronting MTC. Agendas and packets are posted on MTC's website.**

In addition to the panels listed above, MTC facilitates policy and technical discussions through numerous ad hoc working groups, and serves on other multi-agency advisory committees.

### GET INVOLVED: SERVE ON MTC'S POLICY ADVISORY COUNCIL

A major recruitment is done periodically to fill advisory council seats. However, MTC may open recruitment to fill interim vacancies. Check MTC's website for current opportunities ([mtc.ca.gov/about-mtc/what-mtc/mtc-organization/standing-committees/policy-advisory-council](http://mtc.ca.gov/about-mtc/what-mtc/mtc-organization/standing-committees/policy-advisory-council)) or call MTC's Public Information Office at 415.778.6757.

## **B. THE HUB @ 375 BEALE AND THE MTC-ABAG LIBRARY**

The public can access key documents at The Hub @ 375 Beale, located on the first floor in the Bay Area Metro Center (the building that houses MTC offices) at 375 Beale Street in San Francisco; agendas are posted adjacent to the front door of **MTC's** office building. The Hub @ 375 Beale also provides Bay Area Metro Center visitors with information and products related to the agencies housed in the building (Association of Bay Area Governments, Bay Area Air Quality Management District and the Metropolitan Transportation Commission).

The Hub offers the public two public access Internet terminals to conduct searches **of information on MTC's projects and programs. The hours for the Hub are** generally Monday-Friday from 8 a.m. to 6 p.m., and on Saturdays from 9 a.m. to 1 p.m., but are subject to change. Check the website or call MTC Public Information (415.778.6757) for exact hours.

The MTC-ABAG library is located on the seventh floor of Bay Area Metro Center and is open to the public by appointment; call 415.778.5236 or e-mail [library@bayareametro.gov](mailto:library@bayareametro.gov) to schedule an appointment. The library has an extensive collection of reports, books and magazines, covering transportation planning, demographics, economic analysis, public policy issues and regional planning in the San Francisco Bay Area. It is designed to meet the information needs of government agencies, researchers, students, the media and anyone else who is interested in transportation, regional planning and related fields.

The commitment to using technology to extend public outreach continues with MTC-ABAG Library staff posting on **MTC's** website the headlines of transportation and related stories from Bay Area daily newspapers as well as key statewide and national journals and other such publications. Readers can view the headlines each **morning on MTC's website or subscribe to the service via** e-mail.

The library makes public resource materials available for download via its publicly available catalog at <http://slk060.liberty3.net/mtc/opac.htm>.

## **C. COMMISSION AND COMMITTEE MEETINGS**

MTC encourages interested persons to attend MTC Commission and standing committee meetings to express their views. Items on the Commission agenda usually come in the form of **recommendations from MTC's standing committees.** Much of the detailed work of MTC is done at the committee level, and the

Commission encourages the public to participate at this stage, either in person or by tracking developments via the web. Occasionally the Commission may impose a time limit on public comments in order to allow all attendees the opportunity to speak.

At times it may be necessary to call a special meeting of the Commission or one of its committees— one that will be held on a different day of the week than called for in MTC’s regular meeting schedule. A “Call and Notice of Special Meeting” will be distributed at least 72 hours in advance of the meeting, or in accordance with the Brown Act. The notice will be posted on MTC’s website and in the display panel in front of the building; emailed to at least one newspaper of general circulation in each of the nine Bay Area counties; and emailed to any member of the news media upon request.

Current MTC standing committees are shown in the following table:

***MTC Standing Committee Structure and Responsibilities***

<b>Administration Committee</b>	<b>Programming &amp; Allocations Committee</b>	<b>Planning Committee*</b>	<b>Operations Committee</b>	<b>Legislation Committee*</b>
<i>These committees regularly meet the second Wednesday of each month, in the morning, at MTC’s offices. Meeting dates and times are tentative; confirm at <a href="http://www.mtc.ca.gov">www.mtc.ca.gov</a>.</i>		<i>These committees regularly meet the second Friday of each month, in the morning, at MTC’s offices. Meeting dates and times are tentative; confirm at <a href="http://www.mtc.ca.gov">www.mtc.ca.gov</a>.</i>		
Oversight of Agency Budget and Agency Work Program  Agency Financial Reports/Audits  Contracts  Commission Procedures  Staff Salaries And Benefits	Annual Fund Estimate  Fund Allocations  State Transportation Improvement Program (STIP)  Federal Transportation Improvement Program (TIP)	Regional Transportation Plan/Sustainable Communities Strategy  Other Regional Plans (airports, seaports)  State and Federal Air Quality Plans  Corridor Planning Studies  Transportation and Land Use Initiatives	Transportation System Management and Operational Activities  Contracts Related to System Management and Operations  Service Authority for Freeways and Expressways (SAFE)	Annual MTC Legislative Program  Positions on Legislation and Regulations  Public Participation  Policy Advisory Council

\*When agenda items warrant, Planning Committee meets jointly with the ABAG Administrative Committee, and Legislation Committee meets jointly with the ABAG Legislation Committee.

In addition to the above committees, MTC has other committees dedicated to specific issues, such as the Bay Area Toll Authority Oversight Committee, regarding toll-bridge accounts and improvement projects; the Bay Area Infrastructure Financing Agency, regarding express lanes; and the Bay Area Headquarters Authority to discuss issues relating to the regional headquarters building in San Francisco.

**Access to MTC Meetings**

<b>Web Access to MTC Meetings</b> <a href="https://mtc.ca.gov/whats-happening/meetings">https://mtc.ca.gov/whats-happening/meetings</a>				<b>If You Have Limited or No Web Access</b>
Meeting Materials	<b>WHAT ...</b> is available on the web?	<b>WHEN ...</b> is it posted on the web?	<b>HOW LONG...</b> is it available on the web?	<i>Contact the MTC Public Information Office at 415.778.6757 to request meeting materials</i>
Meeting Agendas	<ul style="list-style-type: none"> <li>◆ MTC Commission</li> <li>◆ Standing committees</li> <li>◆ Advisory committees</li> </ul>	One week prior to meeting**	At least 6 months	Mailed to interested public or available at meeting
Meeting Packets	<i>Same as above</i>	<i>Same as above</i>	At least 6 months	<i>Same as above</i>
Webcast of Meetings	<ul style="list-style-type: none"> <li>◆ MTC Commission</li> <li>◆ Standing committees</li> <li>◆ Policy Advisory Council meetings</li> </ul>	Listen to meeting live	At least 6 months	View in a public library or at The Hub @ 375 Beale
MTC Meeting Schedule	Schedule of Commission and advisory committee meetings	Posted and updated continuously	Posted and updated continuously	<i>Contact the MTC Public Information Office to confirm dates</i>

**\*\* Final agendas are posted 72 business hours in advance of the meeting time via an electronic screen adjacent to the front door of MTC's offices at 375 Beale Street, San Francisco.**



## D. PUBLIC MEETINGS, WORKSHOPS AND FORUMS

Public meetings on specific issues are held as needed. If statutorily required, formal public hearings are conducted, and notice of these public hearings is placed in the legal section of numerous newspapers in the MTC region, including newspapers circulated in minority communities of the Bay Area. Materials to be considered at MTC public hearings are posted on MTC's website, and are made available to interested persons upon request. In addition, materials are placed in The Hub @ 375 Beale, located on the first floor of the Bay Area Metro Center.

MTC also conducts workshops, community forums, conferences and other events to keep the public informed and involved in various high-profile transportation projects and plans, and to elicit feedback from the public and MTC's partners. MTC holds meetings throughout the nine-county San Francisco Bay Area to solicit comments on major plans and programs, such as the long-range Regional Transportation Plan. Meetings are located and scheduled to maximize public participation (including evening meetings).

For major initiatives and events, MTC typically provides notice through posting information on MTC's website, and, if appropriate, through e-mail notices and news releases to local media outlets.

## E. DATABASE KEEPS THE PUBLIC IN THE LOOP

MTC maintains a database of local government officials and staff, other public agency staff, and interested persons. The database allows MTC to send targeted mailings to keep the public updated on the specific issues they have requested to be kept up to date on, including information on how public meetings/participation have contributed to its key decisions and actions.

## F. SOCIAL MEDIA

Another way to keep abreast of hot topics, events and comment opportunities is to follow MTC on social media, including Facebook, Twitter and Instagram. All of MTC's social media platforms are accessible via the footer (bottom section) of MTC's website: [www.mtc.ca.gov](http://www.mtc.ca.gov).

Likewise you can sign up via a service called GovDelivery to receive MTC's e-newsletter, press releases and daily news headlines via email from MTC. The GovDelivery sign-up form is available in the footer (bottom section) of MTC's website: [www.mtc.ca.gov](http://www.mtc.ca.gov).

### GET INVOLVED: SIGN UP FOR MTC'S DATABASE

Stay informed by signing up to receive mailings or periodic emails concerning major MTC initiatives. Request to be added to MTC's database by calling MTC's Public Information Office at 415.778.6757 or e-mailing [info@bayareametro.gov](mailto:info@bayareametro.gov)

## **G. WEBSITES: [WWW.MTC.CA.GOV](http://WWW.MTC.CA.GOV), VITAL SIGNS AND BAY AREA METRO WEB PORTAL**

MTC's website — [www.mtc.ca.gov](http://www.mtc.ca.gov) — is targeted to audiences ranging from transit riders seeking bus schedules to transportation professionals, elected officials and news media seeking information on particular programs, projects and public meetings.

Updated daily, the site provides information about MTC's projects and programs, the agency's structure and governing body, and upcoming public meetings and workshops. It contains the names, e-mail addresses and phone numbers for staff and Commission members; all of MTC's current planning documents; information about the MTC-ABAG Library and a link to the library catalog; and data from the U.S. Census as well as detailed facts about the region's travel patterns. It also includes important links to partner government agencies as well as to other sites such as the Bay Area's [511.org](http://511.org) for traveler information and the [BayAreaFasTrak.org](http://BayAreaFasTrak.org) site for users of the region's automated toll-collection system.

The Vital Signs website — [www.vitalsigns.mtc.ca.gov](http://www.vitalsigns.mtc.ca.gov) — provides interested persons access to a wealth of data on Bay Area travel and commute patterns. Vital Signs tracks trends related to transportation, land and people, the economy, the environment and social equity. This data-driven website compiles dozens of indicators; each is presented with interactive visualizations that allow readers to explore historical trends, examine differences between cities and counties, and even compare the Bay Area with other peer metropolitan areas.

Bay Area Metro web portal — [www.bayareametro.gov](http://www.bayareametro.gov) — MTC also manages a web portal that connects Bay Area residents with matters that are of interest to both MTC and its sister agency, the Association of Bay Area Governments (ABAG). A blog, The Bay Link, can be accessed via this portal, and includes news, views and analysis on a range of topics, including housing, land use, transportation, economic development, social equity, the environment, sustainability, climate change and resilience.

### **GET INVOLVED: TRACK MTC VIA WEB**

Log onto MTC's website — [www.mtc.ca.gov](http://www.mtc.ca.gov) — for meeting agendas and packets. Live and archived webcasts of meetings make it possible for interested parties to "tune in" at their convenience to all Commission and standing committee meetings.

## H. MEDIA OUTLETS HELP ENGAGE THE PUBLIC

MTC regularly issues news releases about Commission programs and actions of interest to the public. These include announcements of public workshops and hearings, recruitment for positions on MTC’s advisory committees, and employment opportunities through MTC’s high school and college internship programs. News releases are sent to local, regional and state media — including minority print and broadcast outlets — and some are translated into Spanish, Chinese and other languages. In addition to news releases, MTC staff and Commissioners also host press events and news conferences (often in conjunction with other transportation agencies), visit newspaper editorial boards, and conduct briefings with Bay Area reporters and editors to discuss key initiatives such as the Regional Transportation Plan. These briefings provide an opportunity for both print and broadcast journalists to learn about MTC programs that may not immediately produce traditional hard news stories, thus providing background context for subsequent articles or radio/TV pieces.

### GET INVOLVED: KEEP ON TOP OF TRANSPORTATION NEWS

MTC’s Library compiles an electronic news summary with links to transportation-related articles appearing in major Bay Area and national news outlets. To subscribe, visit MTC’s website: [www.mtc.ca.gov/news/headlines.htm](http://www.mtc.ca.gov/news/headlines.htm).

## I. STAFF DEDICATED TO ASSISTANCE

In addition to the components of MTC’s public outreach program detailed above, MTC’s commitment to public participation includes staff dedicated to involving the public in MTC’s work. Public Information staff provide the following materials and services:

- Public Information staff can make available to the public any item on the MTC website (including meeting notices, agendas, and materials that accompany agenda items for meetings of the Commission and its committees and advisory panels) if a person does not have Internet access.
- Public Information staff works with interested organizations to arrange for MTC staff and commissioners to make presentations to community groups.
- MTC staff participates in region-wide community and special events, especially events in targeted ethnic and under-represented communities.
- Public Information staff will respond to MTC-related inquiries from the public and media by telephone (415.778.6757), U.S. mail (375 Beale Street, Suite 800, San Francisco, CA 94105) or e-mail ([info@bayareametro.gov](mailto:info@bayareametro.gov)).

### III. Public Participation Techniques

MTC uses various techniques to develop and execute specific public participation programs to inform its major decisions, such as for corridor studies, new funding policies or updates to the long-range Regional Transportation Plan.

A menu of participation techniques follows, and includes some tried-and-true approaches as well as an emphasis on digital engagement, based on what we heard from the public and partner agencies in response to recent outreach done in advance of updating this plan.

#### Public Engagement Methods

- Conduct meetings, workshops and open houses at varied times of day, including evening meetings, to encourage participation
- Provide remote access to meetings by webcasting meetings
- Present to existing groups and organizations; co-host events with community groups, business associations, etc.
- Participate in existing community events
- Host online meetings via telephone town halls or online webinars
- Contract with community-based organizations in low-income and minority communities for targeted outreach
- Use innovative outreach techniques **such as “pop-up” meetings in public locales**
- Organize small-group discussions such as focus groups with participants recruited randomly from telephone polls or recruited by stakeholder interest groups
- Sponsor a topical forum or summit with partner agencies, the media or other community organizations
- Host Question-and-Answer sessions with planners and policy board members

#### Use of the Internet/Electronic Access to Information

- Maintain website with updated content, interactive surveys and opportunities for comment
- Use social media to reach a larger audience
- Post video recordings of past public meetings/workshops
- Post open house/workshop written and display materials
- Encourage interaction among participants via web

- Provide access to planning data (such as maps, charts, background on travel models, forecasts, census data, research reports)
- Post information in advance of public meetings

#### Visualization Techniques

- Maps
- Charts, illustrations, photographs
- Table-top displays and models
- Online interactive surveys, polls
- Electronic voting at workshops
- PowerPoint slide shows
- Videos to summarize issues and meetings, and to interview keyplayers

#### Polls/Surveys

- For major planning efforts (e.g. the Regional Transportation Plan and Sustainable Communities Strategy), conduct statistically valid telephone polls
- Electronic surveys via web
- Intercept interviews where people congregate, such as at transit hubs
- Printed surveys distributed at meetings, transit hubs, on-board transit vehicles, etc.

#### Online and Printed Materials

- User-friendly documents (including use of executivesummaries)
- Outside review of publications to ensure clear, concise language
- Post cards
- Maps, charts, photographs and other visual means of displaying information

#### Targeted Mailings/Flyers

- Work with community-based organizations to distribute flyers
- E-mail to targeted database lists
- **Distribute “Take-one” flyers to key community** organizations
- Place notices on board transit vehicles and at transit hubs

#### Local media

- News releases

- Invite reporters to news briefings
- Meet with editorial staff
- Opinion pieces/commentaries
- Purchase display ads
- Negotiate inserts into local printed media
- Visit minority media outlets to encourage use of MTC newsreleases
- Place speakers on Radio/TV talk shows
- Public Service Announcements on radio and TV
- Develop content for public access/cable television programming
- Civic journalism partnerships

#### Notify Public via

- Website
- Digital advertising
- Use of MTC-ABAG blog
- Blast e-mails
- Disseminate information through partnerships with local government, transit operators and community-based and interest organizations
- Electronic newsletters
- Social media outlets
- Local media

#### Techniques for Involving Low-Literacy Populations

- Train staff to be alert to and anticipate the needs of low-literacy participants in meetings, workshops
- **Robust use of “visualization” techniques, including maps and graphics to illustrate trends, choices being debated, etc.**
- Personal interviews or use of audio recording devices to obtain oral comments

#### Techniques for Involving Low Income Communities and Communities of Color

- **Presentations and discussions with MTC’s Policy Advisory Council**
- Grants to community-based organizations to co-host meetings and remove barriers to participation by offering such assistance as childcare or translation services
- **“Take One” flyers on transit vehicles and at transit hubs**

- Outreach in the community (such as pop-up meetings at flea markets, libraries, health centers, etc.)
- Use of community and minority media outlets to announce participation opportunities

#### Techniques for Involving Limited-English Proficient Populations

See also MTC's Final Revised Plan for Special Language Services to Limited English Proficient (LEP) Populations, which can be found in English, Spanish and Chinese on MTC's website at <https://mtc.ca.gov/about-mtc/public-participation/get-language-assistance>.

- Conduct meeting entirely in alternative language (e.g., Spanish, Chinese)
- Train staff to be alert to, and to anticipate the needs of Limited-English-Proficient participants at meetings and workshops
- Personal interviews or use of audio recording devices to obtain oral comments in languages other than English
- Translated documents and web content on key initiatives
- Translate materials; have translators available at meetings as requested
- Include information on meeting notices on how to request translation assistance
- On-call translators for meetings on request
- Translated news releases and outreach to alternative language media, such as radio, television, newspapers and social media
- When conducting statistically valid polls, surveys or focus groups, offer the information in other languages such as Spanish or Chinese

#### Techniques for Reporting on Impact of Public Comments

- Summarize key themes of public comments in staff reports to MTC standing committees
- Notify participants when comments are heard or survey results are reported to decision makers
- E-Newsletter articles
- Updated and interactive web content

## IV. Public Participation Procedures for the Regional Transportation Plan and the Transportation Improvement Program

There are two key MTC transportation initiatives that are specially called out in federal law as needing early and continuing opportunities for public participation — development of the Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP).

### Public Participation Opportunities in the RTP and TIP

Because of its comprehensive, long-term vision, the RTP provides the earliest and best opportunity for interested persons and public agencies to influence MTC’s policy and investment priorities for Bay Area transportation. It is at this earlier RTP stage where investment priorities and major planning-level project design concepts are established, and broad, regional transportation impacts on the environment are addressed. Thus, it might be easier for a member of the public to influence decisions about projects at this stage. Another opportunity for public participation, but further along in the process, is the TIP, which is a programming document that identifies funding for only those programs and projects that are already included in the RTP. A mid-point between the RTP and TIP is the project-selection process. Interested residents can become versed in how a transportation project moves from an idea to implementation — including local project review, details **for how projects are included in MTC’s RTP, MTC’s Project Selection Process, the TIP and environmental review/construction phases** — in a publication titled **“A Guide to the San Francisco Bay Area’s Transportation Improvement Program, or TIP.”** This document is available on MTC’s website ([https://mtc.ca.gov/sites/default/files/Guide-to-the-2017-TIP\\_3-17\\_web2.pdf](https://mtc.ca.gov/sites/default/files/Guide-to-the-2017-TIP_3-17_web2.pdf)) and is also available for viewing in the MTC-ABAG Library.

Another easy way to engage on transportation policies and investment is to **request to be added to MTC’s RTP database (see sidebar at right for instructions).**

### A. REGIONAL TRANSPORTATION PLAN

The long-range Regional Transportation Plan (RTP) prioritizes and guides Bay Area transportation development for at least the next 20 years. The RTP is the comprehensive blueprint for transportation investments, and establishes the financial foundation for how the region invests in its surface transportation system by identifying how much funding is reasonably expected to be available to address

#### **GET INVOLVED: SIGN UP FOR MTC’S RTP DATABASE**

One of the ways to have the most impact on MTC’s policy and investment decisions is to participate in an update of the regional transportation plan (RTP). Contact MTC’s Public Information Office online at [info@bayareametro.gov](mailto:info@bayareametro.gov), or call 415.778.6757, and ask to be included in MTC’s database.



critical transportation needs and describing how it should be prioritized. The RTP is updated at least once every four years to reflect reaffirmed or new planning priorities and changing projections of growth and travel demand, and includes a reasonable forecast of future revenues available to the region.

Under California Senate Bill 375 (Steinberg, Chapter 728, 2008 Statutes) the RTP must include a regional Sustainable Communities Strategy (SCS) for achieving a regional target for reducing per-capita CO<sub>2</sub> emissions from cars and light trucks and identify specific areas in the nine-county Bay Area to accommodate all the **region's projected** population growth, including all income groups, for at least the next 25 years. The legislation requires MTC and the Association of Bay Area Governments (ABAG) to jointly develop the regional Sustainable Communities Strategy to integrate planning for growth and housing with long-range transportation investments. In the Bay Area, the Bay Area Air Quality Management District and the Bay Conservation and Development Commission also develop plans that incorporate air quality objectives and shoreline planning, respectively.

The law also calls for a separate Public Participation Plan for development of the Regional Transportation Plan and Sustainable Communities Strategy. The current RTP is known as Plan Bay Area 2040, adopted by the MTC and ABAG governing boards in July 2017. The next update of the RTP/SCS will be known as Plan Bay Area 2050. Appendix A describes a Public Participation Plan for Plan Bay Area 2050.

MTC prepares several technical companion documents for RTP updates. These include a program-level Environmental Impact Report per California Environmental Quality Act (CEQA) guidelines, and transportation air quality conformity analyses (to ensure clean air mandates are met) per federal Clean Air Act requirements. Certain revisions to the RTP may warrant a revision or update to these technical documents. The process for preparing and conducting interagency consultation on the conformity analysis is described in MTC Resolution No. 3757.

MTC also prepares an equity analysis of RTP updates to determine whether minority and low-income communities in the Bay Area share equitably in the benefits of the regional transportation plan without bearing a disproportionate share of the burdens. As an **assessment of the region's long-range** transportation investment strategy, this analysis is conducted at a regional, program-level scale. This assessment of the long-range plan is intended to satisfy federal requirements

under Title VI of the Civil Rights Act and federal policies and guidance on environmental justice. For each update of the RTP, MTC will prepare a public **participation plan (see below “RTP Update”)** that will provide more information on how the equity analysis will be conducted throughout that update of the RTP.

#### Updating and Revising the Regional Transportation Plan

A complete update of an existing regional transportation plan is required at least once every four years. The RTP also may be revised in between major updates under certain circumstances, as described below in the table and narrative:

- RTP Update

This is a complete update of the most current long-range regional transportation plan, which is prepared pursuant to state and federal requirements.

RTP updates include extensive public consultation and participation involving thousands of Bay Area residents, public agency officials and stakeholder groups **over many months. MTC’s Policy Advisory Council and other members of the public** play key roles in providing feedback on the policy and investment strategies contained in the plan. Local and Tribal governments, transit operators, and other federal, state and regional agencies also actively participate in the development of an RTP update via existing and ad hoc forums.

For each RTP update MTC will prepare a multi-phased public outreach and involvement program to ensure that all those with a stake in the outcome are actively involved in its preparation. See Appendix A for specific information on public engagement for Plan Bay Area 2050, the next update to the RTP/SCS that is slated to be completed by 2021.

- RTP Amendment

An amendment is a major revision to an RTP, including adding or deleting a project, major changes in project/project phase costs, initiation dates, and/or design concept and scope (e.g., changing project locations or the number of through traffic lanes). Changes to projects that are included in the RTP only for **illustrative purposes (such as in the financially unconstrained “vision” element)** do not require an amendment. An amendment requires public review and comment, demonstration that the project can be completed based on expected funding, and/or a finding that the change is consistent with federal transportation conformity mandates. Amendments that require an update to the air quality conformity analysis will be subject to the conformity and interagency consultation procedures described in MTC Resolution No. 3757.

- RTP Administrative Modification

This is a minor revision to the RTP for minor changes to project/project phase costs, funding sources, and/or initiation dates. An administrative modification does not require public review and comment, demonstration that the project can be completed based on expected funding, nor a finding that the change is consistent with federal transportation conformity requirements. As with an RTP amendment, changes to projects that are included in the RTP’s financially unconstrained “vision” element may be changed without going through this process.

**Updating and Revising the Regional Transportation Plan (RTP)**

<b>Public Participation for an RTP Update</b>
<p>❶ Prepare a public participation plan to provide early and continuing opportunities to comment. Review public outreach and involvement program with the public and advisory groups.</p>
<p>❷ Implement public outreach and involvement program, which may include:</p> <ul style="list-style-type: none"> <li>• Numerous targeted workshops with local governments, partner agencies, advisory groups including MTC’s Policy Advisory Council, and the general public</li> <li>• Opportunities to participate via the web, online surveys, statistically valid telephone poll, etc.</li> <li>• Posting draft documents to the web for public review and comment</li> <li>• Documents available for viewing at the MTC Library.</li> </ul>
<p>❸ Notify the public of opportunities to participate using such methods as local media outlets, web postings, electronic-mailings to MTC’s database and advocacy groups.</p>
<p>❹ Conduct inter-governmental consultation, as appropriate.</p>
<p>❺ Conduct interagency consultation as appropriate based on Air Quality Conformity Protocol (MTC Resolution No. 3757).</p>
<p>❻ Release Draft Plan for at least a 55-day public review period:</p> <ul style="list-style-type: none"> <li>• Hold at least three public hearings in different parts of the region</li> <li>• Respond to significant comments</li> <li>• Provide additional review and comment opportunity of five days if the final RTP differs significantly from the Draft RTP and raises new material issues.</li> </ul>
<p>❼ Adoption by the MTC Commission at a public meeting. Notify the public about the Commission’s action with electronic mailings to MTC’s database.</p>

<b>Public Participation for an RTP Amendment</b>
<b>❶</b> Release proposed amendment for a 30-day public review: <ul style="list-style-type: none"> <li>• Notify the public of opportunities to participate and comment using such methods as local media outlets, email notice to MTC’s database or web postings</li> <li>• Post amendment on MTC’s website for public review</li> <li>• Amendment available for viewing at the MTC Library.</li> </ul>
<b>❷</b> RTP Amendment reviewed at a public meeting of the MTC Planning Committee.
<b>❸</b> Approval at a public meeting by the MTC Commission.
<b>❹</b> Post approved RTP Amendment on the MTC website and notify the public about its approval via email to MTC’s database.

<b>Public Participation for RTP Administrative Modification</b>
<b>❶</b> No formal public review.
<b>❷</b> Approval by MTC Executive Director.
<b>❸</b> RTP Administrative Modification posted on MTC website following approval.

### Countywide Transportation Plans

Bay Area counties are authorized by state law to develop Countywide Transportation Plans (CTP) on a voluntary basis and are completed approximately once every four years. MTC, however, is required to develop guidelines for the development of CTPs by the county Congestion Management Agencies, and these guidelines are required to be updated to be consistent with RTP/SCS.

The long-range planning and policy documents assess transportation needs and guide transportation priorities and funding decisions for that county over a 20-25 year horizon. These countywide plans inform the transportation projects and programs that are forwarded to MTC for consideration in **the region’s long-range plan**. Information on the CTP process is located here: <https://mtc.ca.gov/our-work/plans-projects/other-plans/countywide-transportation-plans>.

### Congestion Management Process

Under federal regulations, MTC is required to prepare a congestion management **process (CMP) for the Bay Area that provides, “accurate, up-to-date information on transportation system performance and assesses alternative strategies for congestion management that meet state and local needs.”** In addition to the regional CMP, Congestion Management Agencies prepare countywide congestion management programs approximately every two years, with the results of this technical evaluation used to inform MTC decisions on program and investment priorities, including the Regional Transportation Plan. Generally, **MTC’s** Planning

Committee adopts guidelines every two years to guide the development and ensure consistency between the Regional Transportation Plan and countywide Congestion Management Programs. Those interested in this exercise may obtain copies of the relevant memoranda via **MTC's** website, or by requesting to be added to the Planning Committee's **mailing** list.

## **B. TRANSPORTATION IMPROVEMENT PROGRAM**

The Transportation Improvement Program (TIP) helps implement the policy and investment priorities expressed by the public and adopted by MTC in the Regional Transportation Plan (RTP). In this way, public comments made as part of the RTP are reflected in the TIP as well. The TIP covers at least a four-year timeframe, and all projects included in the TIP must be consistent with the RTP, which covers 20 or more years. The TIP is a comprehensive listing of Bay Area surface transportation projects — including transit, highway, local roadway, bicycle and pedestrian investments — that:

- receive federal surface transportation funding, or are
- subject to a federally required action, or are
- regionally significant, for federal air quality conformity purposes.

The TIP does not contain all funds or projects or programs identified in the Regional Transportation Plan. The majority of revenues identified in the Plan are never included in the TIP. These include local and state funds used to operate and maintain the transportation network that do not meet the criteria listed above. The TIP in itself does not implement the plan, but is a subset of projects that are consistent with implementing the Plan.

The TIP includes a financial plan that demonstrates there are sufficient revenues to ensure that the funds committed (or “**programmed**”) to the projects are available to implement the projects or project phases. Adoption of the TIP also requires a finding of conformity with federal transportation air quality conformity mandates.

**Individual project listings may be viewed through MTC's web-based Fund Management System at <https://mtc.ca.gov/our-work/fund-invest/fund-management-system>. As part of MTC's commitment to public involvement, many projects in the TIP are mapped to present the online reader with a visual location of the project. Individuals without access to the internet may view a printed copy of the project listings in the MTC-ABAG library by scheduling an appointment by calling 415.778.5236 or e-mailing [library@bayareametro.gov](mailto:library@bayareametro.gov).**

In addition to a Transportation Improvement Program that is accessible online at <https://mtc.ca.gov/our-work/fund-invest/transportation-improvement-program>, MTC maintains free, subscription-based e-mail distribution lists to inform interested individuals, transportation officials and staff of changes and actions related to the TIP. Through this list, individuals may be alerted as needed regarding the development and approval of a new TIP and updates, such as the notice of a TIP update or notice and approval of the TIP amendments. These notifications facilitate public review and comments as well as coordination with transportation and other public agencies. Sign up for the service by contacting MTC at [info@bayareametro.gov](mailto:info@bayareametro.gov).

To further assist in the public assessment of the TIP, and specifically to analyze the equity implications of the proposed TIP investments, MTC conducts an analysis for the TIP with a focus on specific populations, including minority and low-income communities.

#### Updating and Revising the TIP

Federal regulations require that the TIP be updated at least once every four years. State statute requires that the TIP be updated every two years. From time to time, circumstances dictate that revisions be made to the TIP between updates. MTC will consider such revisions when the circumstances prompting the change are compelling. The change must be consistent with the RTP, be consistent with (“conform to”) the federal air quality plan known as the State Implementation Plan (SIP), and must not negatively impact financial constraint.

In addition to a TIP update, revisions to the TIP may occur as TIP amendments, TIP administrative modifications, or TIP Technical Corrections. The criteria for administrative modifications and amendments are defined in federal regulations, specifically Title 23, CFR part 450.104.

The Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and California Department of Transportation (Caltrans) have developed amendment and administrative modification procedures for the TIP. These procedures are posted online at: [https://mtc.ca.gov/sites/default/files/TIP\\_Revision\\_Procedures.pdf](https://mtc.ca.gov/sites/default/files/TIP_Revision_Procedures.pdf). Further explanation about TIP updates and how different types of revisions are processed are shown in the narrative and table that follows.

- TIP Update

This is a complete update of the existing TIP, to reflect new or revised transportation investment strategies and priorities. Federal regulations require an update of the TIP at least once every four years, while state statute requires an update of the TIP every two years. Because all projects included in the TIP are **consistent with the RTP, MTC's extensive public outreach for development of the RTP** is reflected in the TIP as well. The TIP supports implementation, in the short-term, of the financially constrained element of the RTP and is responsive to comments received during the development of the RTP. TIP updates will be subject to the conformity and interagency consultation procedures described in MTC Resolution No. 3757.

As the State of California requires a TIP update more frequently than the federally required four-year update cycle, MTC may perform a limited and less robust update and outreach effort by simply updating information reflecting updated project information using prior TIP reports, analysis and methodologies. In such circumstances, significant modification of analytical approaches and additional features to the TIP will be made on the federal four-year update cycle, and more in-line with the four-year update cycle of the RTP.

- TIP Amendment

This is a revision that involves a major change to the TIP, such as the addition or deletion of a project; a major change in project cost or project/project phase initiation date; or a major change in design concept or design scope (e.g., changing project termini or the number of through traffic lanes). An amendment is a revision that requires public review and comment, re-demonstration of fiscal constraint, or an air quality conformity determination. Amendments requiring a transportation-air quality conformity analysis will be subject to the conformity and interagency consultation procedures described in MTC Resolution No. 3757.

- TIP Administrative Modification

**An administrative modification includes minor changes to a project's costs** or to the cost of a project phase; minor changes to funding sources of previously included projects; and minor changes to the initiation date of a project or project phase. An administrative modification does not require public review and comment, re-demonstration of fiscal constraint, or conformity determination.

- TIP Technical Correction

Technical corrections may be made by MTC staff as necessary. Technical corrections are not subject to an administrative modification or an amendment,

and may include revisions such as: changes to information and projects that are included only for illustrative purposes; changes to information outside of the TIP period; changes to information not required to be included in the TIP per federal regulations; use of toll credits; identification of Advance Construction (AC) or conversion of AC for funds already in the TIP; changes to the informational expanded project description if such change does not change the TIP-required project description; changes to funding in prior years (if outside the TIP period); changes to a project phase following federal authorization to proceed for that phase of work; or changes to correct simple errors or omissions including data entry errors. These technical corrections cannot significantly impact the cost, scope or schedule within the TIP period, nor will they be subject to a public review and comment process, re-demonstration of fiscal constraint, or a conformity determination.

**Public Participation for Updating and Revising the Transportation Improvement Program**

<b>TIP Update</b>
<p>① Notify public of opportunities to participate; use appropriate lists within MTC’s database, including list of Regional Transportation Plan participants. Also notify the public using such methods as local media outlets; electronic-mailings to advocacy groups; or via an electronic subscription system that is open for anyone to sign up to be kept informed about the TIP, such as TIP-INFO e-mail notification.</p>
<p>② Notify Bay Area Partnership technical committees or working groups. Conduct intergovernmental review and consultation, as appropriate.</p>
<p>③ Release Draft TIP for 30-day public review and comment period:</p> <ul style="list-style-type: none"> <li>▪ Draft TIP made available for viewing at MTC offices</li> <li>▪ Sent to major libraries throughout the Bay Area upon request</li> <li>▪ Posted on MTC website</li> <li>▪ MTC staff may make minor, technical edits to the Draft TIP during the review and comment period; in these instances MTC will display the technical edits on MTC’s web site and notify interested parties via e-mail notification.</li> </ul> <p>Provide additional review and comment opportunity of five days if the final TIP differs significantly from the Draft TIP and raises new material issues.</p>
<p>④ Respond to significant material comments pertinent to the TIP; MTC’s response compiled into an appendix in the final TIP.</p>
<p>⑤ Review by an MTC standing committee, typically the Programming &amp; Allocations Committee (a public meeting); referral to Commission.</p>



⑥ Adoption by Commission at a public meeting.  
 Approval by California Department of Transportation (Caltrans).  
 Approval by Federal Highway Administration and Federal Transit Administration (FHWA/FTA).

- ⑦ After approval:
- post in MTC’s offices
  - post on MTC website
  - notify Bay Area Partnership technical committees or working groups
  - notify the public about the Commission’s action with electronic notifications, such as TIP-INFO (an electronic subscription system anyone can sign up for to be kept informed about the TIP).

**Public Participation for Updating and Revising the Transportation Improvement Program**

<b>TIP Amendment</b>
① Notify public via TIP-INFO Notification (e-mail) or other electronic notification methods.
② Notify Bay Area Partnership technical committees or working groups. Make available for viewing at MTC’s offices. Post on MTC website for public review.
<p>③ TIP Amendment Review and Approval</p> <ul style="list-style-type: none"> <li>• Amendments deleting or adding or changing a project subject to a new air quality conformity analysis:           <ul style="list-style-type: none"> <li>○ Public review and comment period, as required by the air quality conformity consultation process with review by an MTC standing committee at a public meeting; and</li> <li>○ Approval by the full Commission at a public meeting.</li> </ul> </li> <li>• Amendments deleting or adding a project <i>not</i> subject to an air quality conformity analysis (such as a roadway rehabilitation):           <ul style="list-style-type: none"> <li>○ Review and approval by an MTC standing committee or the full Commission at a public meeting.</li> </ul> </li> <li>• Amendments changing an existing project that is not subject to an air quality conformity analysis, or changing an existing grouped project listing (such as the highway bridge program), or bringing a previously listed project or phase back into the TIP for financial purposes; or changing TIP funding revenues:           <ul style="list-style-type: none"> <li>○ Approval by the MTC Executive Director or designee, following 5-day notice on MTC’s website; <b>or</b></li> <li>○ Review and approval by an MTC standing committee or the full Commission at a public meeting.</li> </ul> </li> </ul>
④ Approval by Caltrans → Approval by FHWA/FTA

- ⑤ After approval:
  - post in MTC’s offices
  - post on MTC website
  - notify Bay Area Partnership technical committees or working groups
  - notify public via electronic subscription system open to anyone who requests to be kept informed about the TIP, such as TIP-INFO email notification

<b>TIP Administrative Modification</b>
① No public review
② Approval by MTC Executive Director or designee by delegated authority (authority is delegated by the Federal Highway Administration/Federal Transit Administration), or Caltrans
③ After approval: <ul style="list-style-type: none"> <li>• post in MTC’s offices</li> <li>• post on MTC website</li> </ul>

<b>TIP Technical Correction</b>
① No public review
② Technical corrections by staff
③ No approval required

Federal Transit Administration Program of Projects Public Participation Requirements

Federal transit law and joint Federal Highway Administration (FHWA)/Federal Transit Administration (FTA) planning regulations governing the metropolitan planning process require a locality to include the public and to solicit comment when the locality develops its metropolitan long-range transportation plan and its metropolitan TIP. FTA has determined that when a recipient follows the procedures of the public involvement process outlined in the FHWA/FTA planning regulations, the recipient satisfies the public participation requirements associated with development of the Program of Projects (POP) that recipients of Section 5307, Section 5337 and Section 5339 funds must meet. This Public Participation Plan is being used by the following recipient(s)\* to satisfy their public participation process for the POP. This Public Participation Plan follows the procedures for public involvement associated with TIP development and therefore satisfies public participation requirements for the POP. All public notices of public involvement activities and times established for public review and comment on the TIP will state that they satisfy the POP requirements of the Section 5307, Section 5337 and Section 5339 Programs.

**\*Recipients using MTC’s Public Participation Plan to satisfy their public participation process for the POP:**

1. AC Transit (Alameda-Contra Costa Transit District)
2. ACE (Altamont Corridor Express)
3. BART (Bay Area Rapid Transit District)
4. Caltrain (Peninsula Corridor Joint Powers Board)
5. County Connection (Central Contra Costa Transit Authority)
6. City of Dixon Redit-Ride
7. FAST (Fairfield/Suisun Transit System)
8. Golden Gate Transit (Golden Gate Bridge, Highway and Transportation District)
9. LAVTA (Livermore-Amador Valley Transit Authority/Wheels)
10. Marin Transit (Marin County Transit District)
11. Petaluma Transit
12. Rio Vista Delta Breeze
13. SamTrans (San Mateo County Transit District)
14. San Francisco Bay Ferry (WETA/Water Emergency Transportation Authority)
15. SFMTA (San Francisco Municipal Transportation Agency)
16. Santa Rosa CityBus
17. SolTrans (Solano County Transit)
18. Sonoma County Transit
19. SMART (Sonoma Marin Area Rail Transit)
20. Tri Delta Transit (Eastern Contra Costa Transit Authority)
21. Union City Transit
22. Vacaville City Coach
23. VINE (Napa County Transportation and Planning Agency)
24. VTA (Santa Clara Valley Transportation Authority)
25. WestCAT (Western Contra Costa Transit Authority)

#### Annual Listing of Obligated Projects

By federal requirement, MTC at the end of each calendar year publishes an annual listing of obligated projects, which is a record of project delivery for the previous year. The listing also is intended to increase the awareness of government spending on transportation projects to the public. Copies of this annual listing may be **obtained from MTC’s website:** <https://mtc.ca.gov/our-work/fund-invest/federal-funding/project-delivery> **or by contacting MTC’s Public Information Office at 415.778-6757.**

## V. Interagency and Tribal Government Consultation Procedures for the Regional Transportation Plan and the Transportation Improvement Program

### A. PUBLIC AGENCY CONSULTATION

**Fixing America's Surface Transportation Act, the FAST Act, is federal surface** transportation legislation that specifies a public participation process, directing metropolitan transportation agencies like MTC to consult with officials responsible for other types of planning activities that are affected by transportation in the area, be that conservation and historic preservation or local planned growth and land use management.

The most effective time to involve the public and governmental agencies in the planning and programming process is as early as possible. As such, the development of the Regional Transportation Plan, with its long-range timeframe, is the earliest key decision point for the interagency consultation process. It is at this stage where funding priorities and major **projects'** planning-level design concepts and scopes are introduced, prioritized and considered for **implementation. Furthermore, MTC's funding programs and any projects flowing** from them are derived directly from the policies and transportation investments contained in the RTP. Because the RTP governs the selection and programming of projects in the TIP, MTC considers the agency consultation process as a continuum starting with the regional transportation plan. The RTP is the key decision point for policy decisions regarding project and program priorities that address mobility, congestion, air quality and other planning factors; the TIP is a short-term programming document detailing the funding for only those investments identified and adopted in the RTP.

MTC will use the following approaches to coordinate and consult with affected agencies in the development of the RTP and the TIP. Throughout the process, consultation will be based on the **agency's needs and interests. At a minimum, all** agencies will be provided an opportunity to comment on the RTP and TIP updates.

Regional Transportation Plan (RTP)

**MTC's compliance with the California Environmental Quality Act (CEQA) serves** as the framework to consult, as appropriate, in the development of the RTP with federal, state and local resource agencies responsible for land use management, natural resources, environmental protections, conservation and historic preservation. This consultation will include other agencies and officials responsible for other planning activities in the MTC region that are affected by transportation to the maximum extent practicable.

As required by CEQA, the Notice of Preparation (NOP) stating that MTC as the lead agency will prepare a program-level Environmental Impact Report (EIR) for the RTP is the first step in the environmental process. The NOP gives federal, state and local agencies as well as the public an early opportunity to identify areas of concern to be addressed in the EIR and to submit them in writing to MTC. Further, MTC also will hold agency and public scoping meeting(s) to explain the environmental process and solicit early input on areas of concern. During the development of the Draft EIR, MTC will consult with affected agencies on resource maps and inventories for use in the EIR analysis.

MTC will consider the issues raised during the NOP period and scoping meetings(s) during its preparation of the EIR. Subsequently, as soon as MTC completes the Draft EIR, MTC will file a Notice of Completion (NOC) with the State Clearinghouse and release the Draft EIR for a 45-day public review period. MTC will seek written comments from agencies and the public on the environmental effects and mitigation measures identified in the Draft EIR. During the comment period, MTC may consult directly with any agency or person with respect to any environmental impact or mitigation measure. MTC will respond to written comments received prior to the close of the comment period and make technical corrections to the Draft EIR where necessary. The Commission will be requested to certify the Final EIR, and MTC will file a Notice of Determination (NOD) within five days of Commission certification.

Note that while the RTP is not subject to the federal National Environmental Policy Act (NEPA), MTC will consult with federal agencies as appropriate during the preparation of the CEQA environmental document. Additionally, the involvement of federal agencies in the RTP can link the transportation planning process with the federal NEPA process. As the projects in the RTP and TIP continue down the pipeline toward construction or implementation, most must comply with NEPA to address individual project impacts.

## Transportation Improvement Program (TIP)

As discussed above, crucial decisions about whether or not to support or fund a transportation program or project in the region first occurs at the RTP level. The TIP translates recommendations from the RTP into a short-term program of improvements focused on projects that have a federal interest. Therefore, the earlier, and more effective, timeframe for public comment on the merits of a particular transportation project is during the development of the long-range plan. The TIP defines project budgets, schedules and phasing for those programs and projects that are already part of the RTP. The TIP does not provide any additional information regarding environmental impacts, beyond that found in the program-level environmental analysis prepared for the RTP.

As such, starting at the RTP development stage, MTC staff will concurrently consult with all agencies regarding the TIP. Subsequent to the RTP, additional **consultations at the TIP stage will be based on an agency's needs and interests.** At a minimum, all agencies will be provided with an opportunity to review and comment on the TIP. Project sponsors — including the California Department of Transportation (Caltrans), local jurisdictions, transit operators and county congestion management agencies (CMAs) — review and consult with MTC on each of their respective projects in the TIP. These agencies (and any other interested agency) are involved every step of the way in the establishment of MTC programs, selection of projects and their inclusion in the TIP.

## **B. OTHER PROTOCOLS FOR WORKING WITH PUBLIC AGENCIES**

### The Bay Area Partnership Review and Coordination

MTC established the Bay Area Partnership to collaboratively assist the Commission in fashioning consensus among its federal, state, regional and local transportation agency partners regarding the policies, plans and programs to be adopted and implemented by the Commission. More recently, that focus has shifted to advising the Commission on specific transportation investment policies or matters related to the Regional Transportation Plan. Membership includes a chief staff officer from all public agencies representing the following transportation interests:

- Transit operations
- Transportation facilities
- Congestion management agencies
- Public works agencies

- Airports and seaports
- Regional, state and federal transportation, environmental, and land use agencies

The Partnership Board and its Partnership Technical Advisory Committee (PTAC) and working group(s) consider the on-going and more technical aspects of investment issues. The Partnership Board and PTAC meetings are open to the public. **The Partnership Board's** meetings at the Bay Area Metro Center are **webcast live and later archived on MTC's website**; its offsite meetings and all PTAC meeting are recorded and recordings may be requested. The status of TIP revisions are provided to the Partnership through email notifications. For TIP updates, PTAC and working group(s) will be kept informed and consulted throughout the process by e-mail notifications or presentations as appropriate.

#### Air Quality Conformity and Interagency Consultation

A dialogue between agencies over transportation air quality conformity considerations must take place in certain instances prior to MTC's adoption of its RTP or TIP. These consultations are conducted through the Air Quality Conformity Task Force, which includes representatives of the U.S. Environmental Protection Agency, the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), the California Air Resources Board (CARB), Caltrans, the Bay Area Air Quality Management District, and other state and local transportation agencies. These agencies review updates and, in certain instances, amendments to the RTP and TIP to ensure they conform to federal transportation conformity regulations via transportation-air quality conformity analysis.

In accordance with Transportation Air Quality Conformity and Interagency Consultation Protocol procedures (MTC Resolution No. 3757), MTC must implement the interagency consultation process for the nine-county San Francisco Bay Area before making a transportation conformity determination on the RTP or TIP. In developing an update to the RTP/TIP, MTC will bring important issues to the Partnership or its technical committees/working groups for discussion and feedback. All materials that are relevant to interagency consultation, such as the RTP/TIP schedule, important RTP/TIP-related issues and draft RTP/TIP, will also be transmitted to the Conformity Task Force for discussion and feedback. Similar consultation will occur for RTP/TIP amendments requiring an air quality conformity analysis.

### Intergovernmental Review via State Clearinghouse

The intent of intergovernmental review, per Executive Order 12372, is to ensure that federally funded or assisted projects do not inadvertently interfere with state and local plans and priorities. Applicants in the Bay Area with programs/projects for intergovernmental review are required to submit documentation to the State Clearinghouse via the Office of Planning and Research in Sacramento, which is the Single Point of Contact (SPOC) for the intergovernmental review of federal grant proposals and other activities. In this capacity, it is also the function of the Clearinghouse to coordinate state and local review of federal financial assistance applications, federally required state plans, direct federal development activities and federal environmental documents. The purpose of the clearinghouse is to facilitate state and local participation in federal activities occurring within California. The Executive Order does not replace public participation, comment or review requirements of other federal laws, such as the National Environmental Policy Act (NEPA), but gives the states an additional mechanism to ensure federal agency responsiveness to state and local concerns.

The clearinghouse also receives and distributes environmental documents prepared pursuant to the California Environmental Quality Act (CEQA) and coordinate the state-level environmental review process. The RTP is subject to CEQA and therefore is reviewed through the clearinghouse.

## C. TRIBAL GOVERNMENT CONSULTATION

There are six federally recognized Native American tribes in the San Francisco Bay Area. MTC invites the tribes to conduct government-to-government consultation throughout the regional transportation planning process and the companion Transportation Improvement Program. MTC lays the groundwork for consultation early in the process of developing the regional transportation plan, and generally includes a **“Tribal summit” for all six Tribal governments. MTC expresses to each tribe a willingness to conduct individual meetings at the tribe’s convenience.**

MTC board members and executive staff participate in consultation with the Tribal governments. MTC will conduct consultation and associated activities in locations convenient for the Tribal governments. Past meetings have been held in Sonoma County, where most of the Tribal governments are located.

**The Tribal summit often will include MTC’s partner agencies, the Association of Bay Area Governments, the state Department of Transportation and the**



appropriate congestion management agencies. The Tribal summit also may include facilitation by an individual or organization known to the Tribal governments.

The Tribal summit will include discussion about how the Tribal governments will participate in development of the long-range plan, as well as the companion TIP. **The Tribal summit also serves to introduce the Tribal governments to MTC's** partner agencies.

As a next step after the tribal summit, MTC encourages individual meetings with each tribal government throughout development of the regional transportation plan to discuss issues and concerns specific to each tribe. MTC offers to conduct consultation at a time and location convenient for the tribe, which may include attendance at meetings of the tribal council or committees. The governments also receive material from MTC throughout the RTP planning effort.

## VI. Evaluation and Update of the Public Participation Plan

**MTC's** Public Participation Plan is not a static document, but an on-going strategy that is periodically reviewed and updated based on our experiences and the changing circumstances of the Commission and transportation community it serves.

As part of every public outreach and involvement program developed for the regional transportation plan, MTC sets performance measures for the effectiveness of the participation program and reports on the results. These performance reports serve to inform and improve future outreach and involvement programs, including future updates to this Public Participation Plan.

Additionally, MTC periodically evaluates various components of items identified under Section II, “**Continuing Public Engagement,**” which form the core of **MTC's** public involvement activities.

This Public Participation Plan may be subject to minor changes from time to time. **Any major updates will include a review by MTC's advisory committees, 45-day public comment period with wide release and notification of the public about the proposed changes, review by the Commission's Planning Committee (a public meeting), and approval by the Commission.** We will extend the public comment period by an additional 45 days in instances where major revisions are proposed in response to comments heard.

MTC Public Participation  
Plan Appendix A

A Public Participation Plan  
for Plan Bay Area 2050



Metropolitan Transportation Commission  
Bay Area Metro Center  
375 Beale Street  
San Francisco, CA 94105

Approved: June 27, 2018

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# A Public Participation Plan for Plan Bay Area 2050

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## I. Introduction

The Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) work together to adopt a long-range, regional housing and transportation plan every four years. This effort is required under state and federal law, and helps the Bay Area plan and prioritize transportation investments and policies that support a healthier, safer and more just region for our residents today and in the future. The current plan, known as Plan Bay Area 2040, was adopted by ABAG and MTC in July 2017. This was the second Regional Transportation Plan (RTP) for the nine-county San Francisco Bay Area that also includes a Sustainable Communities Strategy (SCS) as required by California Senate Bill 375 (2008).

Senate Bill 375 gives MTC and ABAG joint responsibility for preparing the **RTP/SCS. The legislation also states that the two agencies “set forth a forecasted** development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board.”

**This Appendix A to MTC’s Public Participation Plan** outlines the anticipated approach and schedule for the next **update for the Bay Area’s RTP/SCS, known as** Plan Bay Area 2050. Scheduled to begin in 2019 and to be considered for adoption in 2021, Plan Bay Area 2050 will focus on where the region is expected to grow and what transportation investments will support that growth. ABAG and MTC seek to chart a course for accommodating anticipated growth while fostering an innovative, prosperous and competitive economy; preserving a healthy and safe environment; and allowing all Bay Area residents to share the benefits of vibrant communities connected by an efficient and well-maintained transportation network.

The RTP/SCS requires MTC and ABAG to work together with local governments, county congestion management agencies, public transit agencies, business and community groups, nonprofits, and interested residents to allow all who are interested the opportunity to be involved. We invite the participation of all Bay Area residents to make our region an even better, more livable place.

One key difference between Plan Bay Area 2050 and the 2017 adopted plan — known as Plan Bay Area 2040 — is that the update will build off of work under way in an Action Plan to address challenges of affordable housing, economic development and resiliency. In the realm of housing, MTC and ABAG have partnered with a number of organizations to launch CASA, the Committee to House the Bay Area. ABAG is considering a Comprehensive Economic Development Strategy, and ABAG and MTC are partnering with the San Francisco Bay Conservation and Development Commission and other entities on a number of efforts to address hazards such as sea level rise, earthquakes, wildfires and the like. For more information on the Action Plan, see Plan Bay Area 2040 at <http://2040.planbayarea.org/action-plan>.

## II. Developing Plan Bay Area 2050

In July of 2017, MTC and ABAG consolidated their staffs to create one integrated team to tackle the transportation, land use, economic and resilience efforts of the Bay Area. The integrated team will develop Plan Bay Area 2050, while continuing to serve both ABAG and MTC boards. In addition, MTC and ABAG will coordinate with regional partners – the Bay Area Air Quality Management District (BAAQMD), the Bay Conservation and Development Commission (BCDC) and the Bay Area Regional Collaborative (BARC) – on **the plan’s development**.

### A. Process and Schedule

Since early 2010, MTC and ABAG staff have focused significant resources on developing the RTP/SCS, including the technical analysis, local engagement and public outreach necessary to produce the integrated plan. The culmination of these efforts – Plan Bay Area (2013) and Plan Bay Area 2040 (2017) – have moved toward a regional consensus on broadly-shared principles such as focused growth, investment in alternatives to single-**occupant vehicles** and **“fixing it first”** before expanding the system – all with an aim of reducing per-capita greenhouse gas emissions and adequately housing the **region’s** expected population growth. As we embark on the next RTP/SCS, Plan Bay Area 2050, much thought has gone into the planning process, especially how we can include additional factors to help us accommodate a growing number of challenges in our planning efforts and more aggressive greenhouse gas emissions reduction targets.

Development of Plan Bay Area 2050 will take place over the next three years. Public participation is critical to ensure an open process, in which all interested residents have the opportunity to offer input and share their vision for what the Bay Area will look like decades from now.

The process will require flexibility and is subject to change in response to input received. To help direct Bay Area residents and organizations interested in participating in key actions and decisions, any changes as well as additional detail will be posted on the Plan Bay Area website and communicated via social media.



## B. Summary of Key Milestones

This section describes key milestones along the path to developing Plan Bay Area 2050. For more detail also see Attachment A.

### 1. *Horizon* Initiative

For the past two planning cycles, MTC and ABAG have engaged in more traditional planning and outreach techniques and strategies for the Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS). However, given ever-changing economic, technological and climate conditions in the Bay Area, a more innovative planning and engagement program is warranted, one that can assist with analyzing a range of future impacts and developing solutions to these impacts. This upcoming planning and outreach initiative, known as *Horizon*, will help create a broad range of options for the Bay Area. Although a separate effort, the results of the *Horizon* work will help inform Plan Bay Area 2050.

*Horizon* will explore topics ranging from transportation and land use to economic development and resilience, with the end goal of identifying a series of policies, strategies and investments that perform well regardless of what happens in the decades ahead. In turn, these strategies will be integrated into the preferred scenario for Plan Bay Area 2050.

#### a) **“Futures”** Planning

In lieu of traditional scenario planning where funding and growth are distributed based on fixed control totals and fixed future assumptions, this **initiative will create a handful of divergent “futures” where the Bay Area** must respond in very different ways. The purpose of this work will be to identify strategies and investments that allow the Bay Area to move forward with high-performing strategies and investments that perform well regardless of what happens in the decades ahead.

- *Opportunities for Input:* **Early 2018 “Pop-up” outreach around the region at public events and locales, an electronic survey, and discussion at MTC’s Regional Advisory Working Group. Fall 2018 will include additional outreach with stakeholders and the public using multiple outreach methods to discuss policy strategies.**

- *Decision-Making Roles:* Direction from **MTC's** Planning Committee and **ABAG's** Administrative Committee.
- *Timeframe:*
  - Select and define futures for analysis: July 2018
  - **"Status Quo" analysis** for each future: October 2018
  - Collaborative development of policy solutions for each future: Fall 2018
  - Identify effective and resilient strategies across futures: May 2019

## b) Project Evaluation

This process will include a solicitation of major projects from public agencies, non-profit organizations and the public at-large in advance of the traditional Call for Projects (in the spring of 2019) that will focus on smaller-scale projects and programmatic categories. Major projects will be screened and then evaluated to provide performance data used in the investment prioritization for the Preferred Scenario. Major projects submitted during this process will also be used to populate each future with specific transportation investments that align with its unique needs and revenue.

- *Opportunities for Input:* Discussion at the Regional Advisory Working Group, **MTC's** Policy Advisory Council and online or pop-up outreach with the public.
- *Decision-Making Roles:* **Direction from MTC's Planning Committee and ABAG's Administrative** Committee.
- *Timeframe:*
  - Call for major projects: summer 2018
  - Finalization of project evaluation framework: July 2018
  - Release of draft project performance results: March 2019
  - Approval of final project performance results: June 2019

## c) Policy Analyses

To address a limitation of past planning cycles where individual policies were not explored in depth outside of the scenarios framework, staff will issue seven policy perspective papers on broad, topical focus areas. The primary objective of each policy perspective will be to identify high-impact policies related to that topic area that support the **region's** guiding principles.

- *Opportunities for Input:* Discussion at the Regional Advisory Working Group and MTC's Policy Advisory Council.
- *Decision-Making Roles:* Direction from MTC's Planning Committee and ABAG's Administrative Committee.
- *Timeframe for Policy Perspective Papers:*
  - Autonomous vehicles & future mobility: June 2018
  - Travel demand management & climate mitigation: September 2018
  - Regional growth strategies: December 2018
  - Crossings: January 2019
  - Future of jobs: March 2019
  - Regional governance: June 2019
  - Design & better buildings: September 2019

## 2. Regional Forecasting

### a) Population, Employment, Housing and Travel Demand Forecasts

The total regional jobs, housing and population forecasts will provide essential information for Plan Bay Area 2050. MTC and ABAG will forecast regional employment by industry, population and households by age and income. This forecast will be built with several forecasting tools, including REMI (an econometric model) and Urban Sim (a demographic and housing model). These models will provide insights on the potential economic and demographic drivers for the Bay Area over the next 30 years. The forecast methodology and results will be reviewed by a technical advisory committee that includes regional agencies, consultants and scholars with substantial experience in regional analysis.

MTC and ABAG use the population, employment and housing forecasts to estimate and analyze regional travel patterns and demand on the transportation system and the resulting emissions.

- *Opportunities for Input:* Discussion at the Regional Advisory Working Group, ABAG's Regional Planning Committee and MTC's Policy Advisory Council.
- *Decision-Making Roles:* **Direction from MTC's Planning Committee and ABAG's Administrative Committee; adoption by ABAG Executive Board and the Commission.**
- *Significance:* This technical work sets the stage for future analysis by identifying anticipated employment, population and housing growth.

- *Timeframe:* Anticipated early 2019. Forecasts are needed before the scenarios are fully defined and evaluated (see Attachment A).

## b) Revenue Forecasts

The investment strategy for Plan Bay Area 2050 will be based on an estimate of total funding available for at least 20 years, per federal requirements. MTC will work with partner agencies and use financial models to forecast how much revenue will be available for transportation purposes over the duration of the Plan. In addition, MTC will also investigate the potential of providing estimates of revenues that will be available for investment in the areas of housing and resiliency. The financial forecasts, coupled with needs assessments in the areas of transportation, housing and resiliency, will help identify funding gaps and **plan investments that fit within the “financially constrained” envelope of revenues** that are reasonably expected to be available.

Under the current Plan Bay Area 2040, transportation revenue forecasts total \$303 billion over a 24-year period, in year of expenditure dollars. Over two-thirds (70 percent) of these funds are from regional and local sources, including transit fares, dedicated sales tax programs, city and county revenues, and bridge tolls, among others. Making up the remainder are state and federal revenues (mainly derived from fuel taxes) and **“anticipated” revenues, which are unspecified revenues that reasonably can be expected to become available within the Plan horizon.**

- *Opportunities for Input:* Discussion at the Regional Advisory Working Group, MTC Policy Advisory Council and ABAG Regional Planning Committee.
- *Decision-Making Roles:* **Direction from MTC’s Planning Committee and ABAG’s Administrative Committee.**
- *Significance:* This technical work sets the stage for future investment strategies and identifies revenue expected to flow to region over the life of the plan (at least 20 years).
- *Timeframe:* Anticipated summer 2019. Forecasts are needed before the preferred land use pattern and investment strategy is fully defined and evaluated (see Attachment A).

### 3. Preferred Land Use Pattern and Investment Strategy Process

#### a) Needs Assessments

To identify the funding needed to operate and maintain the existing transportation network – between now and the year 2050 – MTC and ABAG will conduct a set of needs assessments to quantify financial needs. MTC and ABAG will also investigate the potential to conduct a similar analysis for the areas of housing and resilience. Staff will work with applicable public agencies, both on the local and regional levels, to develop these needs assessments.

- *Opportunities for Input:* Discussion at Regional Advisory Working **Group, MTC’s Policy Advisory Council** and the relevant Partnership working groups.
- *Decision-Making Roles:* **Direction from MTC’s Planning Committee and ABAG’s Administrative Committee.**
- *Significance:* This technical evaluation will provide information on the funding needed to achieve key goals related to transportation infrastructure, affordable housing and climate adaptation.
- *Timeframe:* Anticipated in summer 2019. Precedes any decision by ABAG and MTC on a preferred scenario for the Plan (see Attachment A).

#### b) Call for Projects

The Call for Projects will allow public agencies to submit candidate transportation projects for consideration for both inclusion in Plan Bay Area 2050 and the Transportation Improvement Program (TIP). As major projects were submitted through the earlier solicitation under *Horizon*, the Call for Projects will primarily focus on smaller-scale projects and programmatic categories. Draft guidance for submitting projects will be released in advance, and staff may request additional information needed to include large projects in the Preferred Scenario and in the TIP.

- *Opportunities for Input:* Discussion at the Regional Advisory Working **Group, MTC’s Policy Advisory Council and locally through county Congestion Management Agencies.** The call for projects occurs spring 2019; projects under consideration for inclusion in the Preferred

Scenario will be highlighted at Plan Bay Area 2050 evening public open houses, slated for winter 2019/2020.

- *Decision-Making Roles:* CMA boards will approve project listings **from each county; MTC's** Planning Committee will provide overall direction.
- *Significance:* Opportunity to submit transportation projects for consideration in the Plan.
- *Timeframe:* Anticipated in spring 2019 for smaller-scale projects (see Attachment A).

### c) Land Use and Travel Demand Forecasting

Based on the control totals and revenue forecasts developed earlier in the Plan Bay Area 2050 process, simulation models will be run to determine how far investments, policies and strategies will get the region towards the Plan's goals. Furthermore, this process will identify a specific land use distribution working within the control totals as well as the efficacy of transportation network improvements that can be funded under the revenue forecast. Specific investments, policies and strategies will be collaboratively identified with stakeholders prior to model runs.

- *Opportunities for Input:* Discussion at the Regional Advisory Working Group, **MTC's** Policy Advisory Council and **ABAG's** Regional Planning Committee. Policies and strategies under consideration for inclusion in the Preferred Scenario will be highlighted at Plan Bay Area 2050 public meetings, slated for winter 2019/2020.
- *Decision-Making Roles:* Forecasting efforts will feed into the process for adopting the Preferred Scenario (see below), for which the MTC Commission and ABAG Executive Board will take final action.
- *Significance:* Simulation models are an important tool in determining whether or not specific policies, strategies and investments are sufficient to achieve the aspirational vision of the Plan.
- *Timeframe:* Anticipated in fall 2019. Precedes any decision by ABAG and MTC on a preferred scenario for the Plan (see Attachment A).

d) Adoption of the Preferred Scenario

Based on the results of the project performance assessments, MTC and ABAG will define a preferred scenario to advance to final environmental analysis. The preferred scenario will include a land use distribution, an investment strategy and policies that will best meet the Plan vision given identified fiscal and policy constraints.

- *Opportunities for Input:* Discussion at Regional Advisory Working Group, **MTC's** Policy Advisory Council and **ABAG's** Regional Planning Committee; comment at public meetings in the nine Bay Area counties.
- *Decision-Making Roles:* **Direction from MTC's Planning Committee and ABAG's Administrative Committee; adoption by MTC Commission and ABAG Executive Board.**
- *Significance:* The Preferred Scenario pairs a single land use distribution that is a flexible blueprint for accommodating growth over the long term with a financially-constrained investment strategy.
- *Timeframe:* Adoption expected early 2020. Selection of Preferred Scenario follows a round of evening public meetings in winter 2019/20, before the detailed environmental review work begins in earnest (see Attachment A).

4. Draft and Final Plan

a) Draft and Final Environmental Impact Report (EIR)

A programmatic environmental impact report on the Plan, including the preferred scenario and a limited set of alternatives, will identify the environmental impacts of the proposed long-range land-use changes and transportation investments and policies taken as a whole, as one large project, as required by the California Environmental Quality Act (CEQA). A Draft EIR will be released for public comment and submitted to the appropriate resource agencies for review and comment.

- *Opportunities for Input:* A Notice of Preparation will be issued and a public scoping meeting(s) will be held to explain the environmental process and solicit early input on areas of concern. The Draft EIR will be the subject of three public hearings. Discussion at Regional Advisory Working Group, **MTC's** Policy Advisory Council and **ABAG's**

Regional Planning Committee. A public comment period will be established for written and oral public comments, as per guidelines under the California Environmental Quality Act (CEQA); responses to comments will be in the Final EIR.

- *Decision-Making Roles:* **Direction from MTC’s Planning Committee and ABAG’s Administrative Committee; approval from MTC Commission and ABAG Executive Board.**
- *Significance:* Final set of actions leading to adoption of the updated Plan Bay Area 2050.
- *Timeframe:* Key Milestones (see Attachment A). Release Draft Plan Bay Area 2050 late 2020; final plan and final EIR expected adoption in June 2021.

#### b) Title VI and Environmental Justice Analysis

MTC and ABAG will conduct an equity analysis to satisfy federal requirements with respect to the metropolitan planning process. The analysis will measure both the benefits and burdens associated with the investments in Plan Bay Area 2050 to determine that minority, limited English proficient and low-income communities share equitably in the benefits of the investments without bearing a disproportionate share of the burdens.

- *Opportunities for Input:* Discussion at Regional Advisory Working Group and MTC’s Policy Advisory Council. Detailed technical input will be sought **at the Policy Advisory Council’s Equity and Access Subcommittee** on an as needed basis.
- *Decision-Making Roles:* **Direction from MTC’s Planning Committee.**
- *Significance:* Provides information on the effects of Plan Bay Area **2050 on the region’s minority, limited** English proficient and low-income communities.
- *Timeframe:* Early 2021 (see Attachment A).

#### c) Air Quality Conformity Analysis

The air quality conformity analysis considers if the transportation projects in the financially constrained Plan Bay Area 2050, taken together, do not cause new air quality violations, worsen existing air quality or delay timely



attainment of the federal air quality standards pertaining to ozone, carbon monoxide and particulate matter (PM<sub>2.5</sub>). The analysis is done to meet federal planning requirements in accordance with the latest U.S. Environmental Protection Agency transportation conformity regulations and the Bay Area Air Quality Conformity Protocol (MTC Resolution No. 3757).

- *Opportunities for Input:* Technical analysis will be discussed by the Regional Air Quality Conformity Task Force.
- *Decision-Making Roles:* **Direction from MTC's Planning Committee;** approval from MTC Commission.
- *Significance:* Final set of actions leading to adoption of the updated Plan Bay Area 2050.
- *Timeframe:* Early 2021 (see Attachment A).

d) Draft and Final Plan

Release of the Draft Plan will initiate another round of public meetings to gather comments on the draft in preparation for final Plan adoption. MTC and ABAG will seek input on the Draft Plan through a variety of methods.

As with Plan Bay Area 2040, staff anticipates a concurrent release of the Draft EIR and Draft Plan Bay Area 2050 documents for 45-day and 55-day public comment periods, respectively. The Draft EIR analysis, together with input from the public on the Draft Plan, will inform the policy discussions and public dialogue leading to the Final Plan adoption by both ABAG and MTC, anticipated to occur in June 2021.

- *Opportunities for Input:* The Draft Plan Bay Area 2050 will be the subject of public meetings, including at least three public hearings. **Discussion at Regional Advisory Working Group, MTC's Policy Advisory Council and ABAG's Regional Planning Committee.**
- *Decision-Making Roles:* **Direction from MTC's Planning Committee and ABAG's Administrative Committee;** approval from MTC Commission and ABAG Executive Board.
- *Significance:* Final set of actions leading to adoption of Plan Bay Area 2050.
- *Timeframe:* Adoption is expected in June 2021 (see Attachment A).

e) Regional Housing Need Allocation

Staff also coordinates the state-mandated Regional Housing Need Allocation (RHNA) process, which will be informed by Plan Bay Area 2050. The California Department of Housing and Community Development (HCD) begins the process by determining the region's overall housing need, which staff uses to develop a methodology to identify the number of units, including affordable units, that each jurisdiction must plan in order to accommodate the housing needs of residents at all income levels. To guide staff in developing the methodology, a region-wide Housing Methodology Committee, made up of local government staff, elected officials and stakeholders from throughout the Bay Area, is convened.

The RHNA process includes the following major milestones:

- **Staff consults with HCD about the determination of the region's total housing need;**
  - ABAG delegates authority for the RHNA process to subregions formed by local jurisdictions, and issues each subregion a share of the total regional housing need;
  - Staff develops and releases draft allocation methodology (followed by a 60-day public comment period, including a public hearing);
  - ABAG Executive Board adopts a final methodology and releases a draft allocation (followed by a 60-day period in which jurisdictions can request a revision to the draft allocation);
  - Staff responds to revision requests and provides opportunity for local jurisdictions to appeal the staff response;
  - Staff convenes a committee to hold a public hearing on appeals submitted by local jurisdictions; and
  - ABAG releases final allocation and adoption of the final allocation after a public hearing.
- 
- *Opportunities for Input:* Discussion at meetings of Housing Methodology Committee, ABAG Regional Planning Committee and ABAG Executive Board. Public comment periods and public hearings, as outlined in statute.
  - *Decision-Making Roles:* Guidance from ABAG Regional Planning Committee and ABAG Executive Board; approval by ABAG Executive Board.

- *Significance:* Each jurisdiction is required by law to update the Housing Element of its General Plan to show how it can accommodate **the portion of the Bay Area's total housing need, across all income categories** that it is allocated as part of the RHNA process.
- *Timeframe:* Discussion and approval of RHNA methodology will begin in 2019, in coordination with the development and approval of Plan Bay Area 2050. Anticipated approval date in 2021.

## III. Related Work

### A. Tracking Performance

MTC, in conjunction with its partners, has established an innovative monitoring initiative that tracks trends related to transportation, land and people, the economy, the environment, and social equity. Measurements in these areas are our **region's** Vital Signs helping us understand where we are succeeding and where we are falling short.

This data-driven website compiles dozens of indicators; each presented with interactive visualizations that allow users to explore historical trends, examine differences between cities and counties, and even compare the Bay Area with other peer metropolitan areas. The web address for Vital Signs is: <http://www.vitalsigns.mtc.ca.gov/>.

### B. Countywide Transportation Plans

Bay Area counties are authorized by state law to develop Countywide Transportation Plans on a voluntary basis. These countywide plans are an integral part of Plan Bay Area 2050. As long-range planning and policy documents, they assess transportation needs and guide transportation priorities and funding decisions for that county over a 20-25 year horizon. These countywide plans inform the transportation projects and programs that are forwarded to MTC for **consideration in the region's long-range plan**. Adopted countywide transportation **plans in the Bay Area can be found at the links shown below**. MTC's guidelines for development of countywide plans by the county Congestion Management Agencies can be found here: [https://mtc.ca.gov/sites/default/files/6b\\_Attachment-A.pdf](https://mtc.ca.gov/sites/default/files/6b_Attachment-A.pdf)

*Alameda County:* Alameda County Transportation Commission  
[http://www.alamedactc.org/app\\_pages/view/795](http://www.alamedactc.org/app_pages/view/795)

*Contra Costa County:* Contra Costa Transportation Authority  
<http://ccta.net/sources/detail/11/1>

*Marin County:* No current plan

*Napa County:* Napa County Transportation and Planning Agency  
<http://www.nctpa.net/countywide-plan-vision-2040>

*San Francisco County:* San Francisco County Transportation Authority  
[http://www.sfcta.org/sites/default/files/content/Planning/SFTP2/2017\\_revisio n/SFTP\\_final\\_report\\_10.24.17.pdf](http://www.sfcta.org/sites/default/files/content/Planning/SFTP2/2017_revisio n/SFTP_final_report_10.24.17.pdf)

*San Mateo County:* City/County Association of Governments of San Mateo County  
<http://ccag.ca.gov/programs/planning/countywide-transportation-plan/>

*Santa Clara County:* Santa Clara Valley Transportation Authority  
<http://www.vta.org/projects-and-programs/planning/valley-transportation-plan-2040-vtp-2040>

*Solano County:* Solano Transportation Authority  
[http://www.sta.ca.gov/Content/10153/Solano\\_Comprehensive\\_Transportation\\_Plan\\_Update.html](http://www.sta.ca.gov/Content/10153/Solano_Comprehensive_Transportation_Plan_Update.html)

*Sonoma County:* Sonoma County Transportation Authority  
<http://scta.ca.gov/planning/comprehensive-transportation-plan/>

## C. Action Plan

The Bay Area's housing and transportation crisis reflects the cumulative impacts of **the region's robust job market and its acute failure to keep pace with housing** need, especially near growing job centers. The current RTP/SCS projects these problems will intensify if the region does not take significant corrective steps. As a path forward, MTC and ABAG developed an "**Action Plan**" to focus on performance targets where the plan was moving in the wrong direction, as well as emerging issues that require proactive regional policy solutions.

MTC and ABAG created strategies to address housing **affordability**, **the region's** widening income disparities and economic hardships faced by low- and middle-income workers, and finally the Bay **Area's** vulnerabilities to natural disasters such as earthquakes and floods. These three issue areas – Housing, Economic Development and Resilience – form the core of the Action Plan.

### Action Plan Objectives

The following are the Action Plan's **key** objectives:

- Housing: Lower the share of income spent on housing and transportation costs, lessen displacement risk, and increase the availability of housing affordable to low- and moderate-income households.
- Economic Development: Improve transportation access to jobs, increase **middle wage job creation and maintain the region's** infrastructure.
- Resilience: Enhance climate protection and adaptation efforts, strengthen open space protections, create healthy and safe communities, and protect communities against natural hazards.

In order to meet these objectives, regional policymakers, local governments and civic organizations will need to prioritize these objectives in their future policies and programs. Public participation will be key to ensuring objectives are met.

#### D. CASA – Committee to House the Bay Area

**As a first step to addressing the Bay Area’s housing crisis, MTC and ABAG** are helping to coordinate CASA – The Committee to House the Bay Area. This initiative is bringing together a multi-sector set of partners to identify and agree upon **significant regional solutions that address the region’s chronic housing** challenges and advance equity and economic health in the nine-county Bay Area. Through stakeholder engagement, research and interviews, CASA will develop a comprehensive regional approach to the housing crisis, focusing on increasing housing supply, improving housing affordability, and strengthening preservation and anti-displacement measures. Objectives include a suite of legislative, financial, policy and regulatory recommendations, with partners agreeing on a path forward and working together on implementation. A final report is scheduled for release in 2019.

## IV. Public Engagement

In developing Plan Bay Area 2050, MTC and ABAG strive to promote an open, transparent process that encourages the ongoing and active participation of local governments and a broad range of interest groups and individuals from the general public. The Plan has a greater focus on public engagement than past plans, which will entail using a variety of platforms to communicate with Bay Area residents and working with a variety of agencies and organizations in a multi-year planning effort.

### A. General Public

The general public has several avenues for ongoing participation in the development of Plan Bay Area 2050.

- Key issues and policy matters will be presented at public meetings or open houses held in the evening. MTC and ABAG will hold a minimum of three public meetings in Alameda, Contra Costa, San Francisco, San Mateo and Santa Clara counties, and one or more meetings in the less populous Marin, Napa, Solano and Sonoma counties over the course of developing the Plan. Topics will include the *Horizon* Initiative, Preferred Scenario and the Draft Plan and Draft Environmental Impact report, as detailed in Attachment A, Key Milestones 2018-2021.
- For public meetings/open houses, MTC and ABAG will seek partnerships with cities and counties, Caltrans and other public agencies to explain the relationship of the regional plan to adopted local priorities for transportation and land use.
- MTC and ABAG policy board meetings present another opportunity for the **public to keep abreast of the Plan's development. The committees are** described below.
- Additionally, MTC and ABAG both have advisory panels that meet on a regular basis. The **Plan's** development will be presented to these groups for discussion and comment. The committees are described below; meetings are open to the public.
- The public is invited to be an active participant in meetings of the Regional Advisory Working Group, where a wide range of technical and policy issues will be discussed.
- The Plan Bay Area website is another way for the public to stay informed on the progress of the update or to participate in online surveys or comment forums.

- o Regular updates will be sent to interested members of the public via electronic newsletters, email and social media.

## B. Local Governments

Working with local governments — from elected officials to city managers, planning and public works directors, transit operators, and congestion management agencies — is critical to the development of Plan Bay Area 2050. Local officials can provide valuable context and specifics about local priorities and explain how the regional plan supports these priorities. One avenue for discussion with local government staff is through the Regional Advisory Working Group (RAWG), described below. In addition to the staff-to-staff discussions that will occur at the RAWG meetings, MTC and ABAG will work with members of their policy boards to coordinate meetings in each county with elected officials and local government staff. County Congestion Management Agencies (CMAs) provide a meeting structure that will also be used to discuss issues related to the Plan.

**Regional Advisory Working Group (RAWG):** Comprised of local government staff as well as staff from county Congestion Management Agencies, transit agencies and county health departments, the primary purpose of this ad hoc group is to enable MTC/ABAG staff to provide information to and receive input from local and county-level staff. Regular discussions on technical milestones will be held; the group will meet as needed. It is anticipated that the RAWG will meet approximately monthly throughout much of the Horizon and Plan Bay Area 2050 development process.

The Regional Advisory Working Group has no set membership, its meetings are open to the public and representatives from other organizations, and any individuals interested in the development of the Plan are invited to participate and provide feedback. Because it is primarily a staff-to-staff group, RAWG meets during the workday. Meeting materials are posted on the Plan Bay Area website; meetings are audiocast over the Internet and archived on the web.

**ABAG Delegate Meetings:** An elected official from each city, town and county **in the Bay Area serves as a delegate to ABAG's General Assembly. ABAG meets** with delegates by county. These conversations are helping inform ABAG and MTC about the challenges facing local jurisdictions as they seek to implement Plan Bay Area in ways that reflect their local land use controls as well as their unique assets and values.



## C. Policy and Advisory Committees

Regularly scheduled meetings of ABAG's and MTC's policy and advisory committees present another opportunity for interested members of the public — whether government or non-government — to stay involved. Meeting times, locations and materials will be posted on the Plan Bay Area website.

Additionally, meetings of MTC's policy board are webcast and archived at [mtc.ca.gov/meetings/schedule/](http://mtc.ca.gov/meetings/schedule/). ABAG's major meetings (Executive Board, Legislation Committee, Finance Committee, Regional Planning Committee and General Assembly) are videotaped and available from ABAG's website [abag.ca.gov/meetings/](http://abag.ca.gov/meetings/).

### Policy Committees for Plan Bay Area 2050

The ABAG Executive Board: **ABAG's Executive Board carries out policies** established by the General Assembly, which is composed of representatives of the Bay Area's 101 cities, towns and counties. **ABAG's Executive Board makes** operating decisions, controls expenditures and acts on recommendations from other Association committees. The 38 voting memberships on the Executive Board include elected officials reflecting population size of the nine counties, with non-voting members representing state or federal agencies invited to serve at the pleasure of the Board. The Executive Board meets the third Thursday of every other month, in the Board Room of the Bay Area Metro Center.

ABAG General Assembly: **ABAG's General Assembly meets annually (usually** in spring) and determines policy matters for the Association, including adoption of the annual budget and work program, and reviews major policy actions and recommendations of the Executive Board. General Assembly delegates from each member city and county and their alternates must be elected officials from the jurisdiction they represent — except for the City of San Francisco, where the mayor may appoint as his or her alternate any officer of that government. Each member city and county has one vote in the General Assembly; San Francisco is counted as both a city and county for the purposes of membership. Votes are tabulated separately for county representatives and for city representatives, with a majority vote of each group required for action or adoption of policy recommendations.

Metropolitan Transportation Commission: MTC is guided by a 21-member policy board composed of local officials from the nine Bay Area counties, including two members who represent regional agencies — ABAG and the Bay Conservation and Development Commission — as well as three nonvoting members appointed to represent the U.S. Department of Housing and Urban Development, the U.S. Department of Transportation, and the California Department of Transportation. Sixteen of the voting commissioners are appointed by local elected officials in each county, including the mayors of the three most populous cities in the region — San Jose, San Francisco and Oakland. The Commission generally meets monthly on **the fourth Wednesday of the month, at approximately 9:30 a.m., at MTC's offices** in San Francisco, in the Bay Area Metro Center.

Joint ABAG and MTC Meetings: To more fully collaborate, the MTC Planning Committee and ABAG Administrative Committee meet jointly as needed to oversee development of Plan Bay Area 2050, among other efforts. At major planning milestones, staff will present a summary of key comments heard **from the Plan's public engagement efforts. ABAG's Administrative Committee** submits reports and recommendations to the Executive Board or acts for the Executive Board in a month when the Board does not meet or in an emergency. **MTC's Planning Committee considers issues related** to the Plan and other regional plans, state and federal air quality plans, corridor studies, as well as connections between transportation and land use.

Additionally, both the full MTC Commission and ABAG Executive Board will meet jointly at key milestones throughout the process.

#### Advisory Committees for Plan Bay Area 2050

**MTC's Policy Advisory Council:** The Policy Advisory Council is a 27-seat advisory panel established to advise MTC on transportation policies in the San Francisco Bay Area, incorporating diverse perspectives relating to the environment, economy and social equity. This panel will be an active participant in the development of the Plan by providing input on regional planning efforts linking transportation, housing and land use to reduce greenhouse gas emissions. The Policy Advisory Council meets monthly, on the second Wednesday of the **month, at 1:30 p.m. at MTC's offices in the Bay Area Metro** Center, San Francisco.

**ABAG’s Regional Planning Committee (RPC):** The RPC is composed of a minimum of 18 elected officials, including at least one supervisor from each member county and a city representative from each county. Members also include the Chairperson of the Bay Area Planning Directors' Association or designee; one representative each from the Bay Area Air Quality Management District (BAAQMD), Bay Conservation and Development Commission (BCDC), Metropolitan Transportation Commission (MTC), Regional Water Quality Control Board; and not less than ten citizens. RPC meets the first Wednesday of alternate months, from 12:30 to 2:30 p.m. in the Bay Area Metro Center in San Francisco.

The Bay Area Partnership: This group of top executives from Bay Area transit operators, county Congestion Management Agencies and public works departments, as well as regional, state and federal transportation, environmental and land use agencies, advises MTC periodically on key planning issues, including Plan Bay Area. Staff level working groups meet occasionally on issues such as local roads, public transit and transportation finance.

## D. Additional Outreach to Governments

### Federal, State and Other Government Agencies and Native American Tribal Governments

In addition to the local governments that will be involved with Plan Bay Area 2050, MTC and ABAG will consult with officials responsible for other types of planning activities that are affected by transportation in the area, such as federal and state conservation and historic preservation agencies. Consultation will be based on the **agency’s needs and interests. At a minimum, agencies will be informed** about the process to develop the update and will be provided an opportunity to participate.

Consultation with the **region’s** Native American governments also will occur. There are six federally recognized Native American tribes in the San Francisco Bay Area. MTC and ABAG will invite the tribes to participate in government-to-government consultation during development the Plan. The groundwork for consultation will occur early in the process of developing the regional transportation plan and will include a **“Tribal summit”** for all six Tribal governments. MTC and ABAG will also **conduct individual meetings at each tribe’s** convenience.

## Presentations to Local Government

As required by SB 375 legislation, at least two informational meetings in each county will be held for members of the county board of supervisors and city councils to review and discuss the Draft Plan, and to consider their input and recommendations. Notice of the meeting shall be sent to each city clerk and to the clerk of the board of supervisors. One informational meeting will be conducted if attendance at the one meeting includes county board of supervisors and city council members representing a majority of the cities representing a majority of the population in the incorporated areas of that county.

## V. Public Participation Strategies

Development of Plan Bay Area 2050 will be a multi-year effort. Public participation strategies for major milestones will be identified and posted on the Plan Bay Area website ([www.PlanBayArea.org](http://www.PlanBayArea.org)). Detail for all milestones is described in Attachment A, although it is important to note that this is an iterative process that is subject to change. Throughout each phase, MTC and ABAG will use a variety of participation techniques to engage a wide range of residents, as described in this section.

### A. Innovative Strategies

In the past two Plan Bay Area processes, MTC and ABAG engaged in more traditional planning and outreach techniques. However, the ever-changing economic, technological and climate conditions in the Bay Area warrant a more innovative planning and engagement program. This will allow MTC and ABAG to analyze a range of future impacts and develop solutions to these impacts.

In order to engage as many Bay Area residents as possible, MTC and ABAG will use strategies to reach people “**where they are,**” with a focus on youth and those in communities of concern. These strategies, outlined in Section C below, will be a departure from the more traditional outreach techniques used in past Plan Bay Area efforts. Although MTC and ABAG are statutorily required to hold public **meetings at key milestones in the Plan’s development process, innovative strategies will be used when possible.**

### B. Voices from Underserved Communities

The success of the Plan is dependent on all voices in the region being represented and involved. MTC and ABAG will take special effort to engage minority and low-income residents that do not typically participate in regional government planning efforts.

In order to seek out and consider the needs of those traditionally under-represented in the planning process, including minority, low-income, disability and limited English proficient communities, we will work closely with community non-profit organizations in communities of concern. As we have in past Plans, we will complete a request for proposals (RFP) process for assistance from these groups to the residents they serve.

## C. Participation Activities

The public participation efforts will include:

### *Advance Notice*

- Develop details for the planning process and opportunities for public engagement in advance of each phase of Plan Bay Area 2050's development — and post these details on its website.
- Maintain an updated calendar of events on the Plan Bay Area website.
- Provide timely notice about upcoming meetings. Post agendas and meeting materials on the web one-week in advance of policy committee meetings or ad hoc advisory group meetings.
- Use a mailing list database to keep participants notified throughout the multi-year process (via e-mail or U.S. mail).
- Circulate a Draft Plan or Alternative Planning Strategy, if one is prepared, for public review at least 55 days before the adoption of the Final Plan Bay Area 2050.
- Work with media outlets to encourage news coverage in advance of meetings.

### *Meetings, Open Houses, Workshops, Public Hearings*

- Provide opportunities for a discussion in each county on important issues surrounding how Plan Bay Area 2050 can better support local activities. Pursuant to state statute, MTC and ABAG will hold a minimum of three public meetings in Alameda, Contra Costa, San Francisco, San Mateo and Santa Clara counties, and one or more meetings in the less populous Marin, Napa, Solano and Sonoma counties.
- Promote a civil atmosphere at public meetings that provides an opportunity for all participant to speak free of disruptions or personal attacks.
- Host public meetings, open houses or workshops in convenient and accessible locations at a variety of times (evenings, weekends, as well as weekdays).
- As appropriate, host webinars or telephone town halls to encourage more participation.
- Hold at least three public hearings on the Draft Plan or Alternative Planning Strategy, if one is prepared; hold the public hearings in different parts of the

region to maximize opportunities for participation by members of the public throughout the region.

- Use “**visualization**” techniques to communicate technical planning issues and strategies to the public, such as maps, videos, graphics, animation or computer simulations to depict alternatives under consideration.
- Provide a summary of comments heard at public meetings via the Plan Bay Area website ([www.PlanBayArea.org](http://www.PlanBayArea.org)).

#### *Digital Engagement*

- Use a single web address — [www.PlanBayArea.org](http://www.PlanBayArea.org) — so members of the public have a single place to go for current updates and to request to receive notices and information.
- Use social media to reach, educate and engage residents.
- Maintain an archive of past workshop meeting materials on the Plan Bay Area website.
- Offer interactive web polls, surveys, etc.
- Provide timely, easy-to-understand information on a website that is mobile-ready and accessible, per the Americans with Disabilities Act.

#### *Media Outlets*

- Issue press releases to media outlets, including ethnic, foreign-language and community media, to keep reporters apprised of progress and generate coverage on radio, television, newspapers and the Internet.
- Translate news releases about public meetings into Spanish and Chinese, or other languages as appropriate.

#### *Other Innovative Strategies*

- Engage in “**pop-up**” style intercept outreach at community events and popular locales (e.g., farmers’ markets, malls, festivals, etc.)
- Involve youth in helping to shape the draft Plan Bay Area 2050 through partnerships with academic or nonprofit organizations.
- Use short, captioned video to communicate complex concepts to the public;

video could use humor or animation in order to make the subject matter more relatable.

- Place kiosks with surveys or other online tools in public spaces (e.g., libraries, malls, community centers, etc.) for greater reach.

#### *Outreach to Targeted Groups*

- Ask partners to help spread the word about public comment opportunities.
- Piggy-back on existing meetings in order to attract greater attendance and participation.
- Seek out and consider the needs of those traditionally under-represented in the planning process, including minority, low-income, limited English proficient communities and persons with disabilities. Also, consider the needs **of the Bay Area's growing senior population.**
- Provide assistance, if requested at least three working days prior to a meeting, to people with disabilities and language assistance to people with limited **English proficiency. (Five or more days' notice is preferred.) Such requests** may be made through the MTC Public Information Office at 415.778.6757.

#### *Other*

- Statistically relevant public opinion poll (also available in languages other than English).
- The methods MTC and ABAG will use to report progress on the Plan will include, but not be limited to, the web; e-mail updates; social media; electronic and print newsletters; and local media outlets.



## VI. Public Participation Goals

People who take the time and energy to participate in public processes should feel their participation is valued. MTC and ABAG commit to the following goals and performance benchmarks to measure the effectiveness of the public participation program:

1. Promote a transparent process: MTC and ABAG should make every effort to make the often-complex planning process transparent so that the public has the opportunity to help shape policies and inform decisions.
2. Encourage broad participation: The process should include the greatest number of people possible from throughout the region and reflect the **diverse Bay Area population, regardless of individuals' language, personal mobility or ability to attend a meeting, subject to available budget and resources.**
3. Engage for impact: The feedback received through this Public Participation Plan should be analyzed and provided to policy makers in a timely manner to inform their decisions. Interested participants should be informed of actions by MTC and ABAG at key milestones throughout the planning process.
4. Build knowledge: This program is an opportunity for MTC and ABAG to inform a wide range of people about transportation and land-use issues in the Bay Area. Each step of the process should include an educational element to set context and promote increased understanding of the Plan and relevant topics.

## Targeted Performance Measures

MTC and ABAG will survey participants in an effort to inform and improve future outreach. Results from the survey and other data will be used to conduct an evaluation of Plan Bay Area public engagement at the conclusion of the planning process. Following are specific performance metrics that will be tracked:

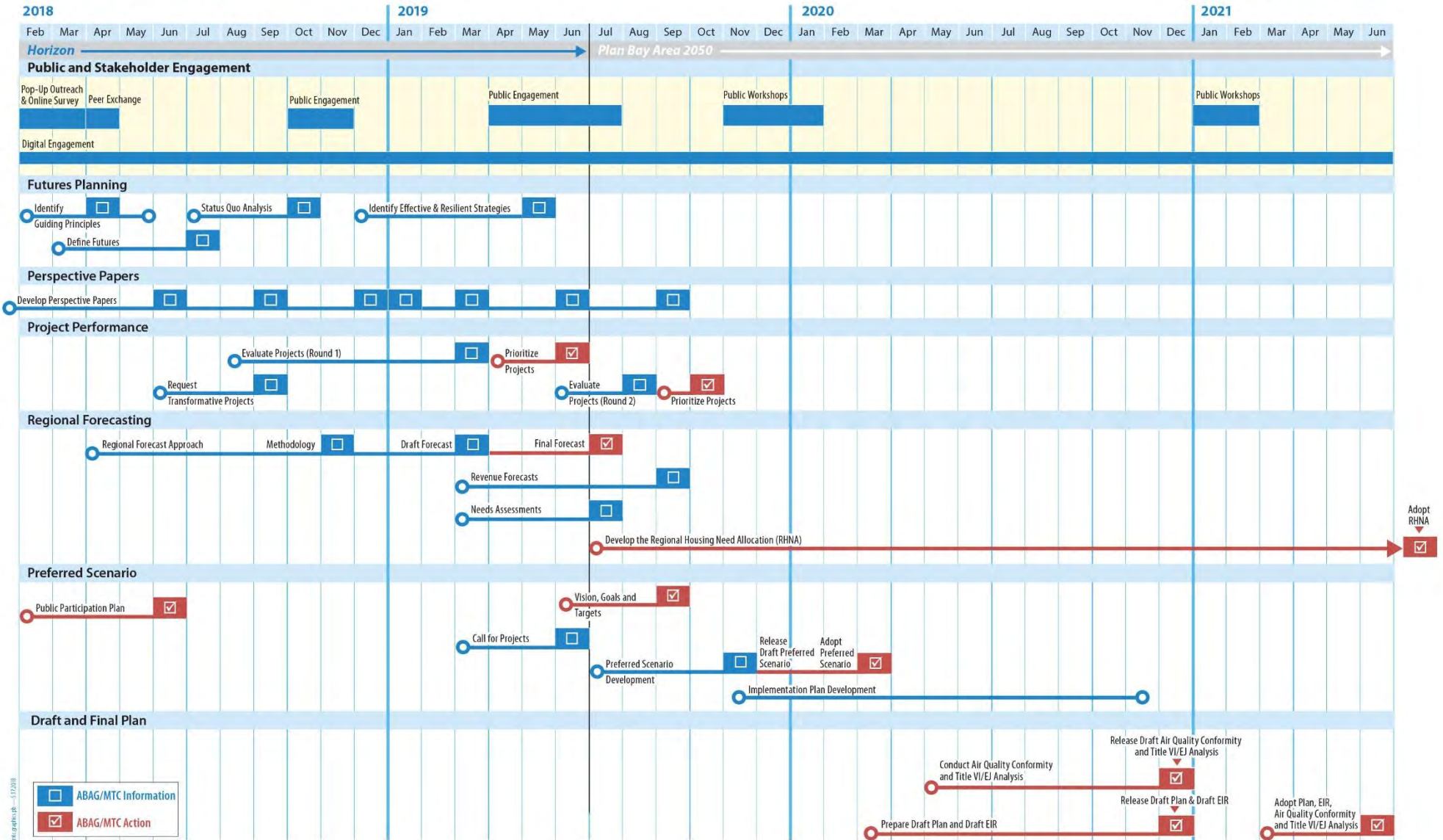
1. Promote a transparent process
  - For each major technical planning milestone, develop user-friendly content written in plain language explaining:
    - The purpose of the work

- Impact on the plan
  - Opportunities for public input, and
  - Decision-making roles.
2. Encourage broad participation
- Outreach will target demographic groups (age, ethnicity, income, primary language, geographic location, disability) roughly mirroring the **demographics of the Bay Area’s** population.
  - Five thousand or more comments are logged on the Plan Bay Area 2050 or associated documents.
  - There are 200,000 visits to **or “page views”** of the Plan Bay Area website.
  - Online engagement options are available for those who are not able to attend meetings.
  - Outreach conducted in all nine counties, in central locations and accessible by public transit to the extent feasible.
  - Meetings are linguistically accessible to 100 percent of participants, with **three (3) working days’ advance request for translation. (Meeting announcements offer translation services with advance request for translation services.)**
  - All meetings are accessible under the requirements of the Americans with Disabilities Act (ADA).
  - Plan Bay Area 2050 or elements of it are mentioned in radio or TV broadcasts, online forums and blogs, social media, newspaper articles, editorials, commentaries, or other printed media.
3. Engage for impact
- One hundred percent of written correspondence received is logged, analyzed and shared in a timely manner with staff and policy makers for consideration.
  - One hundred percent of written correspondence is acknowledged.
  - Policy decisions and other actions are summarized and reported back to participants at key milestones in the process.
4. Build knowledge
- Seventy percent of participants surveyed agree that Plan Bay Area 2050 public participation efforts provided:
    - Sufficient opportunity to comment/ask questions
    - Clear information at an appropriate level of detail, and
    - An opportunity to learn about Plan Bay Area 2050 and related projects or programs.

# Attachment A

## Horizon and Plan Bay Area 2050 (RTP/SCS): Key Milestones 2018–2021

(Dates are tentative and subject to change.)



# Attachment B – Responsibilities & Roles: Plan Bay Area 2050

Major Tasks	Advisory				Decision-Making		
	A	B	C	D	E	F	G
	Partnership Board	Regional Advisory Working Group	Policy Advisory Council	Regional Planning Committee	MTC Planning Committee & ABAG Administrative Committee	Executive Board	Commission
	MTC	Joint	MTC	ABAG	Joint	ABAG	MTC
<b>1. Horizon Initiative</b>							
Horizon Initiative Planning		●	●	●	☑		
Project Evaluation		●	●		☑		
Policy Analysis		●	●		☑		
<b>2. Regional Forecasting</b>							
Population/Employment/Housing/Travel Demand Forecasts		●	●	●	☑	☑	☑
Transportation, Housing & Resilience Revenue Forecast		●	●	●	☑		
<b>3. Preferred Land Use Pattern &amp; Investment Strategy</b>							
Needs Assessments	●	●	●		☑		
Call for Projects		●	●		☑		
Land Use & Travel Demand Forecasting		●	●	●		☑	☑
Adoption of Preferred Scenario		●	●	●	☑	☑	☑
<b>4. Draft and Final Plan</b>							
Title VI & Environmental Justice Analysis		●	●		☑		
Air Quality Conformity Analysis					☑		☑
Draft & Final Environmental Impact Report (EIR)		●	●	●	☑	☑	☑
Draft & Final Plan		●	●	●	☑	☑	☑
Regional Housing Need Allocation (RHNA)				●		☑	

- Input/Information
- ☑ Action/Decision

**NOTE:** Information provided is tentative and subject to change.

Action items presented jointly to MTC’s Planning Committee and ABAG’s Administrative Committee may seek a recommendation from one or both committees.

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# APPENDIX A – 7

## *Regional Policies: Long-Range Planning / Plan Bay Area*

### Equity Analysis Report Plan Bay Area 2050



**This appendix to the 2023 TIP is available on**

<https://mtc.ca.gov/funding/transportation-improvement-program/2023-tip/2023-tip-appendices>



# APPENDIX A – 8

## *Regional Policies: Long-Range Planning / Plan Bay Area*

Performance Assessment Report  
Plan Bay Area 2050



**This appendix to the 2023 TIP is available on**

<https://mtc.ca.gov/funding/transportation-improvement-program/2023-tip/2023-tip-appendices>





# APPENDIX A – 9

## *Regional Policies: Long-Range Planning / Plan Bay Area*

**Coordinated Public Transit-Human Services  
Transportation Plan**

**MTC Resolution No. 4310**



Date: February 28, 2018  
W.I.: 1311  
Referred by: Planning

ABSTRACT

Resolution No. 4310

This resolution adopts the 2018 Coordinated Public Transit-Human Services Transportation Plan for the San Francisco Bay Area.

The following attachment is provided with this resolution:

Attachment A — 2018 Coordinated Public Transit-Human Services Transportation Plan

Discussion of the 2018 Coordinated Public Transit-Human Services Transportation Plan is contained in the Executive Director's Memorandum to the Planning Committee dated February 2, 2018.

Date: February 28, 2018  
W.I.: 1311  
Referred by: Planning

RE: 2018 Coordinated Public Transit-Human Services Transportation Plan

METROPOLITAN TRANSPORTATION COMMISSION  
RESOLUTION NO. 4310

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code 66500 *et seq.*; and

WHEREAS, the Moving Ahead for Progress in the 21st Century Act (MAP-21) requires that projects funded through the Enhanced Mobility of Seniors and Individuals with Disabilities program be included in a locally developed Coordinated Public Transit-Human Services Transportation Plan (Coordinated Plan) beginning in Fiscal Year 2013; and

WHEREAS, the Fixing America's Surface Transportation (FAST) Act requires that projects funded through the Enhanced Mobility of Seniors and Individuals with Disabilities Program be included in a locally developed, Coordinated Plan beginning in Fiscal Year 2015; and

WHEREAS, MTC has dedicated significant resources toward planning efforts that have focused on the transportation needs of low-income, senior and disabled residents in the Bay Area, including the community-based transportation planning program;

WHEREAS, the California Legislature enacted the Social Service Transportation Improvement Act (Chapter 1120, Statutes of 1979) (hereafter referred to as AB 120) with the intent to improve transportation service required by social service recipients; and

WHEREAS, under the auspices of the Social Service Transportation Improvement Act, MTC designates agencies to serve as Consolidated Transportation Service Agencies (MTC Resolution 4097, Revised); and


WHEREAS, MTC completed the region's Coordinated Public Transit-Human Services Transportation Plan in 2007 and updated the plan in 2013 (MTC Resolution 4085); and

WHEREAS, the 2018 Coordinated Public Transit-Human Services Transportation Plan revises the 2013 Coordinated Plan to include new demographic, transportation service gaps and solutions, and regional context information; now, therefore, be it

RESOLVED, that MTC approves the 2018 Coordinated Public Transit-Human Services Transportation Plan as forth in Attachment A of this resolution, and be it further

RESOLVED, that the Executive Director of MTC is hereby authorized to forward the Coordinated Plan Update to the Federal Transit Administration and such agencies as may be appropriate.

METROPOLITAN TRANSPORTATION COMMISSION

  
\_\_\_\_\_  
Jake Mackenzie, Chair

The above resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in San Francisco, California, on February 28, 2018.

Date: February 28, 2018  
W.I.: 1311  
Referred by: Planning

Attachment A  
MTC Resolution No. 4310

## **2018 Coordinated Public Transit-Human Services Transportation Plan**

The 2018 Coordinated Public Transit-Human Services Transportation Plan is incorporated by reference.

The plan and appendices are available in the MTC/ABAG Library, and on-line at <https://mtc.ca.gov/our-work/plans-projects/other-plans/coordinated-public-transit-human-services-transportation-plan>





# COORDINATED PUBLIC TRANSIT- HUMAN SERVICES TRANSPORTATION PLAN

February 2018



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# EXECUTIVE



# SUMMARY



METROPOLITAN TRANSPORTATION COMMISSION





## SETTING THE VISION

This is a forward-thinking, big picture plan for the region that guides MTC’s coordination with partners throughout the Bay Area.



This Coordinated Public Transit-Human Services Transportation Plans goes beyond its basic federal requirements—considering the mobility needs of seniors, people with disabilities, people on low-incomes, and veterans—and designates strategies to guide MTC’s efforts over the next four years.

This plan asks the question:

How can MTC and its partners provide mobility options for seniors, people with disabilities, veterans, and people with low incomes that are also cost efficient for the region?



“How can MTC and its partners provide mobility options for seniors, people with disabilities, veterans, and people with low incomes that are also cost efficient for the region?”

**WHO IS SERVED?**

The Coordinated Plan envisions a cost-effective expansion of services for seniors, people with disabilities, veterans, and those with low incomes.

Existing Targeted Services	Seniors	People with Disabilities	Veterans	Low-Income Populations
Fixed-route transit	✓	✓	✓	✓
ADA-mandated paratransit		✓		
Community-based shuttles	✓	✓	✓	✓
Private demand-response transportation	✓	✓	✓	✓
Subsidized fare or voucher programs	✓	✓		✓
Volunteer driver programs	✓		✓	
Information and referral	✓	✓	✓	✓
Travel training	✓	✓		
Mobility management	✓	✓	✓	✓

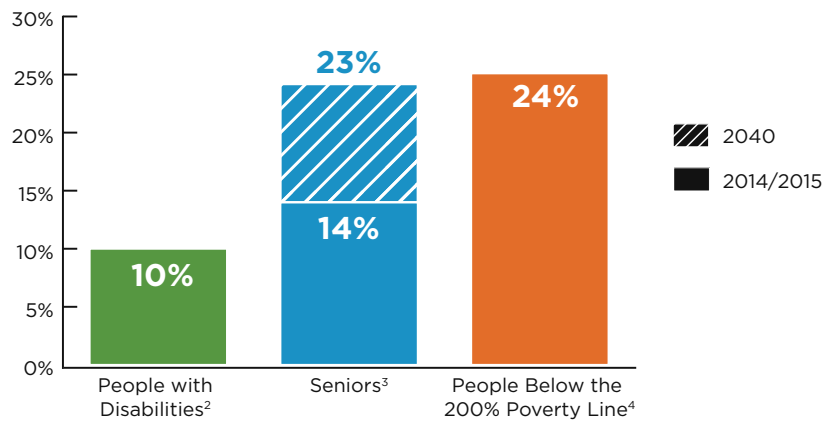
# KEY CHALLENGES FOR THE REGION

The Bay Area’s population is aging, and the portion of the population living in poverty has increased and suburbanized in the last decade. Combined with a growing share of the population that lacks access to a vehicle, this means that **fewer of the most vulnerable people in our region have access to opportunities.**

## WHAT DOES THE DATA TELL US?

Predictions for the region’s growth through the year 2040 indicate that the **senior population will grow from 14% of today’s population to 23% of the 2040 population.**<sup>1</sup> However, those seniors are expected to stay healthy longer, with almost no growth expected in the portion of the population that is disabled.

### Bay Area Demographics



**The cost of providing paratransit is increasing.** According to the Federal Transit Administration, between 1999 and 2012, the average cost per trip on ADA paratransit services increased 138%, from \$13.76 to \$32.74.<sup>5</sup>

Today, 24% live in poverty in the Bay Area. **Poverty has risen faster** in suburban than urban areas, particularly in Solano, Contra Costa, and Marin counties. Low-income populations increasingly have less access to public transit and public services.

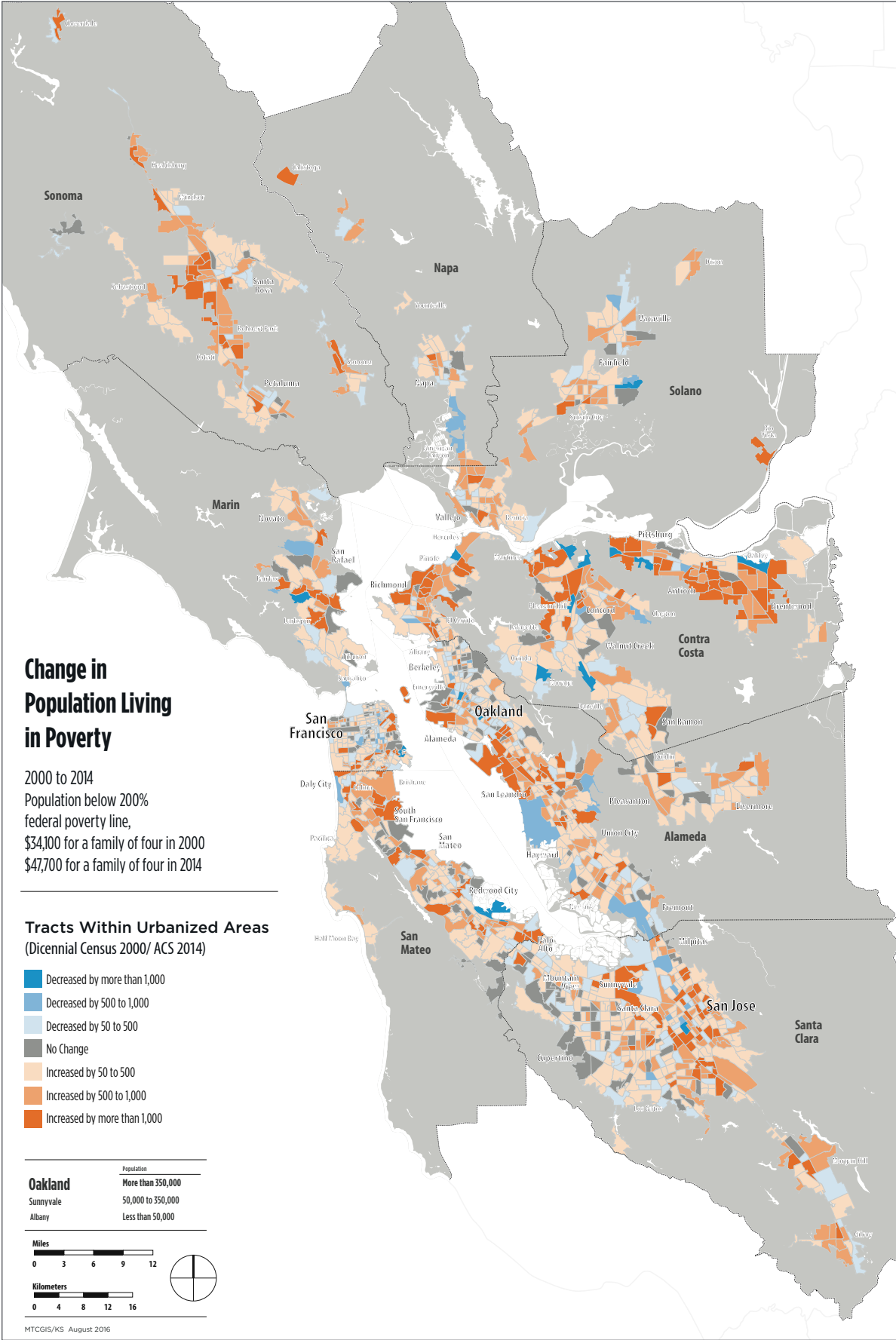
1. 2014 American Community Survey 5-Year Estimate S0101; Metropolitan Transportation Commission and Association of Bay Area Governments, Plan Bay Area 2040 Projections, Scenario 2040\_03\_116

2. 2014 American Community Survey 1-Year Estimate S0103

3. 2014 American Community Survey 5-Year Estimate S0101; Metropolitan Transportation Commission and Association of Bay Area Governments, Plan Bay Area 2040 Projections, Scenario 2040\_03\_116

4. 2015 American Community Survey 1-year Estimate B17002

5. FTA Report No. 0081, Accessible Transit Services for All



## WHAT DO REGIONAL STAKEHOLDERS SEE AS THE BIGGEST GAPS?

Representatives from over 30 Bay Area stakeholder groups were asked to identify the biggest mobility gaps faced by their constituents. These are the most common themes heard.

- **Spatial gaps**—areas of our region that are either difficult or impossible to reach by public transportation—continue to be a key need expressed throughout the region
- **Temporal gaps**—points in time that lack service—also constrain the mobility of target populations
- With regional consolidation of facilities and growing rates of disease, **healthcare access** is a major concern in the region
- Transit and paratransit **fares are unaffordable** for many people in all parts of the Bay Area
- **Funding needs** are growing faster than revenues
- Constituents recognize that **safety investments for pedestrians and people on bicycles** improve mobility for all, and increase access to transit
- While suggestions were made to leverage emerging mobility service providers to assist in solving mobility gaps, people are concerned about the **lack of accessibility of both taxis and ride-hailing services**
- Stakeholders highlight the importance of **transportation information availability** and associated referral services to steer people to gap-filling services
- Consistent with the 2013 Plan, **transfers** on both the fixed-route transit network as well as between ADA Paratransit service providers (when trips cross county lines, for example) are barriers



# COORDINATION STRATEGIES

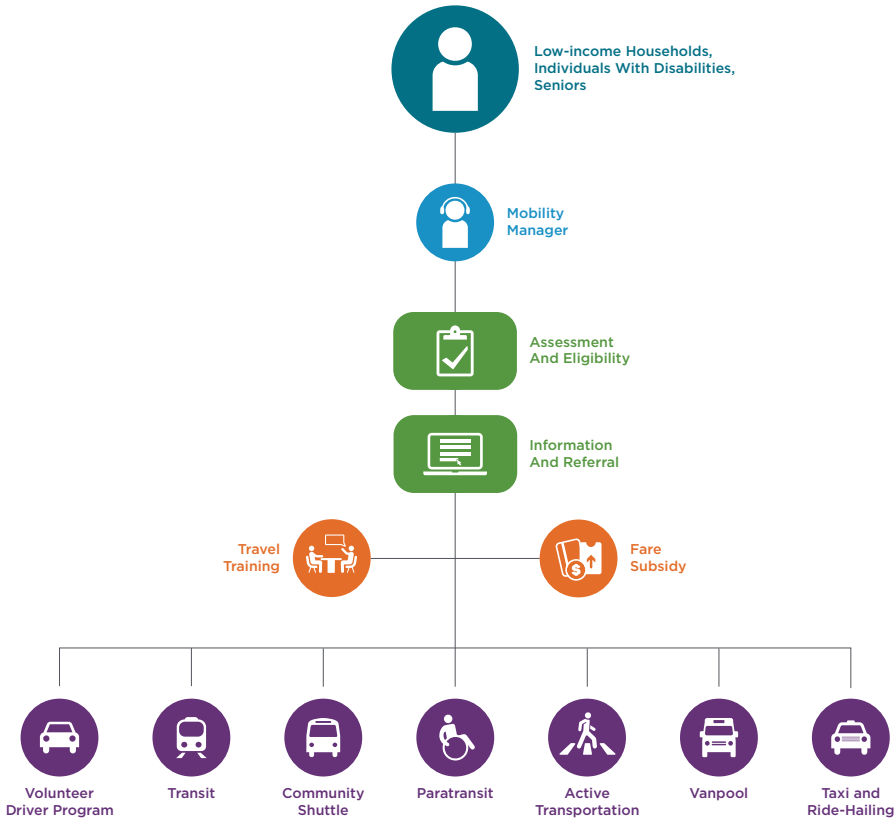
Strategies are big picture initiatives that MTC and its local partners can implement or facilitate. The plan identifies the following strategies for MTC and its partners:



## IMPLEMENT COUNTY-BASED MOBILITY MANAGEMENT

Develop County-Based Mobility Management Across the Region that will direct passengers to all available transportation options and increase efficiency through coordination. A county-based mobility management program should include in-person eligibility assessments, travel training, and information and referral services.

The graphic below describes the typical Mobility Management process, in which an individual seeking mobility services works with a Mobility Manager to assess their needs, and to be referred to services, subsidy programs, or training opportunities for which they are eligible.





## IMPROVE PARATRANSIT

**Address Access to Healthcare** by supporting cost sharing agreements between transportation providers and healthcare clinics, and by exploring Medi-Cal cost recovery programs for public and private providers in the Bay Area.

**Reduce the Cost of Providing ADA Paratransit.** Implementation of mobility management strategies will help address paratransit per-rider costs, including in-person eligibility assessments and software upgrades to allow for trip screening or Interactive Voice Response systems.

**Make it Easier for Customers to Pay** by exploring potential solutions with Clipper 2.0

## PROVIDE MOBILITY SOLUTIONS TO SUBURBAN AREAS

**Increase Suburban Mobility Options.** MTC can provide guidance on public-private partnerships, increasing the availability of subsidized same-day trip programs, increasing the functionality of information and referral systems such as “one-call/one-click” solutions, and subsidizing low-income carshare pilots or vehicle loan programs.

## REGIONAL MEANS-BASED TRANSIT FARE PROGRAM

**Means-Based Fare Program.** To make transit more affordable for low-income people, MTC and partners should implement a financially viable and administratively feasible program.

## SHARED AND FUTURE MOBILITY

**Advocate for the Accessibility of Shared Mobility Solutions and Autonomous Vehicles.** MTC and partners ensure equity and accessibility of bikeshare, carshare, ride-hailing, and other new mobility options by issuing policy guidance and technical assistance for agencies and non-profits entering into partnerships.

## IMPROVE MOBILITY FOR VETERANS

**Support Veterans'-Specific Mobility Services.** Serve localized and long-distance medical trips for veterans and create opportunities for veterans to advise MTC on mobility needs.



# ACTION PLAN

To cost efficiently serve seniors, people with disabilities, veterans, and people with low incomes with a range of mobility options, this plan outlines key actions for MTC and its regional partners over the next four years.



### KEEP THE MOMENTUM (6-12 months)

In the first year of the 2018 Coordinated Plan’s adoption, MTC and its regional partners—transit operators, human service providers, Congestion Management Agencies, and others—should keep the momentum from the planning process by setting policies and establishing internal frameworks.

### IMPLEMENT THE BASICS (1-2 years)

One to two years after adoption, the region should begin to see visible impacts of the planning process, with service pilots, coordination summits, and other basic programs being implemented.

### BUILD OUT THE PROGRAM (3-4 years)

In the three to four year time frame, the major strategies for the region—county-based mobility management, means-based fares, in-person eligibility, access to health care, and an open dialog with shared mobility service providers—should come to fruition.



### FOR MORE INFORMATION

Please contact:

**Metropolitan Transportation Commission**

415.778.6700

[mtc.ca.gov](http://mtc.ca.gov)



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# 1. INTRODUCTION AND METHODOLOGY

To serve the needs of seniors, people with disabilities, those with low incomes, and veterans, the 2018 Coordinated Public Transit-Human Services Transportation Plan sets regional priorities for transportation investments and initiatives for human services and public transit coordination. It also serves as a federally required update to the 2013 Coordinated Public Transit-Human Services Transportation Plan, and is being completed in concert with the region's long-range regional transportation plan, Plan Bay Area 2040.

Through the involvement of the Technical Advisory Committee (TAC)—a group of regional stakeholders representing the plan's target populations,<sup>1</sup> this Coordinated Plan considers numerous existing or ongoing planning efforts focused on the transportation needs of low-income, senior, disabled, and veteran residents in the Bay Area. These include the Means-Based Fare Study and the Plan Bay Area Equity Analysis. Extensive, locally targeted outreach with residents and users of the system, regional stakeholders, and local advisory groups identified the transportation gaps that strategies and projects were designed to address.



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<sup>1</sup> The 2018 Coordinated Plan TAC includes representatives from Golden Gate Transit, Sonoma County Human Services Area Agency on Aging, Choice in Aging (Contra Costa County), City of Fremont, SamTrans, Outreach (Santa Clara County), San Francisco Municipal Transportation Agency, and Solano Transportation Authority.

## PLAN GOALS

The Coordinated Plan provides an opportunity for a diverse range of stakeholders with a common interest in human service transportation to convene and collaborate on how best to provide transportation services for these targeted populations. Specifically, stakeholders are called upon to identify service gaps and barriers, strategize on solutions most appropriate to meet these needs based on local circumstances, and prioritize these needs for inclusion in the Coordinated Plan.

Indeed, stakeholder outreach and participation was a key element to the development of the Coordinated Plan; federal guidance issued by FTA specifically requires this participation and recommends that it come from a broad base of groups and organizations involved in the coordinated planning process, including (but not limited to):

- Area transportation planning agencies
- Transit riders and potential riders
- Public transportation providers
- Private transportation providers
- Non-profit transportation providers
- Human service agencies funding and/or supporting transportation services
- Other government agencies that administer programs for targeted population, advocacy organizations, community-based organizations, elected officials, and tribal representatives.<sup>2</sup>

This Coordinated Plan is intended both to capture those local stakeholder discussions, and to establish the framework for potential future planning and coordination activities.

Importantly, the Coordinated Plan provides an opportunity for MTC to prioritize strategies that can be approached on a regional level. This plan offers potential strategies and priorities for projects that target transportation-disadvantaged populations. Given the timing of the Coordinated Plan update process relative to reauthorization legislation, this document will inform priorities and certify projects receiving funds authorized under both Moving Ahead for Progress in the 21st Century Act (MAP-21) (the previous federal transportation funding

authorization) and the Fixing America's Surface Transportation (FAST) Act. Planning requirements specific to the authorizations are described below.

## PLANNING REQUIREMENTS

### Enhanced Mobility of Seniors and Individuals with Disabilities Program (Section 5310)

The FAST Act retains the same planning requirements identified under MAP-21 for the Enhanced Mobility of Seniors and Individuals with Disabilities Program (Section 5310). Section 5310 remains the only funding program with coordinated planning requirements under the FAST Act.

In relation to the locally developed Coordinated Public Transit-Human Services Transportation Plan, the FAST Act requires:<sup>3</sup>

1. That projects selected are “included in a locally developed, coordinated public transit-human services transportation plan.”
2. That the coordinated plan “was developed and approved through a process that included participation by seniors, individuals with disabilities, representatives of public, private, and nonprofit transportation and human service providers, and other members of the public.”
3. That “to the maximum extent feasible, the services funded will be coordinated with transportation services assisted by other Federal departments and agencies,” including recipients of grants from the Department of Health and Human Services.

Funds are apportioned based on each state's share of the population of seniors and individuals with disabilities. Funding decisions must be clearly noted in a program management plan.

The selection process may be formula-based, competitive or discretionary, and sub-recipients can include states or local government authorities, private non-profit organizations, and/or operators of public transportation.

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<sup>2</sup> Federal Register: March 15, 2006 (Volume 71, Number 50, pages 13459-60)

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<sup>3</sup> <https://www.transit.dot.gov/funding/grants/grant-programs/section-5310-%E2%80%93-enhanced-mobility-seniors-and-individuals-disabilities>

# FEDERAL AND STATE ROLES TO PROMOTE HUMAN SERVICE TRANSPORTATION COORDINATION

## Federal

Incentives and benefits to coordinating human services transportation programs are defined and elaborated upon in numerous initiatives and documents. Coordination can enhance transportation access, minimize duplication of services, and facilitate cost-effective solutions with available resources. Enhanced coordination also results in joint ownership and oversight of service delivery by both human service and transportation service agencies. Technical assistance related to the FAST Act built on earlier initiatives from the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and MAP-21. These earlier initiatives include:

- **United We Ride:** In February 2004, President George W. Bush signed an Executive Order establishing an Interagency Transportation Coordinating Council on Access and Mobility (CCAM) to focus 10 federal agencies on the coordination agenda.
- **A Framework for Action:** The Framework for Action is a self-assessment tool that states and communities could use to identify areas of success and highlight the actions still needed to improve the coordination of human service transportation.
- **Medicaid Transportation Initiatives:** Transit Passes – Federal regulations require that Medicaid-eligible persons who need transportation for non-emergency medical care be provided transportation. For many people, the most cost-effective way to provide this transportation is with public transportation. Expansion of Medicaid under the Patient Protection and Affordable Care Act increased the number of persons eligible for Medicaid in the State of California.

The CCAM currently sponsors the following initiatives:

- **Rides to Wellness:** An initiative to increase partnerships between health and transportation providers and show the positive financial benefit to such partnerships. The initiative's goals are to increase access to care, improve health outcomes, and reduce healthcare costs. In March 2015, FTA hosted the Rides to Wellness summit, representatives from FTA, HHS, USDA and the Department of Veterans Affairs attended. The Rides to Wellness initiative also oversees

the FAST Act's competitive pilot program for innovative coordinated access and mobility to help finance innovative projects for the transportation disadvantaged that improve the coordination of transportation services and non-emergency medical transportation (NEMT) services.

- **Veterans Transportation Community Living Initiative (VTCLI):** FTA has awarded \$64 million in competitive grants to help veterans, military families, and others connect to jobs and services in their communities by improving access to local transportation options.<sup>4</sup>
- **Healthcare Access Mobility Design Challenge (and other National Center for Mobility Management projects):** The Design Challenge was part of the Federal Transit Administration's Rides to Wellness initiative, a key component of the agency's Ladders of Opportunity program. Sixteen communities were awarded grants to design innovative transportation solutions related to healthcare access; their work was completed in March 2016.<sup>5</sup>
- **National Aging and Disability Transportation Center (NADTC):** The National Aging and Disability Transportation Center is a national technical assistance center funded by FTA to promote the availability and accessibility of transportation options that serve the needs of people with disabilities, seniors and caregivers with a focus on the Section 5310 program and other transit investments. The NADTC provides technical assistance, information and referral; develops field training; implements interactive communication and outreach strategies; and supports communities in assessing their needs and developing innovative transportation solutions.
- **National Center for Mobility Management (NCMM):** The National Center for Mobility Management supports FTA's Rides to Wellness Initiative and is funded through a cooperative agreement with FTA. NCMM provides capacity-building technical assistance and training; catalogs and disseminates best practice information on innovative mobility management programs around the country; and works to improve and enhance the coordination of federal resources for human service transportation, especially for people with disabilities, older adults and people with lower incomes.

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4 <https://www.transit.dot.gov/ccam/about/initiatives>

5 <http://nationalcenterformobilitymanagement.org/challenge/>

- **National Rural Transportation Assistance Program (RTAP):** The National Rural Transportation Assistance Program provides outreach and training to each state's RTAP and coordinates with other organizations involved in rural transit, operates a national toll-free telephone line, a webpage, a national peer-to-peer technical assistance network and various presentations and publications and fulfillment services for National RTAP products.
- **Intelligent Transportation System (ITS) Peer-to-Peer Program:** The ITS Peer-to-Peer Program helps urban and rural clients create solutions for a variety of highway, transit, and motor carrier interests, in virtually all areas of ITS planning, design, deployment and operations.
- **National Transit Institute:** The National Transit Institute (NTI) at Rutgers University was established in 1992 to conduct training and educational programs related to public transportation. Funded by FTA, NTI's mission is to provide training, education, and clearinghouse services in support of public transportation and quality of life in the United States.
- **Transit Cooperative Research Program:** The Transportation Cooperative Research Program (TCRP) is funded by DOT and FTA. TCRP offers practical research that yields near-term results and can help agencies solve operational problems, adopt useful technologies from related industries and, find ways for public transportation to be innovative.

## HOW WAS THIS PLAN DEVELOPED?

The four required elements of a coordinated plan are: (1) an assessment of current transportation services; (2) an assessment of transportation needs; (3) strategies, activities and/or projects to address the identified transportation needs (as well as ways to improved efficiencies); and (4) implementation priorities based on funding, feasibility, and time, among other criteria. This section describes the steps taken by MTC and its Technical Advisory Committee (TAC) to develop these elements of the Bay Area's coordinated plan.

## Bay Area Demographic Trends

An updated demographic profile of the Bay Area was prepared using data from the Census Bureau's American Community Survey and other relevant planning documents, to determine the local characteristics of the study area as they relate to the four population groups the Coordinated Plan focuses on: persons with low incomes, persons with disabilities, veterans, and older adults.

## Regional Transportation Resource Inventory

To assist county- and local-level organizations in improving local mobility, the Coordinated Plan provides an updated summary of JARC, New Freedom, and Section 5310 projects funded since the last Coordinated Plan, defines mobility management, and describes the range of transportation services that exist in the region. These services include public fixed-route and paratransit services and transportation services provided or sponsored by social service agencies. Information about options were gleaned from existing resources and the TAC.

## Outreach to Stakeholders - Transportation Gaps and Solutions

Input was sought from the region's seniors, people with disabilities, people with low incomes, and veterans through various forms of outreach.

Together with findings from the demographic analysis, stakeholder input informed the development of a comprehensive list of transportation gaps and a summary of possible solutions.

### Outreach

Outreach efforts focused on conversations with individuals, advocates, and agencies. Thirty-five agencies, organizations, and advisory groups from all nine counties of the Bay Area provided input, captured in more than 300 individual comments. These comments were individually classified as either identifications of existing transportation gaps or suggestions of potential solutions; further, each comment was categorized according to its overarching theme—temporal or spatial gaps, for example. These comments, along with their themes, are provided as Appendix B and Appendix C.



## Summary of Gaps and Solutions

Each comment was categorized as either a gap or a solution, and further assigned a theme. In total, 53 themes emerged. Discussions with the TAC to develop locally implementable projects and regionally relevant strategies focused on the 10 most common themes heard through all engagement channels. In addition to gaps, stakeholders also offered solutions — either things that have been discussed in their county or new ideas. This input was incorporated into the strategy recommendations.

## Projects Eligible for 5310 and other Funding

This plan synthesizes feedback received through the outreach process along with demographic analysis and work done in the 2013 Coordinated Plan to identify specific eligible project types; these projects become eligible for 5310 and other funding sources that require or encourage proposals to refer to this Coordinated Plan (e.g. 5311 or MTC's own competitive grant programs) Projects eligible for 5310 funding can be found in Appendix E.

Project types include Mobility Management and Travel Training, Improvements to Paratransit that Exceed ADA Requirements and/or Demand-Responsive Services, Improvements to ADA-mandated Paratransit, Improvements to Public Transit Service and Access, Pedestrian and Bicycle Improvements, Shared Mobility Accessibility, and Other Solutions.

## Potential Strategies for Addressing Mobility Gaps

To leverage the unique opportunity offered by coordinating this planning effort with Plan Bay Area 2040 – the region's long range transportation plan and Sustainable Communities Strategy – MTC took the opportunity to think strategically about the regional role it can play in improving mobility for seniors, people with disabilities, veterans, and those with low incomes. These strategies are big picture initiatives that MTC can facilitate or implement. They are informed by the information gathered throughout the Coordinated Plan planning process as well as in coordination with MTC planners working on Plan Bay Area.

## Implementation Recommendations

After a thorough review of strategies, the Coordinated Plan lays out next steps for MTC, Congestion Management Agencies, transit providers, and human services providers to address mobility gaps.

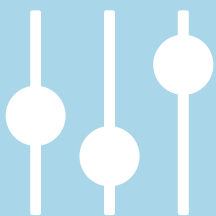


## 2. BAY AREA DEMOGRAPHICS

The San Francisco Bay Area is a geographically diverse metropolitan region that surrounds the San Francisco Bay. It encompasses the cities of San Francisco, San Jose, and Oakland, and their many suburbs, as well as the smaller urban and rural areas of the North and East Bay.

Home now to over 7.7 million people, the region comprises cities, towns, military bases, airports, associated regional, state, and national parks, and nine counties connected by a network of roads, highways, railroads, bridges, and commuter rail. Even as MTC plans to invest \$303 billion in the Bay Area's transportation system over the next 24 years,<sup>6</sup> there are external factors that are outpacing the systems' ability to address the needs of the target populations in this report. The limits of current infrastructure coupled with the massive growth among aging demographics (the population of seniors, for example, is projected to grow from 14 percent in 2014 to 23 percent of the population in 2040), points to a lack of fiscal and organizational readiness.

Moreover, the closure and consolidation of medical facilities while rates of diabetes and obesity are on the rise will place heavy demands on an already deficient system. The demographic trends described in this chapter suggest that increased investments will need to be enhanced by policies that address the significant institutional challenges and regulatory inefficiencies inherent in the existing infrastructure.



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<sup>6</sup> Plan Bay Area 2040. San Francisco, CA: Metropolitan Transportation Commission, 2017.

## KEY FINDINGS

This section presents the existing conditions for disadvantaged populations including seniors (those 65 and over), people with disabilities, those living in poverty and/or without access to a vehicle, and veterans. Some of these populations overlap and some counties have higher concentrations of people that fall into one or more of these groups. Some key findings reflecting the mobility needs of these groups are listed below.

- The Bay Area's population is aging. Specifically, the North Bay counties of Marin, Sonoma, and Napa – which are three of the region's four least populated counties – have the highest proportion of individuals who are age 65 and over.
- The percentage of people living in poverty in the past decade has increased.
- The majority of the region's veterans are seniors. Suburban areas have a higher percentage of veterans than more urban areas.
- San Francisco is an outlier. It is the most urban of all counties with the greatest density of transit services, and has the highest percentage of residents without access to a vehicle. As of 2012, San Francisco was the fifth most car-free city in the country, a much higher ranking than in 2000.<sup>7</sup> The increase in households without access to a vehicle suggests large investments in transit and infrastructure that supports multi-modal mobility should continue.
- San Francisco also has the highest percentage of seniors living in poverty.
- The percentage of people living without access to a vehicle has been on the rise since 2007, both nationally and around the region.
- Solano County is one of the least urban in the region and has the highest percentage of veterans.
- Growing demand for mobility programs that target seniors and people with disabilities will generate increased funding requirements.
- As the retirement population grows, there will be fewer workers to provide services and facilitate mobility among the aging population. New technology and innovative mobility strategies will be necessary to fill the gaps in mobility services.

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<sup>7</sup> Transportation Research Institute, University of Michigan. (2012). [Graph illustration of car-free cities]. Retrieved from <https://www.theatlantic.com/business/archive/2014/01/why-do-the-smartest-cities-have-the-smallest-share-of-cars/283234/>

## SENIORS

### Current Conditions

In 2014, the nine county Bay Area region had approximately 1,028,000 people age 65 or older, according to the U.S. Census's American Community Survey (ACS). **The general population is aging and the percentage of seniors is on the rise.** Seniors made up 13.6 percent of the region's total population, compared to 11.3 percent in 2000.

**The North Bay counties of Marin, Sonoma, and Napa – three of the regions' four least populated counties – along with San Francisco, have the highest percentage of seniors.** Marin has the highest percent of seniors in the region, but is below average in percent with a disability, living in poverty, without access to a vehicle, and veteran population. Sixteen percent of all seniors in the region were veterans.

Alameda, Solano, and Santa Clara have the lowest proportion of seniors of Bay Area counties. These percentages can be seen over time in **Figure 2.1**.

### Trends

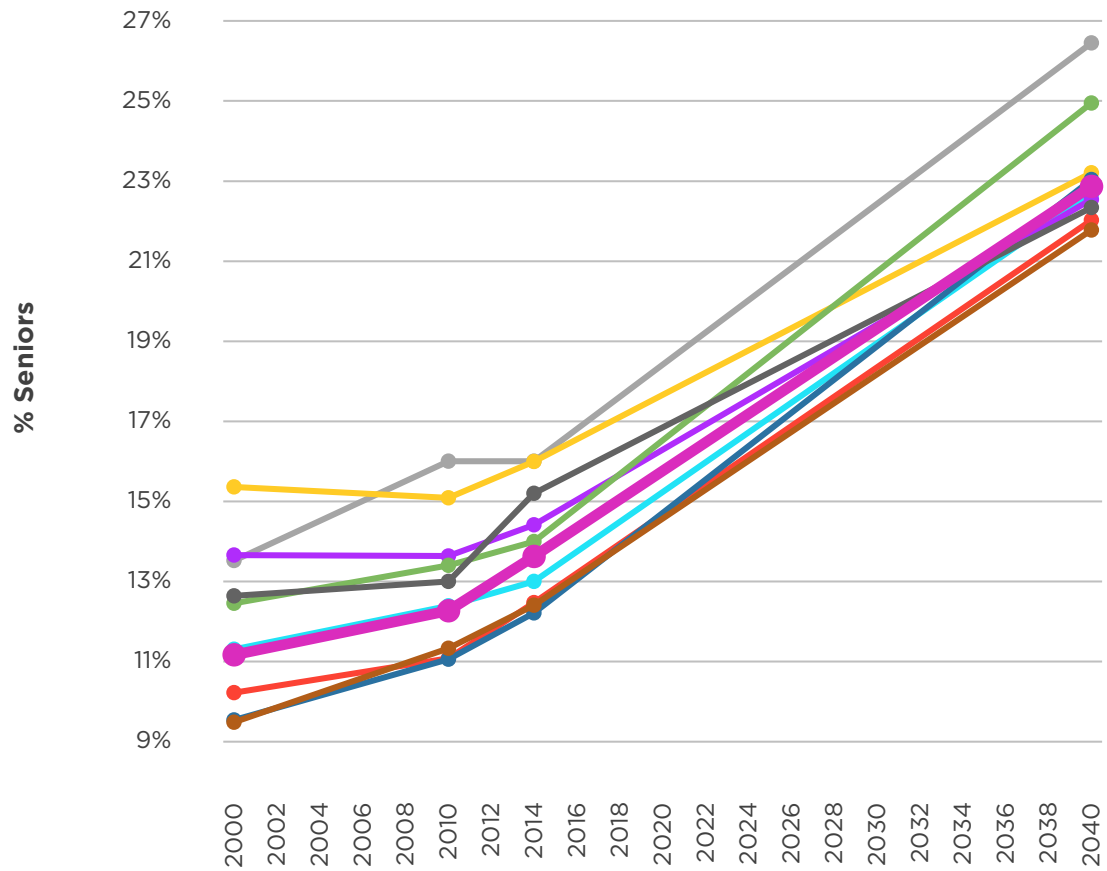
By 2040, a much greater proportion of the region is projected to be 65 or older. Seniors are projected to increase to a fifth of the population or more in every county. Marin and San Mateo Counties are projected to have the highest percentages of seniors, with a quarter or more 65 or older. Services for seniors will need to increase at or ahead of the rate at which the senior population is growing.

To put this in perspective, in 2014, people who were 65 and older made up about 14 percent of the regional population. By 2040, this segment will increase to 23 percent. Mobility will continue to be a challenge for seniors and for transportation planners as a far greater proportion of the population loses their ability to drive.

The senior population has been steadily increasing over the last decade and a half. Between 2010 and 2014, the percentage of seniors grew even more rapidly than the decade prior.

Current senior-oriented mobility services do not have the capacity to handle the increase in people over 65 years of age, as evidenced by the routine identification of service gaps in multiple studies the team has conducted throughout the Bay Area with older adults.

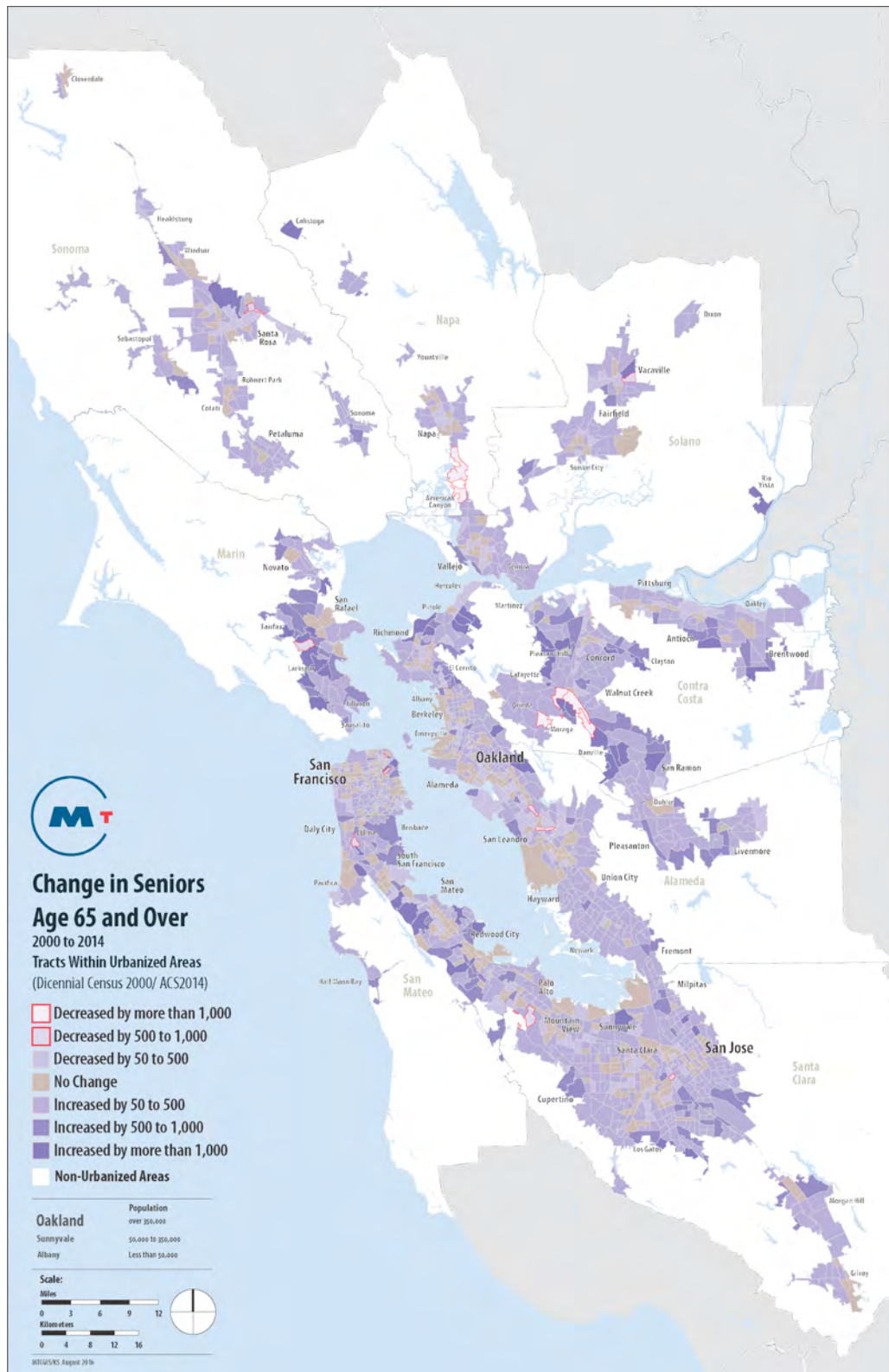
**Figure 2.1** Percent of Senior Population (2000-2040)



	2000	2010	2014	2040
Alameda	10%	11%	12.5%	22%
Contra Costa	11%	12%	13.0%	23%
Marin	14%	16%	16.0%	26%
Napa	15%	15%	16.0%	23%
San Francisco	14%	14%	14.4%	23%
San Mateo	12%	13%	14.0%	25%
Santa Clara	10%	11%	12.2%	23%
Solano	9%	11%	12.4%	22%
Sonoma	13%	13%	15.2%	22%
Region	11%	12%	13.6%	23%

**SOURCE:** 2000 Census Summary File DP-1; 2010 American Community Survey 5-Year Estimate S0101; 2014 American Community Survey 5-Year Estimate S0101; Metropolitan Transportation Commission and Association of Bay Area Governments, Plan Bay Area 2040 Projections, Scenario 2040\_03\_116

**Figure 2.2** Percent Change in Seniors (local geography)



SOURCE: 2000 Census Summary File 3 P011001; 2014 American Community Survey C18108

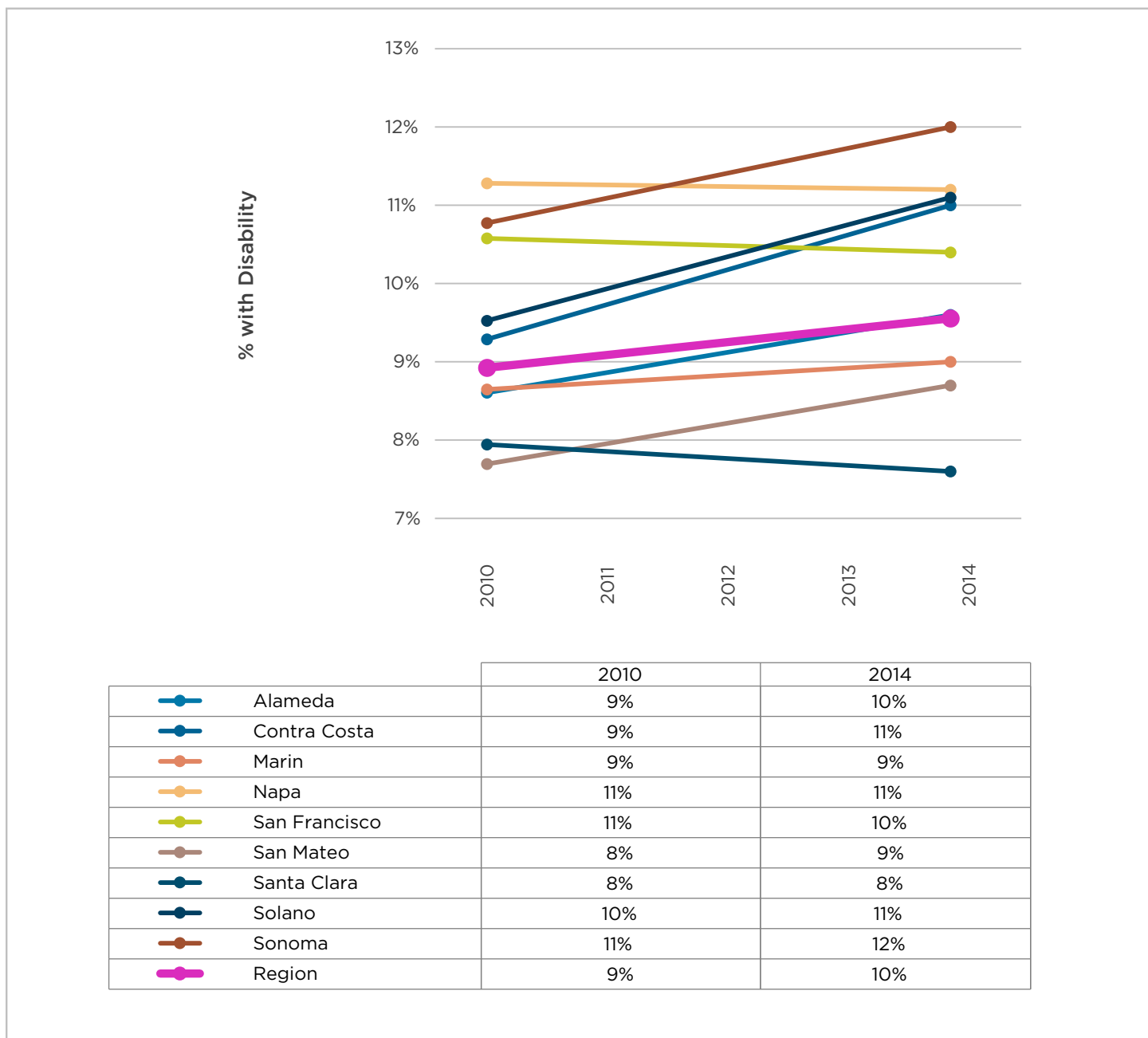
In **Figure 2.2**, the percent change in the senior population can be seen at a local level for the 2000 to 2014 period. This data is from the same source as the previously reported data, but it is summarized at a local geographic level instead of at the county geographic level. This map can aid county officials in targeting investments locally.

# PEOPLE WITH DISABILITIES

## Current Conditions

**Sonoma County has the highest proportion of people currently living with a disability.** Marin County's senior population has the lowest proportion of seniors living with a disability, suggesting that while there is a large population of seniors in the county, they are more likely not to have a disability or be as dependent on accessible services. These percentages can be seen in **Figure 2.3** and **Figure 2.4**.

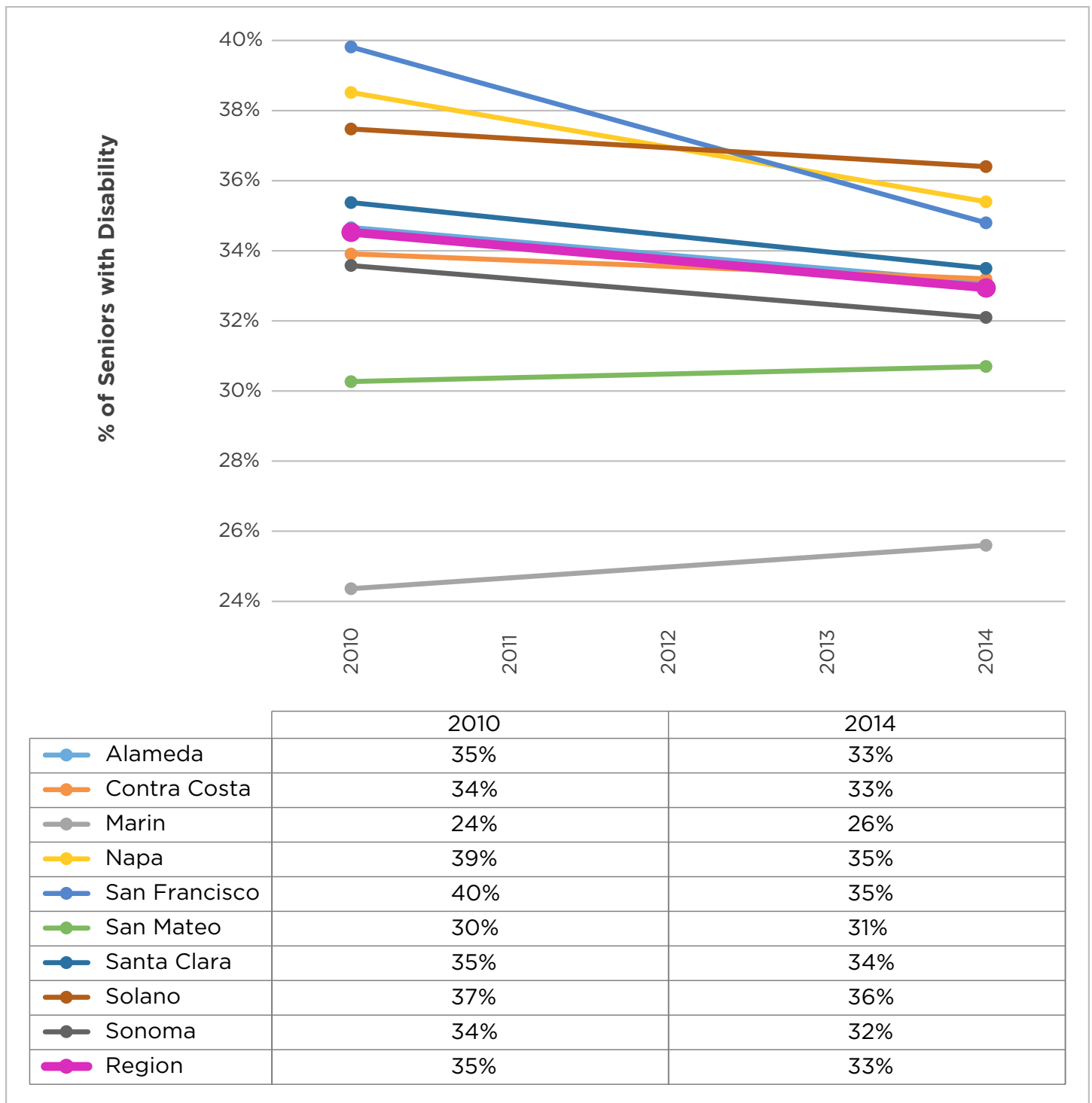
**Figure 2.3** Percent of Population with a Disability (2010-2014)



**SOURCE:** 2010 American Community Survey 1-Year Estimate S0103; 2014 American Community Survey 1-Year Estimate S0103; Metropolitan Transportation Commission and Association of Bay Area Governments, Plan Bay Area 2040 Projections, Scenario 2040\_03\_116

\* New disability questions were introduced in 2008, along with new questions on Health Insurance, Marital History, and Veterans' Service-connected Disability Ratings. Because of the changes to the questions, the new ACS disability questions should not be compared to the previous ACS disability questions or the Census 2000 disability data.

**Figure 2.4** Percent of Seniors with a Disability (2010-2014)



**SOURCE:** 2010 American Community Survey 1-Year Estimate S0103; 2014 American Community Survey 1-Year Estimate S0103

\* New Disability questions were introduced in 2008, along with new questions on Health Insurance, Marital History, and Veterans' Service-connected Disability Ratings. Because of the changes to the questions, the new ACS disability questions should not be compared to the previous ACS disability questions or the Census 2000 disability data.

### Trends

According to the demographic data gathered from the ACS, the percentage of people with a disability has remained relatively steady. Since 2010, trends have varied from county to county. On the regional level, there has been a slight decrease in the percentage of seniors with a disability over the last half decade.

# POVERTY

## Current Conditions

**In 2015, almost one fourth of people in the region were living in poverty.** Poverty has risen faster in suburban than urban areas. Due to this shift, “poor populations... have less access to public transit than they did in 2000.”<sup>8</sup> This decentralization of poverty makes it more challenging for those in need of services, as more resources may be needed to provide services to a broader, decentralized suburban population.

Those living in poverty are less likely to be able to afford a car and are more reliant on public transit than those with high incomes. “Poor people living in suburban areas must either pay for a car or navigate an inefficient transit system, forfeiting a significant proportion of their income or the opportunity cost of their time.”<sup>9</sup>

## Trends

As can be seen in **Figure 2.5**, the percentages for years 2000 to 2015 represent those living under 200 percent of the federal poverty level. The 200 percent threshold is used in recognition of the Bay Area’s high cost of living.

The federal poverty level provides a reasonable benchmark to understand trends over time relative to the share of population that may be considered low-income.

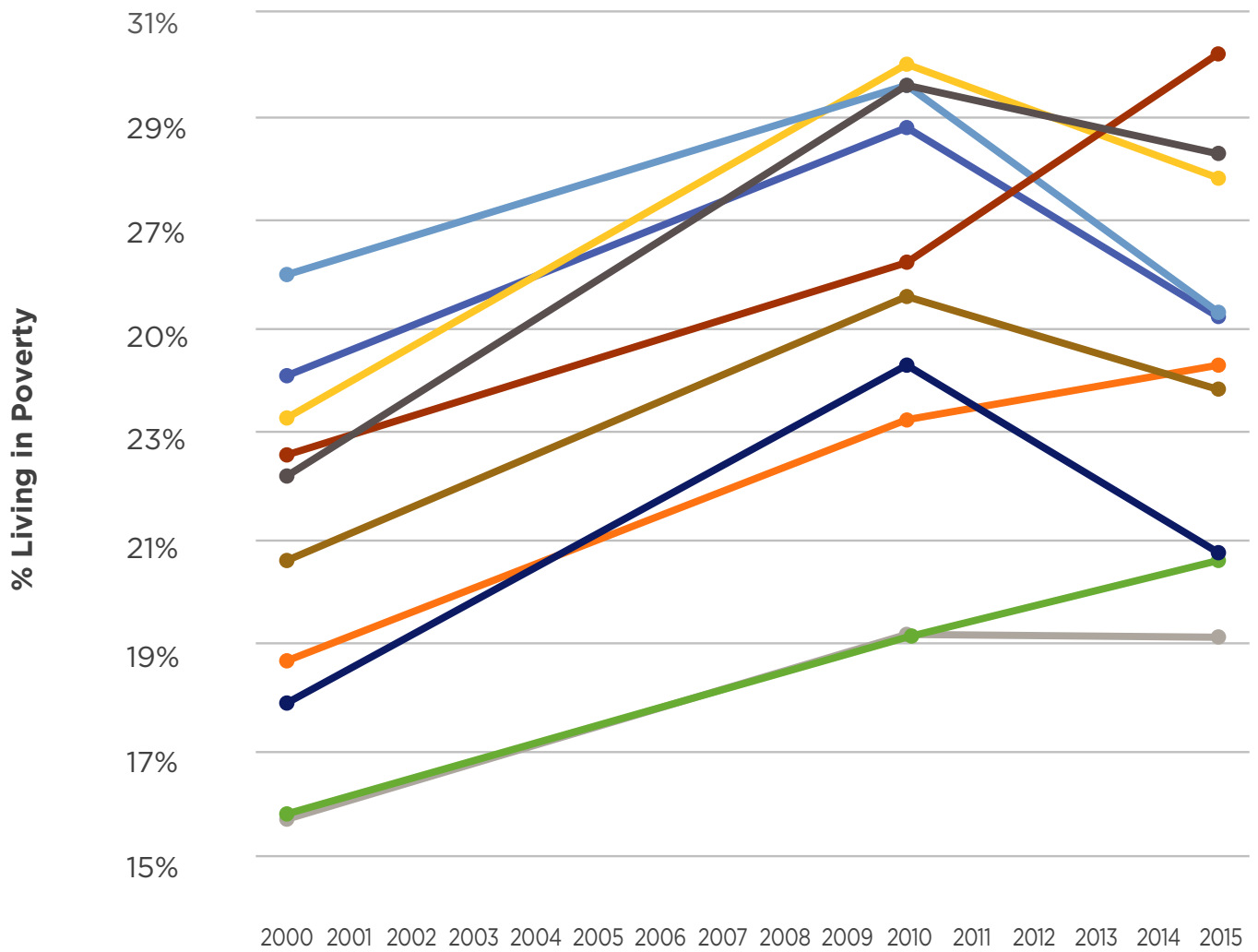
The middle income suburbs that are experiencing this income shift have historically had less experience with providing services for those living in poverty. **Figure 2.5** displays the historical poverty rates by county and **Figure 2.6** shows the poverty levels for seniors in 2015. **Thirty-six percent of seniors living in San Francisco are living in poverty**, far greater than any other county in the Bay Area.

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8 Soursourian, M. (2012). Suburbanization of Poverty in the Bay Area. Federal Reserve Bank of San Francisco. Retrieved 11 July 2016, from <http://www.frbsf.org/community-development/blog/suburbanization-of-poverty-in-the-bay-area/>

9 The Suburbanization of Poverty in the San Francisco Bay Area « Building Resilient Regions. (2012). Brr.berkeley.edu. Retrieved 11 July 2016, from <http://brr.berkeley.edu/2012/03/the-suburbanization-of-poverty-in-the-san-francisco-bay-area/>

Figure 2.5 Percent of Population Living in Poverty (2000-2015)



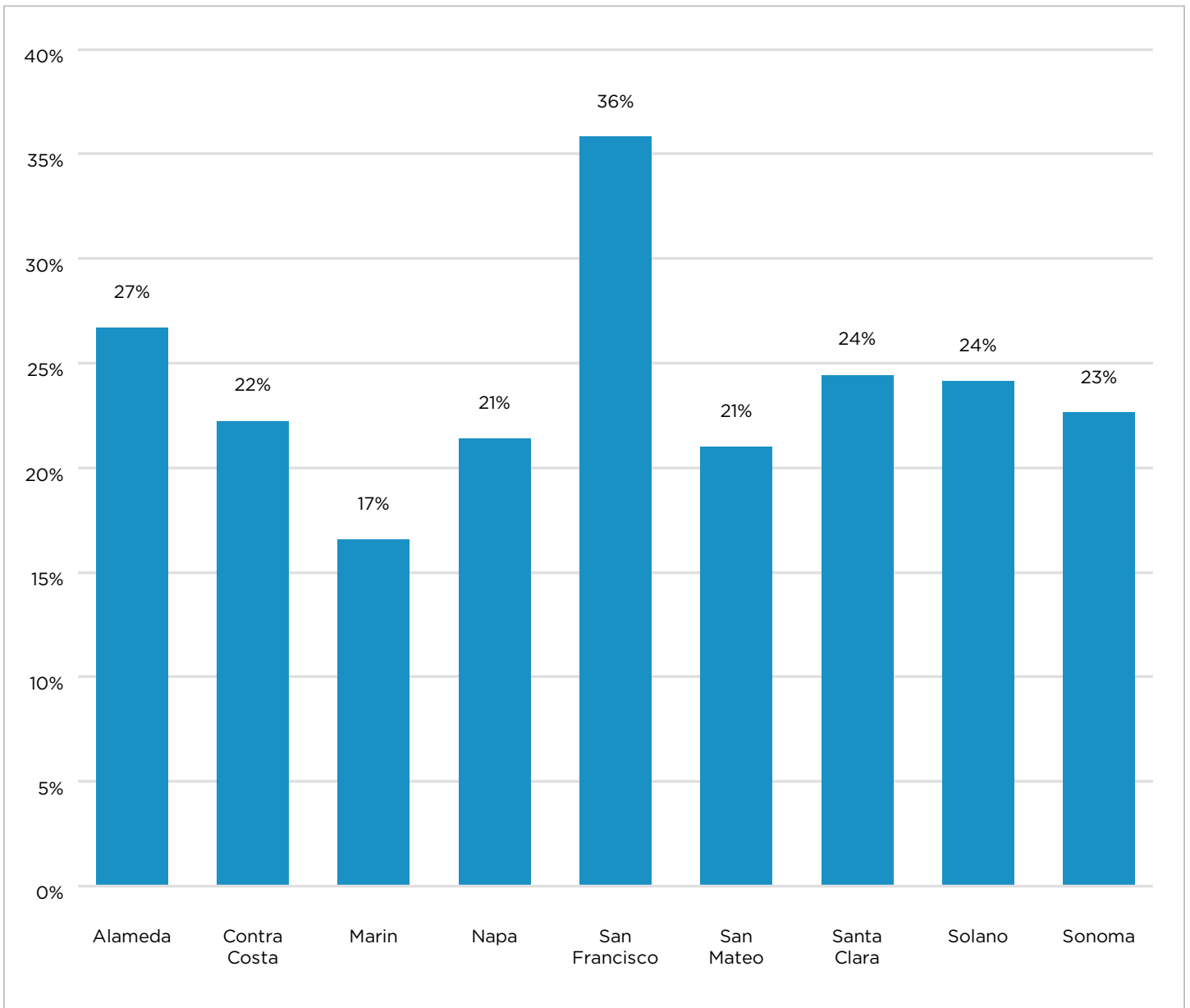
	2000	2010	2015
Alameda	24%	29%	25%
Contra Costa	19%	23%	24%
Marin	16%	19%	19%
Napa	23%	30%	28%
San Francisco	26%	30%	25%
San Mateo	16%	19%	21%
Santa Clara	18%	24%	21%
Solano	23%	26%	30%
Sonoma	22%	30%	28%
Region	21%	26%	24%

SOURCE: 2000 Census Summary File 3 P088; DP-1; 2010 American Community Survey 1-year estimate B17002; 2015 American Community Survey 1-year estimate B17002



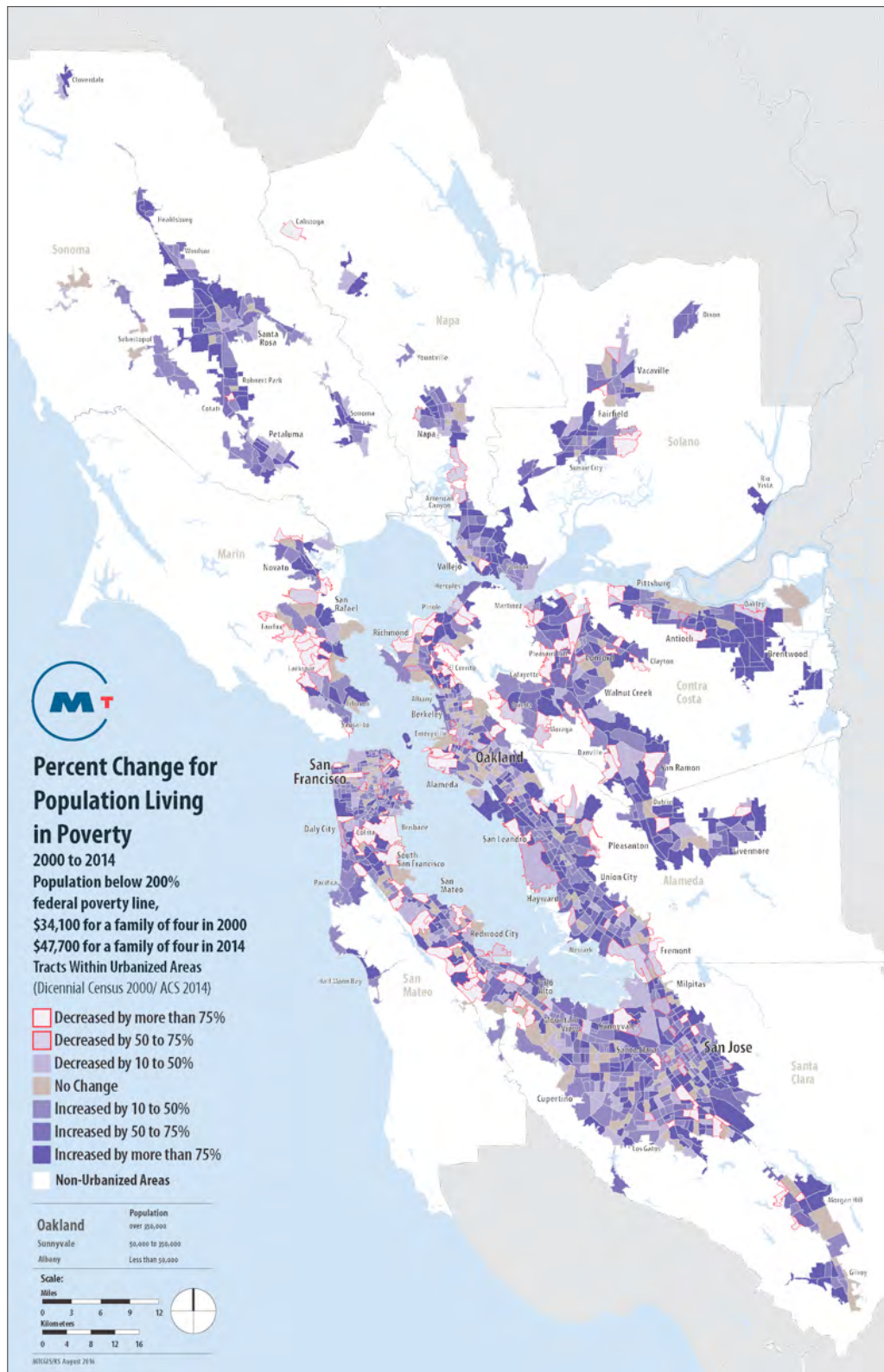
The percent of seniors living in poverty in 2015 for each county and the region can be seen in **Figure 2.6**.

**Figure 2.6** Percent of Seniors Living in Poverty (2015)



SOURCE: 2015 American Community Survey 5-year Estimate B17024

**Figure 2.7** Percent Change for Population Living in Poverty (local geography)



SOURCE: 2000 Census Summary File 3 P088001; 2014 American Community Survey C17002

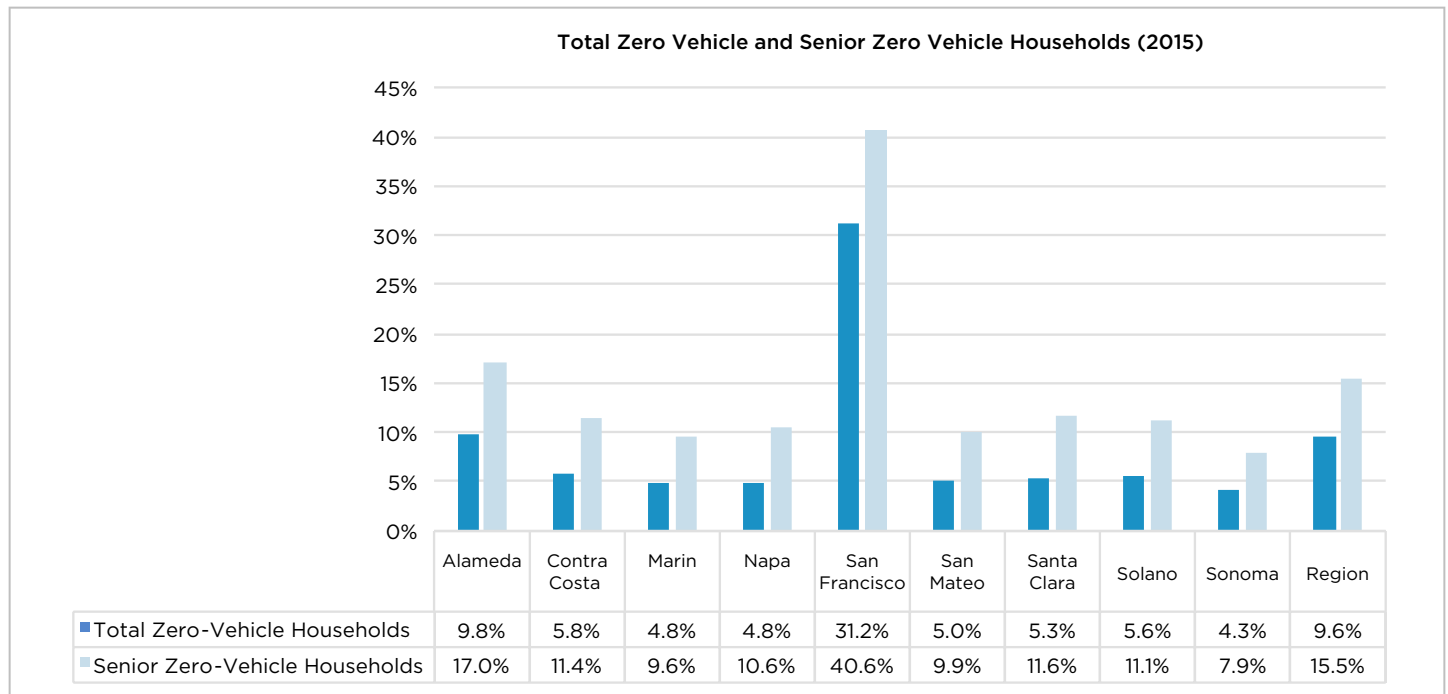
In **Figure 2.7**, the percent change in the population living in poverty can be seen at a local level for the 2000 to 2014 period. This data is from the same source as the previously reported data, but it is summarized at local geographic levels instead of at the county geographic level. This map can aid county officials in targeting investments locally.

# ACCESS TO VEHICLES

## Current Conditions

**Almost 10 percent of Bay Area households do not have access to a vehicle. For senior households, it is 15 percent.** San Francisco is the major outlier in the region. Thirty one percent of all resident households and forty percent of household with a senior as the head of the home do not have access to a vehicle. Both these proportions far surpass the proportions of all other counties in the region. As this is the most urban county in the Bay Area with the greatest transit density, residents have less need to own a vehicle. However, the hilly terrain can be particularly challenging for seniors and those with disabilities. The county with the second highest percentage of households without access to a vehicle is Alameda County with approximately 10 percent of households in this category. The percent of the total and senior populations without access to a vehicle can be seen in **Figure 2.8**.

**Figure 2.8** Comparison of General Public to Seniors without Access to a Vehicle (2015)



SOURCE: 2015 American Community Survey 3-year Estimate B25045

## Trends

The number of people in the U.S. living in households without access to a vehicle has been on the rise since 2007.<sup>10</sup> This trend is even more apparent in the Bay Area. The number of Bay Area households without access to a vehicle has increased from 232 thousand households in 2007 to 261 thousand households in 2015, a 12 percent increase.<sup>11</sup> This is likely to increase at an even more rapid rate due to new technologies that makes living without a vehicle more convenient. In the United States, private-car ownership and issuance of driver’s licenses to younger people are declining.

For instance, the share of people 16 to 24 with a “driver’s license dropped from 76 percent in 2000 to 71 percent in 2013, while there has been over 30 percent annual growth in car-sharing members in North America ... over the last five years.” By 2030, shared mobility services are projected to account for one in ten cars sold; by 2050, one in three cars sold may be used for shared mobility.<sup>12</sup>

10 Hitchin’ a ride: Fewer Americans have their own vehicle | University of Michigan News. (2014). Ns.umich.edu. Retrieved 12 July 2016, from <http://ns.umich.edu/new/releases/21923-hitchin-a-ride-fewer-americans-have-their-own-vehicle>

11 America Community Survey 2007 and 2015 B25045

12 Automotive revolution - perspective towards 2030. (2016). McKinsey & Company. Retrieved 24 May 2017, from [https://www.mckinsey.de/files/automotive\\_revolution\\_perspective\\_towards\\_2030.pdf](https://www.mckinsey.de/files/automotive_revolution_perspective_towards_2030.pdf)

# VETERANS

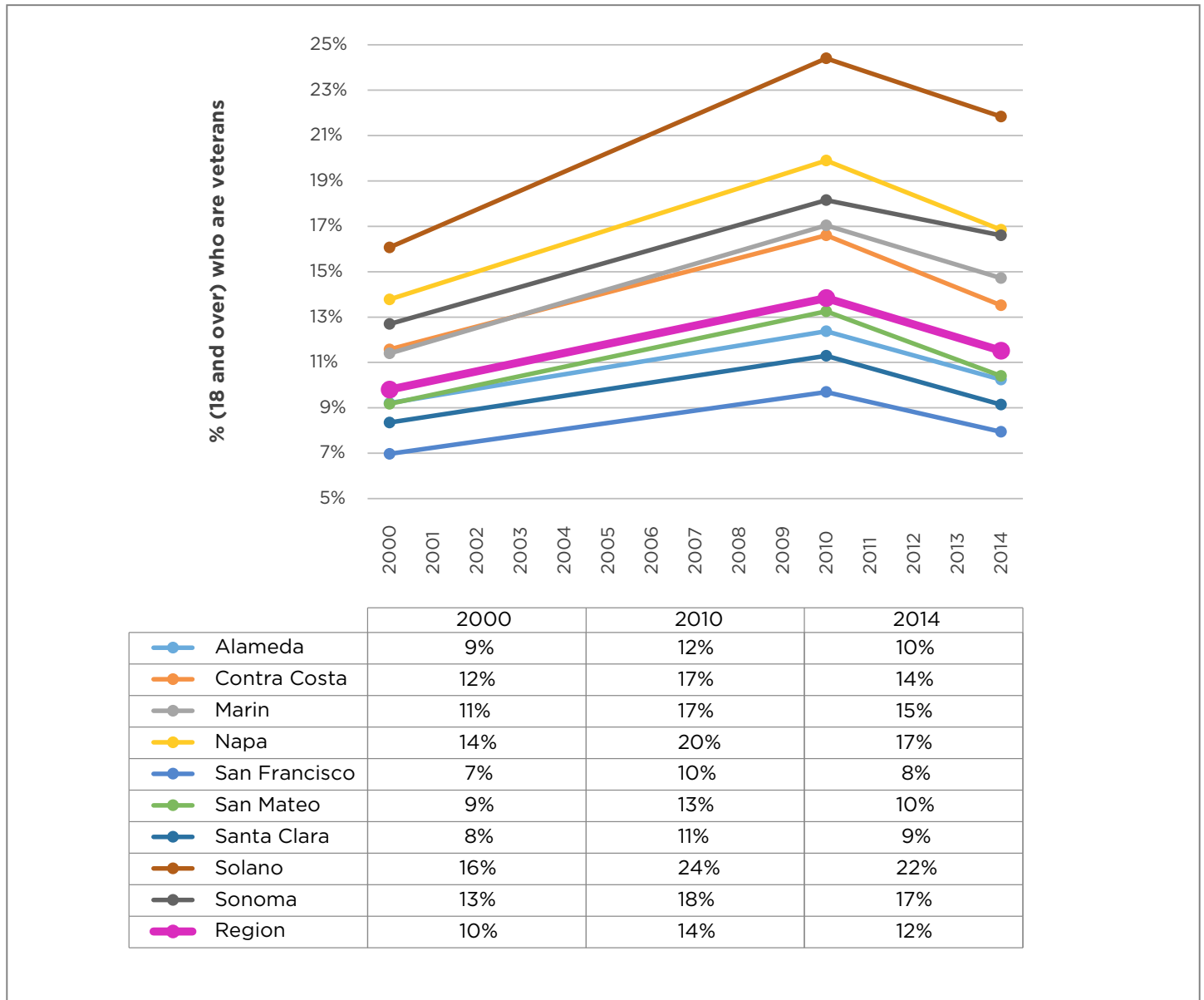
## Current Conditions

In 2014, there were about 86,000 veterans in the nine county Bay Area region.<sup>13</sup> The veteran population in the same year was made up mostly of seniors (56 percent of veterans are 65 or older).

More than half of the region's veterans can be found in Santa Clara, Alameda, and Contra Costa Counties combined. There is an overlap between the populations of those with a disability, those with veteran status, and those who are seniors.

As a result, veterans face similar mobility access issues as other transportation disadvantaged populations.

**Figure 2.9** Percent of Population (18 and over) who are Veterans (2000-2014)



SOURCE: 2000 Census Summary File DP-1; 2010 American Community Survey 1-Year Estimate S0103; 2014 American Community Survey 1-Year Estimate S0103

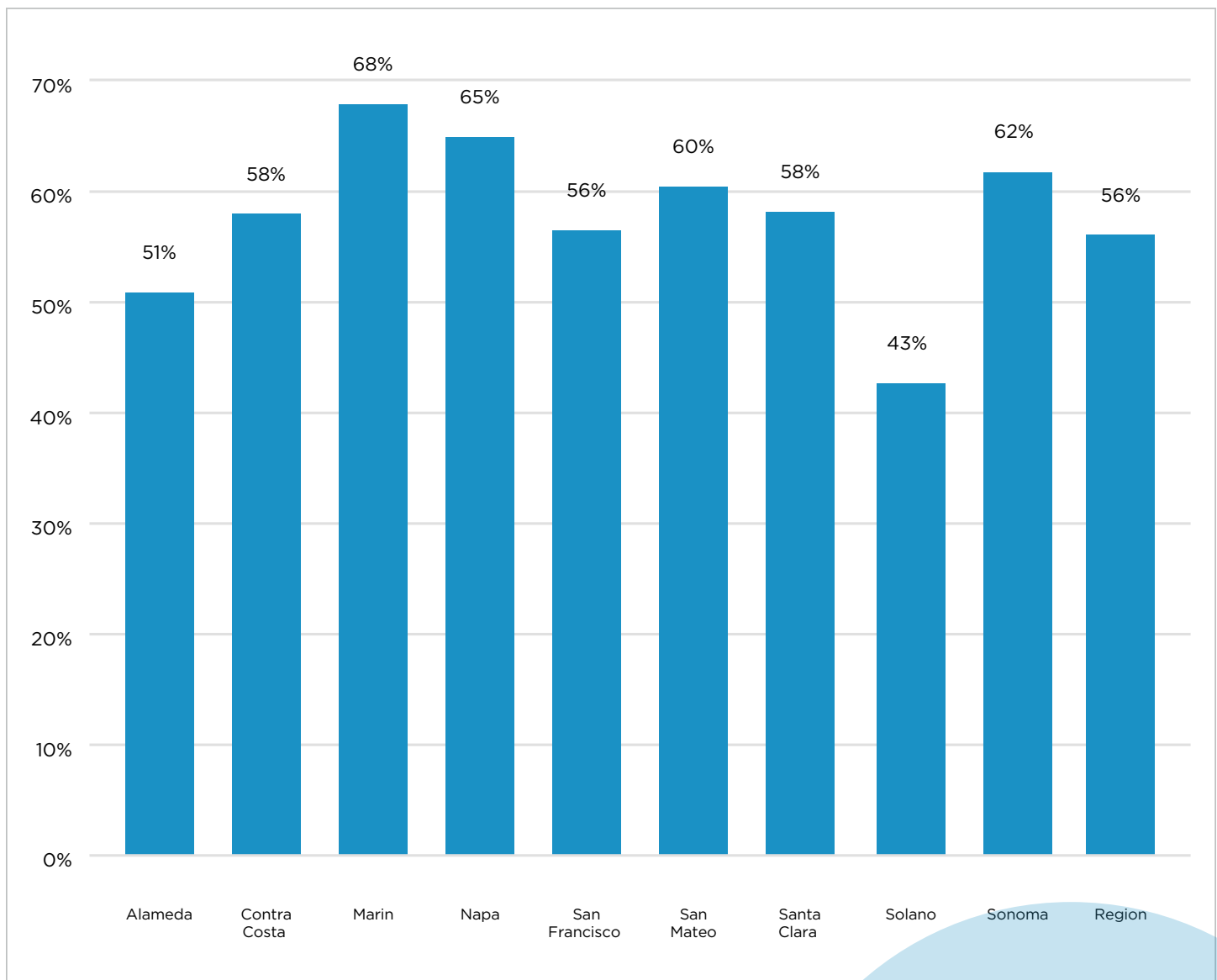
13 American Community Survey 2000 - 2014, 1 year estimates

## Trends

The percentage of adult veterans increased between 2000 and 2010, but decreased between 2010 and 2014. This is illustrated in **Figure 2.9**. If this trend continues, the population of veterans is on track to return to 2000 levels by 2020. Veteran populations with mobility needs tend to fluctuate with military activity abroad, however, so this is a particularly difficult trend to predict.

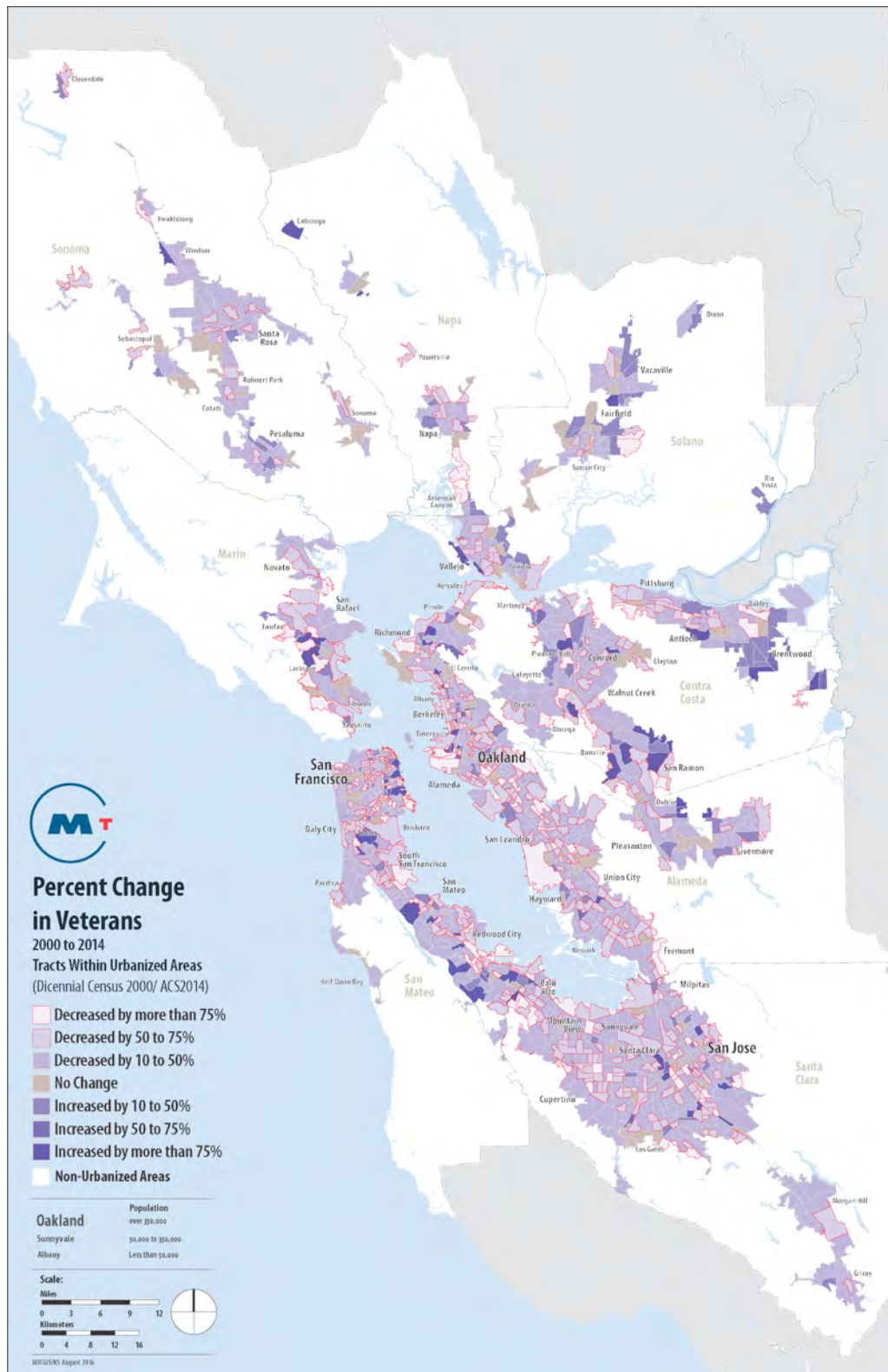
The percent of veterans who were seniors in 2014 for each county and the region is presented in **Figure 2.10**. Counties with substantial populations of retirees have significant percentages of veterans among their senior populations. The veteran population in Solano County, which has a large military base (Travis Air Force Base), is younger than in other counties. The county also has a low percentage of seniors.

**Figure 2.10** Percent of Veterans who are Seniors (2014)



SOURCE: 2014 American Community Survey 1-year Estimate S0103

**Figure 2.11** Percent Change in Veterans (local geography)



SOURCE: 2000 Census Summary File 3 P040001; 2014 American Community Survey B21001

In **Figure 2.11**, the percent change in the veteran population can be seen at a local level over the 2000 to 2014 period. This data is from the same source as the previously reported data, but it is summarized at local geographic levels instead of at the county geographic level.

# 3. TRANSPORTATION RESOURCES

This chapter documents existing transportation resources in the Bay Area that target low-income populations, seniors, people with disabilities, and veterans, including transportation services provided by public, private, and non-profit agencies. It also provides a summary of projects and services funded under the FTA programs subject to coordination requirements since the 2013 Coordinated Plan update.





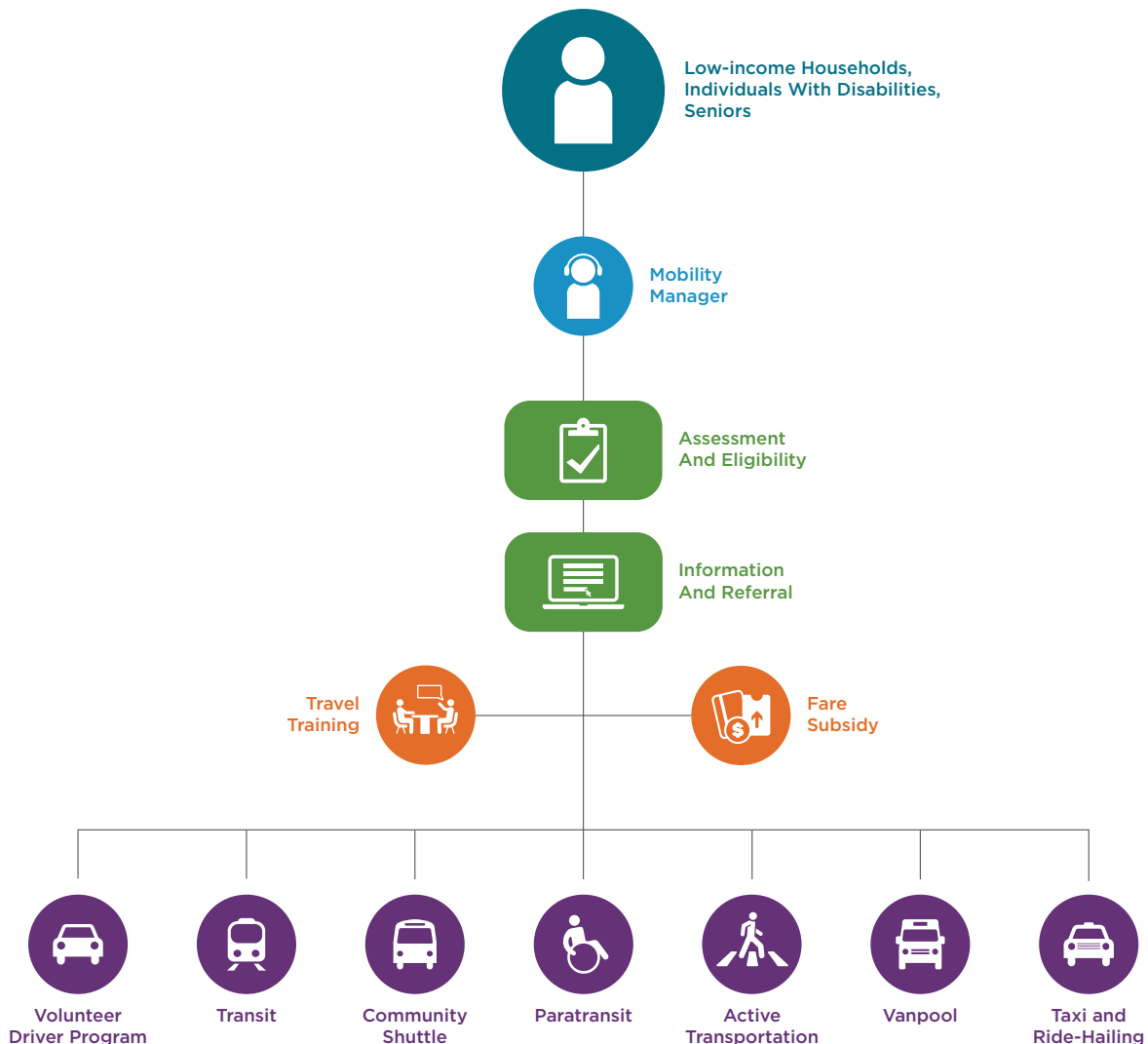
# REGIONAL TRANSPORTATION RESOURCES

The San Francisco Bay Area offers a wide range of transportation options for low-income populations, seniors, people with disabilities, and veterans. These populations are often less likely to have access to an automobile and need to rely on transit and other modes of transportation. In addition to fixed-route transit, riders might use Americans with Disabilities Act-mandated paratransit, city-provided paratransit, non-profit transportation services, private providers like taxis and Transportation Network Companies (TNCs), or other options.

Riders are often unaware of the different transportation options available to them or unsure which to use for a particular trip. Mobility management strategies can assist riders in accessing an array of transportation options, and can assist providers in coordinating their services. For more information on Mobility Management – including common definitions and process – see Appendix G, “What is Mobility Management?” The Bay Area’s population is aging. Specifically, the North Bay counties of Marin, Sonoma, and Napa – which makes up three of the region’s four least populated counties – have the highest proportion of individuals who are age 65 and over.

## How do Individuals Access and Flow through the Mobility Management Process?

Figure 3.1 Mobility Management Process





Transportation disadvantaged populations should be able to access mobility management services through a number of different “entry points.” In addition to contacting a mobility manager directly, individuals might begin with an information and referral provider (e.g. a County 211 service), a non-profit organization (e.g. an Independent Living Program), a social service provider (e.g. a County Human Services department), a community service (e.g. a senior center), or a transportation provider (e.g. an ADA-mandated paratransit provider).

Coordination between service providers is essential because all of these providers should be able to refer an individual to mobility management assistance if needed.

## Types of Transportation Resources in the Bay Area

There are a number of different transportation resources that low-income populations, seniors, people with disabilities, and veterans can access in the Bay Area.

These include different types of transportation services and a range of mobility management related resources, described in detail in **Figure 3.2**. Transportation options that are also available to these groups as well as the public, but are not described in detail below, include walking, biking, and driving.

**Figure 3.2** Types of Transportation Resources in the Bay Area

Support Services	Short Definition <sup>15</sup>
Fixed-Route Transit / ADA-mandated paratransit	Buses, trains, ferries etc. operated by transit agencies that run on regular, pre-determined, pre-scheduled routes, usually with no variation. ADA-mandated paratransit is required as part of the American with Disabilities Act (ADA) to complement, or serve in addition to, already available fixed-route transit service.
Community-Based Shuttles	Transportation services offered outside of the transit agencies (often by cities, public-sector agencies, or non-profit organizations) that address the transit needs of the community, including the general public and special populations.
Private Transportation	Transportation provided by a private for-profit entity in the business of transporting people. These services are often demand-responsive and initiated and paid for by the rider. Examples are taxis, motor coach services, TNCs (Uber, Lyft, etc.), microtransit, and vanpools. <sup>16</sup>
Subsidized Fare Programs/ Voucher Programs	Programs typically administered through a social service agency, that enable qualified people to purchase fares/vouchers for transportation services at a reduced rate from providers such as taxis, public transit, or volunteer driver programs. Recipients are often low-income.
Volunteer Driver Programs	Programs that provide one-way, round-trip, and multi-stop rides. Trips are often door-through-door, in contrast to other transportation options. These programs are provided free of charge, on a donation basis, through membership dues, or at a minimal cost, and typically have an eligibility process and advance reservation requirements.
Information & Referral	Programs that provide community information and referral, and connect people with resources that can help them. Agencies may be independent non-profit organizations, libraries, faith-based organizations, or government agencies at every level. <sup>17</sup>
Travel Training	Programs designed to teach people with disabilities, seniors, youth, veterans, and/ or low-income populations to travel safely and independently on fixed-route public transportation in their community.
Mobility Management Services	Mobility management services cover a wide range of activities, such as travel training, coordinated services, trip planning, brokerage, and information and referral. For the purposes of this resource list, mobility management services refer to the provision of individual transportation information and assistance, and service linkage. Related to information and referral. For more information, see Appendix G.

<sup>15</sup> <http://www.projectaction.com/glossary-of-disability-and-transit-terms/>

<sup>16</sup> ESPA Webinar on Private Transportation and the ADA

<sup>17</sup> <http://www.airs.org/i4a/pages/index.cfm?pageid=3500>

## Fixed-Route Transit/ADA-Mandated Paratransit

Fixed-route transit is operated by transit agencies and offers services that run on regular, pre-determined, pre-scheduled routes, usually with no variation. All fixed-route transit providers are legally required as part of the ADA to provide paratransit to complement, or serve in addition to, already available fixed-route transit service.

Aside from driving and walking, fixed-route transit is the most widely available transportation option available in the Bay Area. From a mobility management perspective, it should provide a base level of affordable service to access major destinations like school, work, medical appointments, shopping, etc.

ADA-mandated paratransit is best utilized as a replacement for fixed-route transit only when it is impossible for an individual with a disability to use transit for a trip. Fixed-route transit has significantly more affordable fares and greater flexibility than ADA-mandated paratransit. The other transportation resources listed are best utilized to supplement or assist individuals in using fixed-route transit. Other transportation resources will often not have the same capacity as fixed-route transit and offer limited rides.

There are 29 public transit providers in the Bay Area. All are required to provide accessible service on their fixed-route vehicles, and many are required to provide complementary ADA-mandated paratransit service. Accessibility features on fixed-route transit include:

- Buses and trains equipped with wheelchair lifts or low floor ramps to allow easy access for people with disabilities.

- Priority seating for those who need it.
- Bus drivers trained to provide assistance in securing wheelchairs in designated spaces.
- Drivers trained to allow passengers time to be seated, and to get on and off the vehicle.
- Announcement of stops at major intersections, transfer points and, at the request of passengers, specific destinations.
- Stations with elevators to boarding platforms, for ease of boarding.
- Route and schedule information provided by transit agencies, including the best way to reach a desired destination. This information is available in accessible formats, if needed.<sup>18</sup>

For people who, due to their disability, are unable to ride regular buses and trains, some or all of the time, ADA-mandated paratransit is offered. ADA-mandated paratransit is meant to replicate fixed-route transit. This means paratransit services operate in the same area, on the same days and during the same hours as the public transit operates. Paratransit service may be provided on small buses, vans, taxis, or in sedans. It is generally a shared ride, door-to-door, or curb-to-curb service that must be reserved at least one day in advance.

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<sup>18</sup> <https://511.org/transit/accessibility/overview>

**Figure 3.3** Providers of Fixed-Route and ADA-Mandated Paratransit in the San Francisco Bay Area<sup>19</sup>

Fixed-Route Transit Agency	Service Area	ADA-Mandated Paratransit Provider
AC Transit	Alameda County (Fremont to Albany) and Western Contra Costa County	East Bay Paratransit (in coordination with BART)
ACE Altamont Corridor Express	Rail service between Stockton and San Jose	The ADA does not require that commuter rail and commuter bus services provide complementary paratransit service
American Canyon Transit	City of American Canyon in Napa County	Shuttles provide door-to-door service in addition to fixed-route; VINE GO Paratransit
BART	Rapid rail transit in Alameda, Contra Costa and San Francisco counties	East Bay Paratransit (in coordination with AC Transit); other applicable paratransit providers within 3/4 mile of stations
Caltrain	Rail service between San Francisco and Gilroy	The ADA does not require that commuter rail and commuter bus services provide complementary paratransit service
Capitol Corridor	Rail service between Sacramento and San Jose	The ADA does not require that commuter rail and commuter bus services provide complementary paratransit service
County Connection	Central Contra Costa County	LINK Paratransit
Dumbarton Express (AC Transit)	Dumbarton Bridge, Union City, Palo Alto	The ADA does not require that commuter rail and commuter bus services provide complementary paratransit service
Fairfield and Suisun Transit (FAST)	Solano County cities of Fairfield and Suisun	DART Paratransit
Golden Gate Transit	Bus service in Marin, Sonoma, San Francisco, and Contra Costa counties	Marin Access Paratransit (in coordination with Marin Transit)
Golden Gate Ferry	Ferry service between Larkspur or Sausalito (Marin County) and San Francisco	Complementary paratransit requirement not defined for ferries
Marin Transit	Marin County	Marin Access Paratransit (in coordination with Golden Gate Transit)
Petaluma Transit	City of Petaluma in Sonoma County	Petaluma Paratransit
Rio Vista Delta Breeze	City of Rio Vista in Solano County	Not required
SamTrans	San Mateo County	Redi-Wheels and Redi-Coast Paratransit
San Francisco Bay Area Water Emergency Transportation Authority (WETA)	Ferry service between: Alameda/Oakland and San Francisco; Alameda/Oakland and South San Francisco; Harbor Bay and San Francisco; and Vallejo and San Francisco	Complementary paratransit requirement not defined for ferries
Santa Rosa CityBus	City of Santa Rosa in Sonoma County	Santa Rosa Paratransit

<sup>19</sup> <https://511.org/transit/accessibility/paratransit>

**Figure 3.3** Providers of Fixed-Route and ADA-Mandated Paratransit in the San Francisco Bay Area

Fixed-Route Transit Agency	Service Area	ADA-Mandated Paratransit Provider
SFMTA	San Francisco City and County	San Francisco Paratransit
Soltrans	Cities of Vallejo, Benicia and Fairfield in Solano County	SolTrans Paratransit
Sonoma County Transit	Intercity service in Sonoma County and local service in Rohnert Park, Cotati, Guerneville, Sebastopol, Sonoma, and Windsor.	Sonoma County Paratransit
Sonoma-Marin Area Rail Transit (SMART)	Rail service in Sonoma and Marin counties from the Sonoma County Airport to Downtown San Rafael	The ADA does not require that commuter rail and commuter bus services provide complementary paratransit service
TriDelta Transit	Eastern Contra Costa County	Tri Delta Transit Paratransit
Union City Transit	City of Union City in Alameda County	Union City Paratransit
Vacaville City Coach	City of Vacaville in Solano County	Vacaville Special Services
Vine	Napa County	VINE GO Paratransit
VTA	Santa Clara County	VTA
WestCAT	Cities of Pinole and Hercules in Contra Costa County	WestCAT Dial-a-Ride Paratransit
Wheels	Cities of Dublin, Pleasanton and Livermore in Alameda County	Wheels Dial-a-Ride Paratransit and Pleasanton Paratransit

Most fixed-route transit agencies contract with private transportation providers to provide ADA-mandated paratransit. These contractors often offer other transportation services including taxis, community shuttles, and charter services.

In addition to ADA-mandated paratransit services, substantial numbers of people with cognitive disabilities receive paratransit service provided by Regional Centers. Some centers rely exclusively on ADA paratransit to provide service to their clients, but many use a mix of ADA paratransit and door-to-door service provide by private providers under contract to the Regional Centers.

### Community-Based Shuttles

A range of shuttle services are offered in addition to transit agencies' own fixed-route services. The 2016 Bay Area Shuttle Census showed that the 35 participating shuttle sponsors and operators carried over 9.6 million passengers in 2014 alone, more than all but six of the region's public transit agencies.<sup>20</sup>

Many of the shuttles in the Census were employment based – but for low-income populations, seniors, people with disabilities, and veterans – community-based shuttles can be an important resource. These shuttles are often sponsored by cities, public-sector agencies, or non-profit organizations, and address unmet transit needs of the community. These shuttles can be fixed-route or offer door-to-door or curb-to-curb service.

Funding provided for these transportation services is usually dedicated for a specific clientele (i.e. veterans, Medicaid eligible persons, seniors attending meal programs, etc.) and cannot easily be co-mingled with other funding sources. For the most part, social service agencies who are providing the service are not primarily in the transportation business; rather, transportation is an auxiliary rather than core service. Riders are often referred to these programs by an agency they are receiving services from, such as a senior center, County Human Service agency, or regional center.

<sup>20</sup> <http://mtc.ca.gov/sites/default/files/2016%20Bay%20Area%20Shuttle%20Census.pdf>

For mobility management purposes, any one of the different transportation providers in a geographic area can be an “entry point” to services and should be able to refer riders to different options.

Mobility managers and information and referral services can be invaluable here. Examples of community-based shuttle services are listed below.

### Services Provided by Jurisdictions

Some cities or communities offer free shuttles that are designed to assist people with commuting or shopping. In addition to being free, these shuttles generally offer the same accessibility options, such as lifts/ramps, as fixed-route transit. Examples of shuttles include the Palo Alto Shuttle, the Monument Shuttle in Concord, the Lamorinda (Lafayette, Moraga, and Orinda) Spirit Van, and the Emeryville Emery Go-Round.

Palo Alto offers three shuttle routes – the East Palo Alto/Caltrain Shuttle, the Embarcadero Shuttle, and the Crosstown Shuttle.<sup>21</sup> The Monument Shuttle in Concord has two routes and is designed to help seniors, people with disabilities, low-income workers, and residents who do not own vehicles get to medical appointments, BART and social service agencies.<sup>22</sup> The Lamorinda Spirit Van Program provides rides to older Lamorinda residents to get to errands, shopping, medical and personal appointments and to the Walnut Creek Senior Center. The drivers are primarily volunteers.<sup>23</sup> The Emery Go-Round offers four routes that connect Emeryville’s employers and shopping centers with the MacArthur BART station.

Some cities or communities offer transportation for seniors and people with disabilities that supplements fixed-route transit or ADA-mandated service. Contra Costa County offers several examples including El Cerrito’s Easy Ride Paratransit Service and Rossmoor’s Dial-a-Bus and Paratransit. Both services offer accessible door-to-door service during the day on weekdays.<sup>24 25</sup>

### Services Provided in Relation to Healthcare/Social Services

There are a number of shuttles and transportation services offered by healthcare and social service

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21 <http://www.cityofpaloalto.org/news/displaynews.asp?NewsID=212&TargetID=107>

22 <http://www.eastbaytimes.com/2016/08/16/concord-free-monument-neighborhood-shuttle-up-and-running/>

23 <http://www.lovelafayette.org/residents/transportation/lamorinda-spirit-van>

24 <http://www.el-cerrito.org/index.aspx?NID=285>

25 [rossmoor.com/resident-information/transportation/](http://rossmoor.com/resident-information/transportation/)

providers. Unfortunately, many of these are not well-known to other transportation providers. A number of hospitals provide shuttles to nearby transit hubs. Examples in Alameda County include Kaiser Shuttles in Oakland and San Leandro, and Alta Bates/Summit Shuttles in Berkeley and Oakland. The San Francisco VA Medical Center offers several transportation options for eligible veterans and employees. These include the VAMC Transport System, Bauer’s/TransMETRO Transportation, and the VA Shuttle to UCSF.<sup>26</sup>

### Services Provided by Non-Profit Organizations

Non-profit organizations in the Bay Area also offer shuttle programs to fill unmet transportation needs. Solano County Faith in Action has a Ride with Pride shared-ride program that takes seniors to medical or social service appointments, particularly in cities with little or no ADA-mandated paratransit.<sup>27</sup>

In Berkeley, Easy Does It Emergency Services provides assistance to seniors and people with disabilities living independently and offers both accessible Emergency Transportation and On Demand Transportation.<sup>28</sup>

### Private Transportation

Private transportation providers have always been an integral partner in the provision of transportation resources for low-income populations, seniors, people with disabilities, and veterans. Private transportation providers are for-profit entities in the business of transporting people. As noted earlier, most fixed-route transit agencies contract with private transportation providers to provide ADA-mandated paratransit. This is also true of many of the Community-Based Shuttles described earlier. In these instances, riders do not request or access the transportation directly from the private company, but through the agency sponsoring the service.

Other options are more likely to be requested directly by the rider. Taxis have filled gaps in service for transportation-disadvantaged populations for decades. Recently Transportation Network Companies (TNCs), like Uber and Lyft, have begun to fill some of the same gaps.

However, smart-phone software-driven transportation options are difficult to track due to the volatility of this market, with services rapidly going into and falling out of business.

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26 <http://www.sanfrancisco.va.gov/patients/transportation.asp>

27 [http://faithinactionsolano.org/Ride\\_with\\_Pride.html](http://faithinactionsolano.org/Ride_with_Pride.html)

28 <http://www.easydoesitservices.org/services/>

Other examples of private transportation are motor coach services, shuttles, vanpools, and limousine and sedan services, and microtransit like Chariot.

From a mobility management perspective, private transportation providers can be helpful in making first and last mile connections. However, riders can face barriers when trying to use private providers directly. Two barriers are affordability and accessibility for mobility devices.

Although private transportation providers are covered by the ADA in terms of access, service, fares and training, they are not required to use accessible vehicles. A number of Bay Area cities and counties including Alameda County, Marin County, San Francisco and Santa Clara County have attempted to increase accessible taxi options with limited success. While TNCs have not sought to add accessible vehicles to their fleet, they have attempted to increase accessible services with limited success in different locations around the U.S. through options such as uberACCESS, uberWAV, and Lyft Accessible Vehicle Dispatch.

As noted earlier some private transportation providers are deeply integrated into transportation services for low-income populations, seniors, people with disabilities, and veterans in the Bay Area. One such provider is MV Transportation. MV is a national company with corporate headquarters based in Dallas, Texas and satellite support centers located in Vacaville, California and Elk Horn, Iowa. MV is or has been an ADA-mandated paratransit provider in almost all nine Bay Area counties. They also provide a number of the community-based shuttles described earlier including the Palo Alto Shuttle, the Emeryville Emery Go-Round, Kaiser shuttles, and Alta Bates/Summit shuttles.<sup>29</sup>

Another example of a private transportation provider filling multiple needs is the A-Para Transit Corporation in Alameda County. The same over-arching company provides ADA-mandated paratransit services to East Bay Paratransit, accessible charter service through Bell Transit Corporation, and regular and subsidized taxi services through Yellow Cab, Veterans Cab, and St Mini Cab Corporation.

An example of a transit provider partnership with a small private transportation provider is the Marin Transit Catch-A-Ride program, which allows seniors and people with disabilities to take taxi rides at a discounted rate. Marin Transit originally contracted with On The Move (the parent company of Radio Cab, Bel Air Taxi and Yellow Cab in Marin) and North Bay Taxi Cooperative to provide the service.

When On the Move abruptly closed in 2015, the agency was left with only one provider. North Bay Taxi initially had difficulty taking on the additional rides once provided by On The Move but has since increased capacity. This demonstrates how partnerships with private transportation providers are often subject to market variability.

### **Subsidized Fare Programs / Voucher Programs**

Subsidized fare or voucher programs are typically administered through a social service agency, and enable qualified individuals to purchase fares/ vouchers for transportation services at a reduced rate from providers such as public transit, volunteer programs, or taxis. Recipients are often low-income.

As noted earlier, cost can be a barrier to accessing transportation for low-income populations, seniors, people with disabilities, and veterans. Fixed-route transit offers reduced fares to seniors 65 and above and people with disabilities. For example, in Solano County transit agencies in Fairfield and Vacaville offer free fares to riders aged 80 years or over. Some agencies, offer subsidies for particular groups independent of income, like students and veterans. Marin Transit, SFMTA, SolTrans, Sonoma County Transit, VTA, and WestCAT currently have means-based programs for some people with low income.

Many transit agencies sell fare products at bulk discounts to social service agencies that serve low-income populations. These organizations determine eligibility and issue the fare products to their clients at their own discretion, free of charge or at significant discounts. These programs are designed primarily to address immediate needs and depend on the discounts offered by transit agencies and available funds to purchase fare products.<sup>30</sup>

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<sup>29</sup> <http://www.mvtransit.com/paratransit>

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<sup>30</sup> [https://s3.amazonaws.com/media.legistar.com/mtc/meeting\\_packet\\_documents/agenda\\_2423/03b\\_Means\\_Based\\_TAC\\_Presentation\\_5-28-15.pdf](https://s3.amazonaws.com/media.legistar.com/mtc/meeting_packet_documents/agenda_2423/03b_Means_Based_TAC_Presentation_5-28-15.pdf)



Taxi subsidy programs allow eligible participants to use taxis at a reduced fare by reimbursing a percentage of the fare, or by providing a low-cost fare medium, e.g. scrip or vouchers, which can be used to cover a portion of the fare. Most Bay Area counties offer subsidized taxis for seniors and people with disabilities through transit agencies, cities, or counties.

Jurisdictions and non-profit organizations may offer paratransit subsidies dependent on available funding. However, these programs are not always widely publicized. Several cities in Alameda County are considering offering fare assistance with newly available transportation sales tax funding.

## **Volunteer Driver Programs**

Volunteer driver programs involve a network of volunteers that provide one-way, round-trip, and multi-stop rides. Participation in these programs can be provided free of charge, on a donation basis, through membership dues, or at a minimal cost, and typically have an eligibility process and advance reservation requirements.

Programs are sponsored by non-profit organizations, transit agencies, or cities and counties. Some volunteer driver programs may also have an escort component where volunteers accompany riders with mobility devices on paratransit services, when they are unable to travel in a private vehicle.

Some programs may use staff to provide initial rides or to fill gaps when volunteers are unavailable. From a mobility management perspective, volunteer driver programs are generally designed for seniors and can fill key needs that are not met by other transportation services like ADA-mandated paratransit. This is because these programs usually offer door-through-door service. These services are therefore ideal for more frail individuals who cannot wait outside, may need a stabilizing arm, help with a jacket or carrying groceries, etc.

These programs are also well suited to certain medical trips, for example, when someone needs to stop and pick up a new prescription before going home, or go to a facility in another county for specialized treatment.

Volunteer driver programs are not usually available for low-income individuals or veterans who are not also seniors or disabled. Volunteer driver programs usually have to closely monitor their capacity and face ongoing funding challenges and finding quality volunteers.

VITAL (Volunteers in Transportation Advocacy Link) is a group made up of volunteer driver programs in the Bay Area whose mission is to meet on a regular basis to network, exchange information, address issues of mutual concern, define and share best practices, serve as mentors and supporters for each other as well as those new to the field, and work together to provide for the transportation needs of the vulnerable populations they serve through mobility management.

Their membership includes a wide range of non-profits organizations, public sector agencies, transit agencies, cities and counties. Although not an exhaustive list of programs, their membership list does provide a broad overview of volunteer driver programs in the Bay Area.

An example of a well-established program offered by a non-profit organization is Senior Support Program of the Tri-Valley's (SSPTV) Senior Transportation Program, based in Pleasanton. SSPTV staff provides the first ride, which aids in completing the intake process. Staff will also provide rides to medical facilities outside of Alameda County, and fills gaps when volunteers are unavailable. An example of a public sector sponsored program is the City of Pleasant Hill's Senior Van Service, which is driven by volunteers.

**Figure 3.4** Volunteer Driver Programs in the Bay Area

Program Name	Location
American Cancer Society	Bay Area
Ashby Village	Berkeley
Avenidas	Palo Alto
Caring Hands	Walnut Creek
Catholic Charities of the Diocese of Santa Rosa	Santa Rosa
City of Fremont	Fremont, Newark, Union City
City of Lafayette	Lafayette
City of Morgan Hill	Morgan Hill
City of Pleasant Hill	Pleasant Hill
City of Richmond	Richmond
City of San Pablo	San Pablo
City of San Ramon	San Ramon
Cloverdale Volunteer Driver Program	Cloverdale
Drivers for Survivors	Fremont, Newark, Union City, Hayward, San Leandro
El Camino Hospital	Mountain View, Los Gatos
Episcopal Senior Communities	Walnut Creek
Faith in Action	Fairfield
Jewish Family and Children's Services	San Francisco, Peninsula, Marin & Sonoma Counties
Life Eldercare	Fremont, Newark, Union City, Hayward, San Leandro
Love INC	Bay Area
Marin County	Marin County
Marin Transit	Marin County
Marin Village	San Rafael
Mobility Matters	Contra Costa County
Molly's Angels	Napa
Next Village SF	San Francisco
Orinda Association	Orinda
Peninsula Jewish Community Center	Foster City
Petaluma People Services Center	Petaluma
SF Village	San Francisco
Sausalito Village	Sausalito
Sebastopol Area Senior Center	Sebastopol
Senior Support Program of the Tri-Valley	Dublin, Pleasanton, Livermore
Seniors Around Town	Orinda
Services for Seniors	San Francisco
Vintage House Sonoma	Sonoma
West Marin Senior Services	Point Reyes Station and West Marin County
Whistlestop	Marin County



**Figure 3.5** Information and Referral Services in the San Francisco Bay Area

County	Program Name	Phone	Website
Alameda	Eden I&R	2-1-1	edenir.org
	Access Alameda	510-208-7400	accessalameda.org
Contra Costa	Contra Costa Crisis Center	2-1-1	crisis-center.org/
	Way to Go Contra Costa	925-284-6109 1-855-234-RIDE (7433)	waytogocc.com
Marin	2-1-1 Bay Area	2-1-1	211bayarea.org/marin/
	Marin Access	415-454-0902	marinaccess.org
Napa	2-1-1 Bay Area	2-1-1	211bayarea.org/napa/
San Francisco	2-1-1 Bay Area	2-1-1	211bayarea.org/san-francisco/
San Mateo	2-1-1 Bay Area	2-1-1	211bayarea.org/san-mateo/
	Senior Mobility Guide	650-508-6283	peninsularides.com
Santa Clara	2-1-1 Santa Clara County	2-1-1	211scc.org
Solano	2-1-1 Bay Area	2-1-1	211bayarea.org/solano/
	Solano Mobility Call Center	800-535-6883	solanomobility.org
Sonoma	Sonoma Access	2-1-1	sonomaaccess.org

All Counties offer a 2-1-1 helpline but transportation is only highlighted in Alameda and Sonoma Counties. In Counties where additional I&R resources are offered, only Alameda County coordinates with the 2-1-1 service.

## Information and Referral

Information and referral (I&R) programs provide community information and referral, and connect individuals with resources that can help them. There is a spectrum of I&R services, ranging from a simple website and database listing resources, to a fully customized trip planner and referral service. While most I&R systems function mainly as lists, there are several examples of more fully featured platforms. I&R agencies may be independent non-profit organizations, libraries, faith-based organizations, or government agencies at every level.

Historically 2-1-1 is the primary free, confidential referral and information helpline and website that connects individuals to health and human services, 24 hours a day, seven days a week.<sup>31</sup> Although all 2-1-1 helplines offer transportation information, in the Bay Area this is only highlighted in Alameda and Sonoma Counties.

Information and referral is the key “entry point” for individuals accessing transportation services. An information and referral database or list is only useful with a sufficiently large pool of resources.

31 <http://www.airs.org/i4a/pages/index.cfm?pageid=3500>

## Travel Training

Travel training programs generally fall under mobility management and are designed to teach people with disabilities, seniors, youth, veterans, and/or low-income populations to travel safely and independently on fixed-route public transportation in their community, but can include other modes and services. The Association of Travel Instruction identifies three different types of travel training.<sup>32</sup>

### Transit Orientation

Group or individual activity conducted for the purpose of explaining the transportation systems; options and services available to address individual transportation needs; use of maps and schedules as resources for trip planning; fare system, use of mobility devices while boarding, riding, and exiting; vehicular features; and benefits available.

### Familiarization

Individual or small group trip activity to facilitate use of transportation systems with a travel trainer accompanying experienced traveler(s) on a new mode of transportation or route to point out/explain features of access and usability.

32 <http://www.travelinstruction.org/20-travel-training>

## Travel Training

Travel training covers one-to-one short-term instruction provided to an individual who has previously traveled independently and needs additional training or support to use a different mode of travel, a different route, mode of transit, or travel to a new destination. It also covers one-to-one comprehensive instruction, specially designed instruction in the skills and behaviors necessary for independent travel on public transportation provided to an individual who does not have independent travel concepts or skills to go from point of origin of trip to destination and back.

As noted earlier, fixed-route transit is the most widely available transportation option available in the Bay Area aside from driving and walking. In many communities, it provides a base level of affordable service to access major destinations like school, work, medical appointments, shopping, etc.

Travel training can help low-income populations, seniors, people with disabilities, and veterans access this transportation resource effectively.

## Local Examples

Non-profits organizations, transit agencies, and cities or counties can sponsor travel training programs. Marin Transit is an example of a transit agency that offers travel training to seniors and people with disabilities. They offer “Navigating Transit,” a free, one-hour presentation and discussion about alternatives to driving for older adults in Marin County, and Individualized Travel Training.

SamTrans sponsors a volunteer Mobility Ambassador program that helps older adults and people with disabilities with many transportation-related issues, including planning a trip using public transit, finding a driver safety class, and learning

**Figure 3.6** Mobility Management Providers in the San Francisco Bay Area

County	Program and Contact Information	Summary of Service
Alameda	Access Alameda 510-208-7400 accessalameda.org	The Access Alameda website is provided to help individuals identify and connect with accessible transportation services in Alameda County, including public transit, Americans with Disabilities Act (ADA) paratransit, city-based paratransit programs, and organizations that provide volunteer drivers and/or training on how to travel by using these services in Alameda County.
	Tri City Mobility Management 510-574-2053	<b>Fremont, Newark, and Union City:</b> Mobility management provides information about transportation access to all callers. Assistance can be provided for a range of transportation needs, from needing wheelchair accessible transportation to assistance retesting for a driver’s license.
Contra Costa	Mobility Matters 925-284-6109 1-855-234-RIDE (7433) mobilitymatterscc.com	Works collaboratively with all types of transportation providers. Matches riders (seniors, veterans, people with disabilities, and others seeking help) with providers that best meets their individual mobility needs through the Transportation Information & Referral Helpline, utilizing a case management model. Also publishes a hard copy and online transportation guide called “Way To Go Contra Costa.” In addition, operates two free, door-through-door, one-on-one, volunteers driver programs called Rides for Seniors and Rides 4 Veterans.
Marin	Marin Access 415-454-0902 marinaccess.org	Marin Access was designed and is sponsored by Marin Transit to coordinate transportation resources for Marin’s older adults, persons with disabilities and low-income residents, along with others who cannot or choose not to drive. Services include Marin Access Paratransit, Catch-A-Ride, Volunteer Driver, Travel Navigators, and Travel Training.
Napa	VINE Go 707-259-8327 vinego@nvta.ca.gov ridethevine.com/ada-accessibility-0	All vehicles used by the VINE family of local and regional transportation services are wheelchair accessible and conform to the standards set by the Americans with Disabilities Act (ADA). The Vine also provides a free service called Transit Ambassadors, which provides a travel buddy to teach individuals everything they need to know to ride the bus. In addition, a transit ambassador will actually ride around town on the bus with the new rider until they feel comfortable travelling alone. Participants receive one 30-day bus pass for free.

**Figure 3.6** Mobility Management Providers in the San Francisco Bay Area

County	Program and Contact Information	Summary of Service
San Francisco	SF Paratransit 415-285-6945 <a href="http://sfparatransit.com/general-info.htm">sfparatransit.com/general-info.htm</a>	<p>San Francisco's Mobility Management Programs are designed to assist people with disabilities and seniors in navigating the city's transportation options by offering information and recommending solutions that aid the rider in making the most suitable transportation choices. Services offered include travel training for groups and individuals unfamiliar with the public transportation system. Other services include:</p> <p><b>SF Access - ADA Paratransit</b> - SF Access is a pre-scheduled, shared-ride, ADA-compliant van service providing door-to-door transportation to certified riders.</p> <p><b>Paratransit Taxi &amp; Ramp Taxi</b> - Paratransit Taxi is a ride service that utilizes San Francisco taxis and ramp taxis available to the general public. This is not an ADA service, but many riders find that it better meets their transportation needs. Taxi service is available for certified riders.</p> <p><b>Group Van</b> - Group Van is a pre-scheduled van service providing door-to-door transportation to groups of ADA eligible riders attending certain agency programs such as Adult Day Health Care, senior centers, or work sites.</p> <p><b>Shop-a-Round</b> - Shop-a-Round is a convenient, low-cost shuttle that makes it easier to go grocery shopping. The service offers registered seniors and people with disabilities personalized assistance not available on Muni. A rider must register for this service, but does not have to be ADA-paratransit eligible to use this service. Grouped riders are transported to select supermarkets in San Francisco to shop. The driver will help carry groceries on and off the shuttle upon request.</p> <p><b>Van Gogh</b> - Van Gogh is a low-cost, pre-scheduled van shuttle service to groups of seniors and/or people with disabilities to attend social and cultural events in San Francisco through a social service agency or program.</p>
San Mateo	Mobility Ambassadors 650-508-6362 <a href="http://seniormobility.org">seniormobility.org</a>	<p>The San Mateo County Senior Mobility Initiative is a joint effort by a broad coalition of concerned entities in San Mateo County, with the leadership of the San Mateo County Transit District (SamTrans), to keep older people - including those with disabilities - safe and connected to their communities as problems related to aging make it harder for them to get around. Services include Mobility Ambassadors, Senior Mobility Guide, and the Information and Assistance Program.</p>
Santa Clara		<p>Until fall 2016, Outreach, a non-profit organization, provided a holistic approach to each caller/customer/client and provides an array of social services and coordinated transportation services to seniors; low-income persons, families and youth; persons ADA-certified with functional disabilities; CalWORKS recipients; veterans; homeless; limited-English speakers; persons without cars and/or transit-dependent; and Medi-Cal recipients. Outreach is no longer providing these services.</p>
Solano	Solano Mobility Call Center 800-535-6883 <a href="http://solanomobility.org">solanomobility.org</a>	<p>The Solano Mobility Call Center provides assistance in getting to appointments, shopping, work, recreation and other destinations without driving. The Call Center has information on public, non-profit organization, and private transportation services in and around Solano County.</p>
Sonoma	Sonoma Access 2-1-1 <a href="http://sonomaaccess.org">sonomaaccess.org</a>	<p>Sonoma Access was designed, as a first step, to bring together information on all of the public, private and non-profit transportation options available in Sonoma County. Sonoma Access informs residents on these types of transportation services: Local and Regional Bus Service, Local and Regional Paratransit Service, Volunteer Driver Programs, Non-profit Agency Transportation Options, Private businesses that provide Transportation Options, Transportation Programs for Veterans, and Travel Training Programs that teach anyone how to ride the bus.</p>

about alternatives to driving, such as community shuttles. Ambassadors can also give educational presentations, conduct group and one-on-one rider training, and organize group trips on transit to interesting destinations.

The Veterans Mobility Corps (VMC) was developed by SamTrans to address many transportation challenges faced by veterans of the Armed Forces when they have disabilities brought about by aging or injuries sustained during their military service. The VMC recruits and trains volunteer veterans to help veterans with disabilities to acquire skills needed to access the mobility options they are eligible for.

These options can include a broad range of choices: travel training on public transit such as SamTrans, VTA buses and light rail, BART, Muni, and Caltrain. All of the travel training services of the VMC are free of charge. This program is still in a pilot phase to identify challenges and opportunities of focusing directly on the veteran population.

The non-profit organization Center for Independent Living (CIL) in Berkeley offers a varied travel training program. They offer one-on-one and group training to youth, seniors, and people with disabilities in how to use transportation to get to destinations of their choice. They also help people with disabilities apply for a Regional Transit Connection Discount Card/Clipper Card for people with disabilities, obtain information to plan trips using the 511.org website and/or 511 phone service, and train on using a mobility device (such as a cane, walker, wheelchair, or scooter) to travel throughout the community using both public transit and pedestrian rights-of-way. Additionally, AC Transit offers wheelchair securement consultations and attachment of tether straps at CIL for participants once a month.

Some counties and cities also host or offer their own travel training programs. Solano County offers the Solano Mobility Travel Training program, which includes one-on-one trainings and group trainings provided under contract with local non-profit organizations, and has produced training videos for each operator in the county. The City of Vacaville's Public Works Department oversees the City Coach transit service. They offer one-on-one or group travel training and a Youth Travel Training Program. The Bay Area Regional Mobility Management Group frequently discusses travel training and assists the Region's programs in coordinating.

## Mobility Management

Mobility management services cover a wide range of activities, such as travel training, coordinated services, trip planning, brokerage, and information and referral. For the purposes of this resource list, mobility management services refer to the provision of individual transportation information and assistance as well as service linkage.

Mobility management services are closely related to information and referral, but go further by providing more individually tailored information and providing service linkage. Where available, mobility management is an ideal "entry point" for low-income populations, seniors, people with disabilities, and veterans to the range of transportation resources available. Although all counties in the Bay Area have some sort of information and referral service, individual mobility management services are not yet available throughout the Bay Area.

The state of California recommends designating a Consolidated Transportation Service Agency (CTSA) in each county to promote and implement mobility management. This approach is also recommended in the Bay Area's 2013 Coordinated Public Transit-Human Services Transportation Plan, but only one county - Solano - in the region currently has a designated CTSA.

Several counties and/or transit agencies have hired mobility managers and these individuals are designing and implementing some new mobility management programs.

While all counties have some elements of mobility management, not all are as comprehensive as the recommendations made by MTC's Roadmap Study to implement three basic countywide components along with a formally identified Mobility Manager. The three recommended components were:

- Coordinated information and referrals, or a "one-stop" information center on multiple travel options
- Coordinated travel training and trip planning for individuals
- Enhanced Americans for Disabilities Act (ADA) paratransit certification process in coordination with transit operators

## OVERVIEW OF PROJECTS FUNDED UNDER PREVIOUS COORDINATED PLAN

SAFETEA-LU required that projects receiving funds under FTA’s Jobs Access Reverse Commute (JARC) program (Section 5316), New Freedom Program (Section 5317), and Section 5310 Formula Program for Elderly Individuals and Individuals with Disabilities be derived from a locally developed coordinated public transit-human services transportation plan. In July 2012, Congress passed MAP-21, the federal transportation act that superseded SAFETEA-LU. Under MAP-21, the JARC and New Freedom programs were eliminated as stand-alone programs. JARC functions and funding were combined with the Urbanized Area Formula (Section 5307) and the Non-Urbanized Area Formula (Section 5311) programs starting in FY 2012-13. The New Freedom program was merged with the Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities program, for which Caltrans is the designated recipient and

the direct recipient. For the New Freedom eligible projects, MTC works with Caltrans on the 5310 Program to continue investing in New Freedom efforts (see below for more information).

Prior to MAP-21, MTC’s policy was to direct JARC funds to support implementation of MTC’s Lifeline Transportation Program, which includes projects that address mobility and accessibility needs in low income communities throughout the region. In response, MTC has adopted a policy to annually set aside Section 5307 funds per the JARC formula (approximately 3% of the Section 5307 appropriations) for funding projects under MTC’s Lifeline Transportation Program.

**Figure 3.7** summarizes funding programmed in each of the nine Bay Area counties since the 2013 Coordinated Plan was adopted. All funding was determined by regional or statewide competitive selection processes, and most of the funding went to the region’s most-populated counties.

**Figure 3.7** FTA Specialized Program Funding by Urbanized Area (UA), since 2012 Coordinated Plan

Urbanized Area (Large and Small)	JARC/5307 (a)(b)	New Freedom (a)	5310 (c)	Total (d)
	FY 2011-2016	FY 2012	FY 2013-2017	
Antioch	\$729,224	\$75,306	\$1,032,188	\$1,836,718
Concord	\$806,351	\$151,329	\$2,391,773	\$3,349,453
S.F. - Oakland	\$10,082,572	\$1,180,786	\$12,959,089	\$24,222,447
San Jose	\$3,637,758	\$496,368	\$5,515,480	\$9,649,606
Santa Rosa	\$836,174	\$99,524	\$1,264,981	\$2,200,679
Vallejo	\$560,389			\$560,389
Fairfield	\$384,060			\$384,060
Vacaville	\$166,659			\$166,659
Napa	\$290,657			\$290,657
Livermore	\$129,033			\$129,033
Gilroy-Morgan Hill	\$247,964			\$247,964
Petaluma	\$128,224			\$128,224
<b>Regional Total</b>	<b>\$17,999,065</b>	<b>\$2,003,313</b>	<b>\$23,163,511</b>	<b>\$43,165,889</b>

**NOTES:** (a) JARC and New Freedom (FY 2011 and 2012) includes only Large Urbanized Area (UA) funds programmed by MTC; Small UA and Rural Area funds programmed and administered by Caltrans were not included. For FTA Section 5307, FY 2013 and beyond includes Large and Small UA. In 2013, approximately \$2 million in JARC funds lapsed due to delays in U.S. Department of Labor certifications on grants. The apportionments remained the same, however the project list has been modified to reflect the \$2 million loss of funds.

(b) JARC/5307 funds are programmed locally by county Lifeline Program Administrators; funds were subject to Lifeline Transportation Program formula per county % of regional low-income population.

(c) 5310 includes Large UA funds that are programmed by MTC (MTC selects the projects). The Small UA and Rural Area funds are apportioned to each state. In California, these two amounts are pooled into one statewide competitive process for Caltrans to program. Depending on the results of Caltrans’ competitive process, the region may receive some of the Small UA and Rural Area funds (in addition to the Large UA funding) for projects outside the Large UAs. All funds are administered by Caltrans.

(d) Apportionments represented are for Lifeline Transportation Program Cycles 3 and 4 (JARC/ 5307), New Freedom Cycle 5, and 2014 and 2017 5310 Programming Cycles.

## Funding by Project Type per Funding Source

### JARC/Section 5307

The Lifeline Transportation Program (JARC/Section 5307) is programmed by MTC for the region's Large Urbanized Areas. MTC established program guidelines to prioritize a wide variety of capital or operating projects based on eligibility criteria and regional priorities.

**Figure 3.8** summarizes Section 5307/JARC funding by project type for the region's Large Urbanized Areas (Antioch, Concord, San Francisco–Oakland, San Jose, and Santa Rosa) funded under the third and fourth cycles of the Lifeline Transportation Program, covering FY2011 through FY2016. About half of all funding went to support fixed-route transit services connecting low-income communities to employment and other essential destinations, with most of the remainder going to alternative services other than fixed-route transit, including taxi vouchers, guaranteed ride home programs, bike programs, shuttles, and auto loan programs.

**Figure 3.8** JARC/5307 Funding by Project Type, FY 2011-FY 2016

	Total	Percentage of Total	Number of Projects
Transit Capital	\$1,812,046	11.6%	4
Transit Operations	\$6,822,659	43.7%	19
Transit Alternatives	\$3,117,427	20.0%	8
Auto Loan Programs	\$1,304,077	8.4%	4
Shuttles	\$1,579,641	10.1%	8
Pedestrian and Bicycle Improvements	\$570,000	3.7%	4
Program Administration	\$406,811	2.6%	2
<b>Total</b>	<b>\$15,612,661 <sup>(a)</sup></b>	<b>100%</b>	<b>49</b>

**NOTES:** (a) This programming is lower than apportionments. In 2013, approximately \$2 million in JARC funds lapsed due to delays in U.S. Department of Labor certifications on grants. The apportionments remained the same, however the project list has been modified to reflect the \$2 million loss of funds.

### New Freedom Program

The New Freedom program was administered by MTC for the region's Large Urbanized Areas. MTC established program guidelines to prioritize a wide variety of capital or operating projects based on eligibility criteria and regional priorities.

Under this Coordinated Plan period, MTC administered one remaining New Freedom program cycle (New Freedom Cycle 5). The New Freedom program also funded a variety of capital and operating projects in the region's Large Urbanized Areas, as shown in **Figure 3.9**. The largest share went to informational and travel training program projects. The other major categories were mobility management and demand-responsive alternatives to fixed-route transit or ADA paratransit, including volunteer driver programs, taxi-based programs, and non-ADA paratransit services. New Freedom funding was not continued in MAP-21 (starting with FY 2013) and similar project-types became eligible under 5310.<sup>33</sup>

33 <http://www.apta.com/gap/legissues/authorization/Documents/APTA%20MAP-21%20Guide.pdf>



**Figure 3.9** New Freedom Funding by Project Type, FY 2012

	Total	Percentage of Total	Number of Projects
Mobility Management	\$360,602	18.0%	3
Info/Training	\$1,237,794	61.8%	5
Transit/ADA Alternatives	\$304,751	15.2%	5
Program Administration	\$100,000	5.0%	1
<b>Total</b>	<b>\$2,003,147</b>	<b>100%</b>	<b>14</b>

**Section 5310**

For the Section 5310 program, Caltrans funds “traditional” and “expanded” projects. Traditional projects include vehicles, transportation program-related equipment, and mobility management projects. Traditional projects must comprise at least 55 percent of the available funding. Expanded projects include operating assistance and mobility management projects of the type eligible in the former New Freedom program. In 2014 and 2017, MTC jointly administered the program with Caltrans, where MTC established program guidelines for the Large Urbanized Areas and oversaw project selection, but Caltrans remained the designated recipient, responsible for grant management, procurement, and project oversight.

**Figure 3.10** summarizes 5310 funding by project types that was apportioned to the Bay Area’s Large UAs, as well as funding awarded to projects in the Bay Area through the Caltrans statewide competitive process using Small UA and Rural Area funds. Approximately half of the funding has gone to mobility management projects, which comprise coordination activities, personalized trip planning, information and referral and travel training. One quarter of the funding has gone to purchase wheel chair accessible vehicles. Volunteer driver programs received 14% of the funding, and provide door-through-door transportation. Alternatives to fixed-route transit or ADA paratransit, including taxi-based programs and non-ADA paratransit services received 9% of funding. The remaining funding went to transportation program-related equipment like wheelchair restraints, radios and computer software.

**Figure 3.10** 5310 Funding by Project Type, FY 2013 – FY 2017

	Total	Percentage of Total	Number of Projects
Mobility Management/Info/Travel Training	\$11,810,234	47.1%	25
Vehicles	\$6,175,400	24.6%	107
Volunteer Driver Programs	\$3,544,913	14.1%	15
Transit/ADA Alternatives	\$2,378,769	9.5%	12
Transportation Program-Related Equipment	\$31,725	0.1%	35
Program Administration	\$1,158,176	4.6%	2
<b>Total</b>	<b>\$25,099,217</b>	<b>100%</b>	<b>196</b>

## 4. OUTREACH AND STAKEHOLDER GAP IDENTIFICATION

To reveal high-level gaps in the Bay Area’s transportation network experienced by the region’s seniors, people with disabilities, people with low incomes, and veterans, this chapter draws upon feedback received through conversations with individuals, advocates, agencies who serve them, as well as on a regional demographics assessment of trends (Chapter 2). Where comments include suggested solutions to specific gaps, those have been summarized as well. Together, these gaps and solutions inform recommended strategies for MTC and its regional partners, provided in Chapter 5.

The following lists summarize the top themes heard through all engagement channels. Each comment was categorized as either a gap or a solution, and further assigned a theme. Many themes emerged and presented below are the top ten gaps and top five solutions.





## SUMMARY OF GAPS

1. **Spatial gaps—areas of our region that are either difficult or impossible to reach by public transportation—continue to be a key need expressed throughout the region.**

In the 2013 Coordinated Plan update, some of the top themes included needs for enhanced fixed-route and paratransit through increased connectivity. This continued to be true in feedback gathered for this 2018 Update; spatial gaps top the list of most frequently heard comments. These spatial needs are specific to location, but generally highlight a lack of connectivity either within or between suburban and rural areas. These gaps are exacerbated by several demographic trends – the proportion of the regional population composed of seniors and people living in poverty has increased over the last decade, as has the proportion of the population that lacks access to a vehicle. These trends are projected to continue into the future.

2. **Temporal gaps—points in time that lack service—also constrain the mobility of target populations.** Most comments focused on the lack of transit and paratransit availability in the evenings, late night, and weekends. However, we also heard from some stakeholders involved in volunteer driver programs that there are increasing requests for dialysis transportation services very early in the morning, either prior to available transit or at a time that feels unsafe for dialysis patients to travel alone. Further, necessary transfers between services create another type of temporal gap—long travel times, affecting those dependent on transit who often earn hourly wages.

3. **Healthcare access is a growing concern in the region.** Comments regarding medical transportation needs generally came in three types: dialysis transportation, the trend of medical facilities locating in areas difficult to serve by fixed-route transit, and the lack of affordable non-emergency medical transportation options. These healthcare access needs are heightened by the fact that the areas of the region that are aging the fastest also tend to be the most suburban or rural – areas difficult to serve by fixed-route transit. Further, seniors are living longer, and in counties like Marin, where the population is one of the longest living in the country,<sup>35</sup> this means an increasing strain on local budgets to support people with limited mobility.

4. **Comments from almost every county in the region raised concerns that transit and paratransit fares are too high for many people.** Seniors and families with low incomes are a growing portion of our local demographics, and these groups are some of the least able to afford increasing transportation costs. While local bus service may be a more affordable option, more costly regional transit options like BART or Caltrain increase access to medical facilities, jobs, and other critical services.
5. **Funding needs are growing faster than revenues.** Service providers say that funding is constrained to support the mobility of seniors, people with disabilities, veterans, and people with low incomes. There is increasing pressure on programs that provide mobility for target populations as those populations are growing and housing near services is less affordable. Funding available for services above and beyond the ADA—which are particularly important in counties where the fixed-route system cannot cover important destinations—are limited in counties without local sales taxes for transportation. Lastly, the grant-based nature of non-ADA funding sources threatens the consistent availability of some programs.
6. **Constituents recognize that investments in the safety of pedestrians and bicycles improve mobility for all.** Stakeholders discussed missing sidewalks, sidewalks in poor condition, sidewalk blockages due to parked cars and driveways, and missing crossing treatments. A lack of these treatments renders some individuals incapable of using the fixed-route system, which could increase the costs of operating ADA Paratransit services. Some comments also centered on transit stop amenities to make public transit more welcoming for everyone.
7. While some feedback suggested leveraging transportation network companies (TNCs, such as Lyft or Uber) and other new technologies to assist in solving mobility gaps, **many comments focused on the lack of accessibility of taxis and TNCs.** There is some concern about the ability of target groups to leverage these solutions due to the apps' reliance on smartphone ownership.
8. **Stakeholders highlight the importance of transportation information availability and associated referral services to steer people to gap-filling services.** Comments focused on a need for more real-time information about both transit and paratransit services, but also a need to increase constituents' awareness of

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35 <http://marinaccess.org/wp-content/uploads/2016/09/FINAL-Marin-Access-Strategic-Analysis-and-Recommendations-2016.pdf>

all services and mobility options—including combining biking and transit, for example—available to them.

9. **As discussed in the 2013 Coordinated Plan, facilitating transfers on both the fixed-route transit network as well as between ADA paratransit service providers (when trips cross county lines, for example) remain a barrier.** Not only are these trips difficult and time consuming, but they can also be costlier. This is more of a problem for paratransit than fixed-route transfers, as the former often require close coordination between different providers and sometimes different counties, and have a greater impact on people with disabilities due to the challenges of long waits between transfers. Personal safety is a concern for riders. Safety measures such as lighting, accessible restrooms, safe waiting areas, benches and phones are essential. Further, riders feel that their safety can be at unnecessary risk when required to transfer between vehicles.

The remainder of feedback received covered a wide variety of topics, from housing and land use, to strained volunteer driver programs, to mobility management and coordination, to the need for more planning and study. Overall, the general gaps identified in Chapter 6 of the 2013 Plan remain, but **new comments in this update reflect recent trends in technology, medical facility accessibility, and the growth of disadvantaged populations.**

## Summary of Solutions

In addition to gaps, stakeholders also offered solutions—either things that have been discussed in their county or new ideas. The summary below describes the top five solutions themes; other comments covered equity solutions for emerging mobility services, access to automobiles, fare media, and others.<sup>36</sup> This input will be incorporated into the 2018 Plan's ultimate strategic recommendations.

1. Consistent with the information gaps highlighted above, **stakeholders also provided several ideas for increasing the availability and efficacy of transportation information.** These ideas included:
  - a. Making comprehensive information about available transportation services available to all human service providers, possibly through one-call/one-click services

- b. Offering targeted mobility information at key points of contact (e.g. for seniors at the DMV; for discharged patients or families of patients at hospitals)
- c. Increasing the availability of real-time information (e.g. “where’s my ride?” paratransit information; BART elevator in service information; real-time information about available wheelchair spaces on an arriving bus)
- d. Improving on-vehicle communication (e.g. consistent operator announcements and stop information signs in both the front and rear of vehicles)

2. **To increase the affordability of transit for the target populations, there is interest in reducing the cost of public transit, paratransit, and on-demand transportation options such as taxis.** Most comments suggested partially subsidizing the cost, but some also suggested making transit free for the target populations, and others asked for discount consistency between providers in the region. Relatedly, a few commenters recommended universal fare media across transit providers and between both general public and paratransit services.
3. **Coordination and cooperation could increase cost efficiency and improve service for end users.** Underutilized resources, such as school buses at midday, or paratransit vehicles off-peak, could be made available to serve other mobility gaps if a central agency coordinated across various providers. Increased coordination between regional centers and public transit agencies could respond to specific spatial gaps. In addition, transfers between ADA Paratransit providers or between ADA Paratransit and city-based providers could improve the travel experience and reduce travel times.
4. **Creating new funding streams and increasing the sustainability of other funding streams is a top priority.** Comments suggested creating new revenue through local measures, such as a vehicle license fee. Commenters also advocated for lessening the administrative burden associated with applying for and receiving 5310 funds through Caltrans, longer-term grants, and new funding for mobility management and coordination activities to ensure that local priorities receive funding.

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<sup>36</sup> There was less consensus around solutions in the comments than gaps; therefore, only the top 5 are listed. All comments are considered in crafting the 2018 Coordinated Plan's strategic recommendations.

5. **To address spatial gaps, increase the availability of non-ADA services for the target populations, and ensure their coordination with ADA Paratransit and public transit.** There was also discussion of a need for better land use-transportation coordination, and to ensure individuals are assigned to services (e.g. regional centers, dialysis clinics) closest to their homes.

## COMMUNITY INPUT OPPORTUNITIES

**Figure 4.1** lists all outreach activities completed by the 2018 Coordinated Plan team. Over 30 organizations from all nine counties of the Bay Area provided input, captured in more than 300 individual comments. These comments were individually classified as either identifications of existing transportation gaps or suggestions of potential solutions; further, each comment was categorized according to its overarching theme—temporal or spatial gaps, for example. These comments, along with their themes, are provided as Appendix B and Appendix C.

**Figure 4.1** Community Engagement and Outreach Activities

Organization	Counties Served	Type (Consumer, Provider, Advocate)	Date	Attendees / Representative
San Mateo County Paratransit Coordinating Council (PCC)	San Mateo	Consumer	June 13, 2016	27
Regional Mobility Management Group	Regional	Provider	June 16, 2016	18
Senior Mobility Action Committee, Contra Costa County	Contra Costa	Consumer	June 27, 2016	19
Cycles of Change	Alameda	Provider	July 6, 2016	Former Co-Director and Development Consultant
MTC Policy Advisory Council Equity and Access Committee	Regional	Consumer	July 6, 2016	9
West Contra Costa Regional Mobility Working Group	Contra Costa	Advocate	July 7, 2016	14
Home First	Santa Clara	Provider	July 7, 2016	Director of Services
Napa PCC	Napa	Consumer	July 7, 2016	12
Bay Area Partnership Accessibility Committee	Regional	Advocate	July 11, 2016	10
Contra Costa County Employment and Human Services	Contra Costa	Provider	July 11, 2016	Transportation Services Specialist
North Bay Organizing Project	Sonoma	Advocate	July 11, 2016	Executive Director
Marin PCC	Marin	Consumer	July 18, 2016	16
Contra Costa PCC	Contra Costa	Consumer	July 18, 2016	11
Sonoma PCC	Sonoma	Consumer	July 19, 2016	14
Solano PCC	Solano	Consumer	July 21, 2016	30
Alameda Paratransit Advisory and Planning Committee (PAPCO) and Paratransit Technical Advisory Committee (ParaTAC)	Alameda	Consumer and Provider	July 25, 2016	30
San Mateo County Health System	San Mateo	Provider	August 4, 2016	Senior Community Health Planner
Peninsula Family Service	San Mateo	Provider	August 4, 2016	Director, Financial Empowerment Program

**Figure 4.1** Community Engagement and Outreach Activities

<b>Organization</b>	<b>Counties Served</b>	<b>Type</b> (Consumer, Provider, Advocate)	<b>Date</b>	<b>Attendees / Representative</b>
San Francisco PCC	San Francisco	Consumer	August 10, 2016	39
Solano Transportation Authority	Solano	Provider	August 19, 2016	Planning and Programming Staff
Western Contra Costa Transportation Advisory Committee	Contra Costa	Provider	September 1, 2016	WCCTAC Project Manager
East Bay Paratransit Service Review Advisory Committee	Alameda, San Francisco, Santa Clara	Consumer	September 6, 2016	27
Napa Valley Transportation Authority	Napa	Provider	September 8, 2016	Planning and Programming Staff
Alameda County Transportation Commission	Alameda	Provider	September 9, 2016	Planning and Programming Staff
AC Transit Accessibility Advisory Committee	Alameda, Contra Costa	Consumer	September 13, 2016	22
Transportation Authority of Marin	Marin	Provider	September 14, 2016	Planning and Programming Staff
City/County Association of Governments for San Mateo County	San Mateo	Provider	September 16, 2016	Planning and Programming Staff
Contra Costa Transportation Authority	Contra Costa	Provider	September 22, 2016	Planning and Programming Staff
Sonoma County Transportation Authority	Sonoma	Provider	September 26, 2016	Planning and Programming Staff
San Francisco County Transportation Authority	San Francisco	Provider	September 27, 2016	Planning and Programming Staff
VTA Committee for Transit Accessibility	Santa Clara	Consumer	October 12, 2016	29
Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Advocate, Provider, Consumer	October 14, 2016	19
San Francisco Planning and Urban Research (SPUR)	Regional	Advocate	November 16, 2016	Transportation Policy Staff
TransForm	Regional	Advocate	November 17, 2016	Executive Staff

## SUMMARY OF FEEDBACK BY COUNTY

Below is a brief summary of comments provided by users and their advocates in each county.

**Regional.** Four regional groups engaged in the 2018 Plan's initial outreach process – the Regional Mobility Management Group, Bay Area Partnership Accessibility Committee, SPUR, and TransForm. The Regional Mobility Management Group is a 30-member group comprised of mobility management and human service transportation providers throughout the Bay Area.

The Bay Area Partnership Accessibility Committee is comprised of representatives from the Bay Area's ADA Paratransit providers and other interested parties. SPUR is a regional planning and policy non-profit that provides research, education, and advocacy. TransForm is a transportation advocacy non-profit focused on the Bay Area and California, promoting access, health, justice, and sustainability. Among the comments were discussions related to the ability for MTC to lead in mobility management, coordination and system seamlessness, innovative pilots and demonstration projects, additional planning or study opportunities, ensuring inclusive planning processes, and funding.

The groups also discussed issues related to new transportation technology, and urged emerging mobility services to be considered in this plan's recommended strategies.

**Alameda County.** The project team met with the Alameda County Paratransit Advisory and Planning Committee (PAPCO) as well as Alameda CTC staff. The common comment received focused on spatial gaps in the county – particularly related to connectivity to and from eastern sections of the County. Other comments addressed themes of transportation information, funding, temporal gaps, and fares.

**Contra Costa County.** The project team received input from the Contra Costa County Paratransit Coordinating Council (PCC), the Department of Employment & Human Services, WCCTAC, and the City of San Pablo. Temporal and spatial gaps, as well as funding availability, were the most concerning themes in Contra Costa County. Funding constraints limit the ability of services beyond ADA Paratransit to serve observed spatial and temporal gaps.

**Marin County.** The Marin County PCC's comments covered several topics without one strong overarching theme. Similar to Alameda County, sections of Marin (namely, West Marin) are perceived to be less connected than the more populated eastern parts of the county. In addition, in the eastern part of the county, the need for better pedestrian and bicycle infrastructure was mentioned as a means of addressing mobility for seniors aging in place.

**Napa County.** Healthcare access and the strain on the county's existing volunteer driver programs and taxi scrip programs (City of Napa only) were consistent themes throughout the meeting with the Napa PCC. These programs are meant to help address temporal and spatial gaps, but wheelchair access is limited and drivers are in short supply.

**San Francisco County.** San Francisco's PCC elevated congestion as one of their largest concerns – a typically urban challenge. Comments related to congestion highlighted how congestion – due to high levels of traffic and double parking – impacts both public transit and paratransit's ability to serve customers in a timely manner.

The other common theme related to transit information; participants acknowledged the provision of real-time information in and outside of buses, but highlighted that it can be inconsistently provided and difficult to see or hear from the rear of the vehicle, and a request for better information about elevator outages. The lack of transportation information and referral service was also cited. Additional comments submitted by the SFMTA cite curb access and congestion, particularly at human service locations, and vehicle storage costs due to the high demand for real estate.

**San Mateo County.** San Mateo's PCC and County Health System, as well as the Peninsula Family Service Agency provided feedback. The most common themes expressed had to do with pedestrian and bicycle needs at specific locations throughout the county, though some covered more general comments such as parked cars blocking sidewalk right-of-way and a desire for bike lanes to accommodate motorized scooters and wheelchairs. Transportation information, emerging mobility providers, and transit fares were other common themes.

While some comments related to the use of car share, transportation network companies (TNCs), or autonomous vehicles as potential solutions, other comments called for the increased accessibility and affordability of these services in the meantime.

**Santa Clara County.** Almost 40 individual comments were received from constituents in Santa Clara County representing the VTA Committee for Transit Accessibility, the Equity and Access Subcommittee, and Home First Santa Clara — a non-profit focused on housing the homeless.

Comments covered a broad spectrum of issues, from transit fares to funding, spatial gaps, healthcare access, and the uncertainty of the current paratransit program.

**Solano County.** In Solano County, the PCC and Faith in Action—a non-profit that provides the county’s only volunteer driver program — provided comments. The top two concerns of these groups related to healthcare access and sustainable funding for programs. There is strain on all local programs to address access to dialysis and medical care, with increasing distances between home and medical centers.

**Sonoma County.** Sonoma’s PCC, the Sonoma Access Coordinated Transportation Services (SACTS) Committee, and the North Bay Organizing Project each provided input. The North Bay Organizing Project does not provide services directly, but rather is an advocacy organization that works with diverse, multi-issue groups to empower citizens to be their own advocates.

Their main concerns related to the cost of transit to students and seniors, and the lack of access to affordable housing. Fares were also a top concern among other groups’ comments, as were the accessibility of non-ADA paratransit options, transportation information, and various spatial gaps.



## 5. REGIONAL STRATEGIES FOR COORDINATION

Transportation gaps and solutions identified in this Coordinated Plan become eligible for funding through federal funds distributed by MTC to regional partners, as well as other funds from state and county agencies. These eligible solutions are referred to as projects, and are outlined in Appendix E – Projects Eligible for Funding. Projects are concrete solutions—new vehicles, improved sidewalk infrastructure or accessible bus stops, and software systems are some examples.

**Strategies**—covered in this chapter—are bigger picture initiatives that stakeholders and MTC can implement or facilitate. These strategies grow directly from feedback received from user groups, their advocates, and existing local providers of transportation and human services. They are bounded by regional policies, and the powers that MTC and transit agencies, cities, counties, congestion management agencies, non-profits, providers, and other stakeholders have to fund and implement initiatives.



# STRATEGY 1: COUNTY-BASED MOBILITY MANAGEMENT

In 2016, MTC staff prepared the Roadmap Study: A Bay Area Mobility Management Implementation Plan, the purpose of which was to assess ongoing mobility management efforts in each county, and lay the groundwork for successful implementation of mobility management region wide. The study found that implementing a county-based mobility management strategy requires a multipronged approach. MTC would lead the development of a county-based mobility management program and continue to help leaders on a local level to coordinate mobility services for an entire spectrum of transportation providers. The approach and recommendations are detailed in this section.

## Development of a County-Based Mobility Management Program

The promise of mobility management is two-fold: to improve the mobility of traditionally underserved groups by directing passengers to available transportation options, and to increase the efficiency of the overall system of public transit and human service transportation through coordination. Mobility management is of the utmost importance due to its ability to leverage and enhance the effectiveness and efficiency of other projects and strategies listed in this Coordinated Plan. Based on best practices, MTC expects county-based mobility management programs would include three key components:

1. **Countywide travel training,**
2. **In-person ADA paratransit certifications, and**
3. **Coordination of information and referrals (I&R) through the provision of a mobility manager in every Bay Area county.**

MTC's primary roles in facilitating such a program would include:

- Supporting funding for locally led, county-based mobility management programs, and associated program components in each county, including county one-call/one-click systems for trip planning; coordinated travel training programs for those currently not using the fixed-route system; and enhanced ADA paratransit certification processes for each transit provider.
- Serving as the central point of contact for county mobility managers, providing resources and technical support.

- Leveraging the 511 system or other available traveler information system for its role in providing travel information.
- Encouraging the creation of Consolidated Transportation Service Agencies (CTSAs) in each county. CTSAs are a mechanism for promoting mobility management. Through an MTC designation process, County Board of Supervisors, Paratransit Coordinating Councils, County Congestion Management Agencies, and transit operators confirm their support of an official mobility manager for the county. (Appendix D lays out the process for designating CTSAs in the San Francisco Bay Area.)

In addition, MTC should work with county led mobility management efforts to ensure that each county has created and maintains an online inventory of accessible vehicles in each county (e.g. all 5310-funded vehicles plus other public transit and human service transportation vehicles). This list should be shared with County-level offices of emergency services and would improve the ability of agencies to coordinate and/or enter into public-private partnerships to provide wheelchair-accessible trips.

This would increase the effectiveness of investments in the accessible fleet. MTC should also ensure that each county mobility manager provides assistance to 5310 applicants to help with applications and federal compliance, and that within each county there is a mechanism by which applicants can “piggyback” onto statewide commodity contracts (vehicles, software, capital investments) to increase cost efficiency of vehicle investments.

MTC should work with county-based mobility management efforts to make sure that each county mobility manager facilitates joint driver training and follow-up customer satisfaction surveys to monitor success, and provide assistance in the development and funding of new transportation services.

### Best Practice Example:

**Ride Connection (Portland, Oregon):**<sup>37</sup> Ride Connection is a private non-profit that coordinates the transportation operations of 30+ small community-based providers of elderly and disabled transportation services. The services it provides are summarized in **Figure 5.1**.

Ride Connection provides information for all transportation options available to older adults and people with disabilities in the region, and

<sup>37</sup> Nelson\Nygaard. Coordinated Transportation Plan for Elderly and People With Disabilities. TriMet. 2012. [trimet.org/pdfs/publications/elderly-and-disabled-plan.pdf](http://trimet.org/pdfs/publications/elderly-and-disabled-plan.pdf)



**Figure 5.1** Ride Connection Support Services Provided to Service Partners

Support Services			
<ul style="list-style-type: none"> <li>• Service coordination between partners</li> <li>• Customer service monitoring</li> <li>• Grant writing, fundraising, and serving as conduit for state and federal fund</li> <li>• Service planning, which includes coordination of existing services for efficiency and creation and implementation of innovative ideas to meet local and regional transportation needs in the community</li> </ul>	<ul style="list-style-type: none"> <li>• Individual travel ability assessment</li> <li>• Web –based tools for daily operations and reporting</li> <li>• Contract administration, compliance and performance monitoring</li> <li>• Advocacy for individuals with transportation needs and for community-based service partners who meet those needs</li> </ul>	<ul style="list-style-type: none"> <li>• Driver, partner and staff training and development</li> <li>• Data management and reporting support</li> <li>• Outreach and joint marketing of regional transportation services</li> <li>• Technical assistance and support to service partners and community organization</li> </ul>	<ul style="list-style-type: none"> <li>• Accessible fleet acquisition</li> <li>• Volunteer recruitment assistance</li> <li>• Management and maintenance of a 100+ fleet</li> <li>• Service scheduling and centralized call center services for a growing number of partners</li> </ul>

SOURCE: TriMet Coordinated Transportation Plan for Elderly and People with Disabilities 2012

refers people to the options that best fit their circumstances. With one call to Ride Connection, a rider can either access Ride Connection services or be connected to another service provider in the region who can best serve her/him.

### Facilitate Coordination

Coordination is essential for meeting the needs of seniors, people with disabilities, veterans, and those with low incomes. To best serve the region’s needs for mobility services, partnerships need to involve the entire spectrum of transportation providers: providers of public fixed route transit, paratransit, human service transportation providers, private taxi and ride-hailing services, departments of health and human services, advocacy groups, faith-based groups, medical and dialysis providers and providers of support services to low-income populations, seniors and individuals with disabilities.

As a funder and evaluator of grant applications, MTC has been and should continue to award extra points to projects and proposals that address cross-county or regional connections by including coordination as an evaluation criterion in appropriate fund programs. MTC will continue to provide a venue for inter-agency coordination.

#### Best Practice Example:

**King County Access (King County Metro)**<sup>38, 39</sup>: King County Access provides paratransit service in King

County, Washington. A paratransit rider making an “Out of County Transfer trip” only needs to make a reservation with King County Access. Access will coordinate the trip scheduling with the connecting agency. King County Access recommends that riders call as early in the day as possible to give the two agencies time to coordinate the Out of County Transfer trip before the end of the day.

Access has designated transfer points for Out of County Transfer trips at transit stations or park-and-rides near the boundaries of neighboring counties. On the day of an Out of County Transfer trip, Access will pick up the rider at her/his origin, and drive her/him to the transfer point. Drivers and dispatch staff at both agencies coordinate with each other to communicate times of arrival. If the driver from the paratransit agency in the neighboring county has not arrived at a transfer point when the Access driver arrives, the Access driver will wait with the passenger until the connecting driver gets there.

This transfer method of two paratransit drivers meeting to transfer the rider from one vehicle to another – without leaving a rider at a transfer point unattended – is also known as a “hand-off.” While there is an example of a Bay Area provider that has also adopted the “hand-off” model (East Bay Paratransit), most of the larger systems have yet to implement this practice.

38 King County Metro. Access Ride Guide. 2015. metro.kingcounty.gov/tops/accessible/pdf/AccessRideGuide.pdf

39 King County Access Call Staff. Phone Interview by Nelson Nygaard. February 17, 2017.

## Recommendations for MTC

### Plan and Implement Mobility Management Technical Assistance Program

As regional partners begin to develop local mobility management functions, MTC staff should develop a technical assistance program to advise partners on the implementation of travel training, in-person eligibility, and information and referral programs.

### Set Schedule for Coordination Summits and Assess Opportunities to Incentivize Coordination

Coordination takes preparation. MTC should keep the momentum from the Coordinated Plan and Roadmap Study efforts by establishing a schedule of regional coordination summits and topics for the convening.

MTC can host regular events with transit operators, human service agencies, CMAs, and other coordination partners. MTC can also begin to assess specific opportunities, suggested in this chapter of this plan, to incentivize coordination among transit operators and human services providers.

### Identify Sustainable Sources of Flexible Funding for County-Based Mobility Management

Within one to two years of Coordinated Plan adoption, MTC should work with county and local stakeholders to identify funding for county-based mobility management programs.

## Recommendations for Partners

### Develop New County-Based Mobility Management and Related Initiatives

In the first one to two years of this plan's adoption, regional partners should begin to develop new mobility management functions across the Bay Area. In the first two years of this plan's implementation, county partners are expected to consider how to fund county-based mobility management functions, such as travel training, information and referral services, and ADA paratransit in-person eligibility and conditional eligibility policies.

### Contribute to Regular Coordination Summits

To leverage coordination opportunities, CMAs, transit operators, human service providers, and other partners should commit to contributing and participating in regular coordination summits.

### Create Consolidated Transportation Service Agencies and Seek Funding for County-Based Mobility Manager Positions

Local entities can request to become designated as a Consolidated Transportation Service Agency (CTSA) from MTC. The CTSA designation empowers each county to build out a full mobility management program that facilitates coordination between local social service agencies and transportation providers. In the next one to two years, counties that lack a CTSA should seek designation, or develop a plan to build CTSA capacity in their county. (Appendix D lays out the process for designating CSAAs in the San Francisco Bay Area.)

## STRATEGY 2: IMPROVE PARATRANSIT

Paratransit services should be improved to better meet the needs of customers. The recommended approach is to improve access to healthcare, reduce the cost of service, and make it easier to pay for ADA paratransit services.

### Address Access to Healthcare

The ongoing consolidation of healthcare centers and tendency to locate in peripheral locations has reduced transit accessibility to medical services. Although ADA paratransit and non-profit providers have been required to increase the volume and length of trips for medical purposes, there is currently no unified funding mechanism in place in the Bay Area for providers to recover the costs of these trips from Medi-Cal. However, "non-emergency transportation" is one of the reimbursable activities under the Medi-Cal program.

Non-emergency transportation vehicles include taxis, buses, trains, cars, and vans. Time spent and actual expenses, such as taxi vouchers and bus passes, can be claimed through County-Based Medi-Cal Administrative Activities (CMAAs). However, there is a requirement to use the lowest cost option, which often results in reimbursement being limited to transit fares.

Attempts to address this issue have been ongoing for a number of years in California. MTC can play a role by exploring a cost recovery program for Medi-Cal non-emergency transportation in the Bay Area for public and private transportation providers who are coordinating with county-based mobility management efforts. As part of the development of this program, the types of entities that would be eligible for participation should be determined, in addition to an overall implementation plan.

Given the lack of reimbursement programs, MTC could also explore other ways to help agencies contain costs. For instance, costs are particularly burdensome for ADA paratransit providers who provide subscription trips to individuals requiring dialysis. ADA paratransit providers receive no financial contribution from the clinics whose clients receive these services. MTC could bring the parties together to arrive at cost sharing arrangements that would exceed the fare paid by riders, or explore other ways to reduce travel costs, and expand travel options.

Finally, MTC could play a role in addressing service gaps to medical services by linking NEMTs and TNCs to increase capacity and provide accessible service to medical destinations. This could be achieved through MTC grants for pilot programs and/or technical assistance.

## Reduce the Cost of Providing ADA Paratransit

Due to the growing population of ADA-eligible passengers, the increasing difficulty of hiring and retaining paratransit drivers, and other national trends indicating increased labor costs, the costs of providing ADA paratransit are rising.<sup>40</sup> Strategies to address these costs are:

- Increasing the use of in-person eligibility assessments and conditional eligibility policies. Transit agencies should implement in-person assessments, as well as evaluations of applicants' functional mobility by trained professionals to provide conditional eligibility.
- Piloting trip-screening modules in scheduling software to facilitate the implementation of conditional eligibility policies. Funding for this technology can be prioritized, and can assist in coordinating the phased development of a regional database of accessible bus stops to inform trip-screening.
- Promoting the use of Interactive Voice Response (IVR) systems to remind passengers of upcoming trips and communicate imminent arrival. IVR systems will help reduce no-shows and late cancels.

### Best Practice Examples:

Most large paratransit systems in the U.S. now use in-person eligibility assessments, including functional assessments, in order to achieve more accurate eligibility determinations. One of the key

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40 Federal Transit Administration, Transit Cooperative Research Program, Report 142, "Vehicle Operator Recruitment, Retention, and Performance", 2010, Washington DC, Summary, page 1

benefits of this eligibility model is the ability to determine the conditions under which an applicant can ride fixed route service, even if for some of their trips.

Conditional eligibility is routinely applied in Seattle, Pittsburgh, Philadelphia, Tacoma, and Salt Lake City, and the trend is towards greater implementation. Systems that have been successful in implementing conditional eligibility generally have between 12 and 14 conditional categories, although King County Metro has over 20. Following is a listing of some of the key categories that are used by transit agencies in applying conditional eligibility:

- Street barriers (e.g. lack of sidewalks or curb cuts)
- Distance
- Slope
- Seasonal
- Snow/ice
- Temperatures
- Darkness
- Need for transfers on fixed-route
- Travel trained
- Dialysis

Transit agencies use a variety of approaches to apply eligibility conditions. King County Metro identifies conditionally eligible riders who request the same trip with some frequency. They then conduct a "pathway review" to determine if the individual would actually be able to negotiate the paths between the nearest transit stops and their points of origin and destination. If this is an option, they inform the customer of their fixed route options and do not provide the trip on paratransit. Accessible Services staff have estimated annual savings of approximately \$845,000 in Access operating costs because of this approach.

In Pittsburgh, ACCESS applicants are given very specific information about their eligibility to ensure that both reservationists and the riders have a common understanding of which trips are eligible. Since 2005, ACCESS has been applying eligibility conditions on all trips requested by those with conditional eligibility.

ACCESS has found that about 29-35 percent of applicants are determined conditionally eligible, but they only take about 18 percent of the trips, and about half of those are subscription trips. This proportion of trips has not changed in nearly ten years. Therefore, the screening process, while not insignificant, is not as substantial as is commonly assumed.

ACCESS generates regular reports about conditional and feeder trips so they can evaluate the barriers that create eligibility. If these barriers can be addressed, the agency tries to implement mitigations, such as making bus stops accessible, installing traffic signalization and curb cuts.

The agency has had only limited success in this effort – but knowing why people need to use paratransit is helpful in planning efforts.

### Make it Easier to Pay for Paratransit

The cost of on-vehicle card readers necessary for the use of Clipper cards is prohibitive given the relative lower volume of trips provided on paratransit as compared to fixed-route. MTC and operators can examine other technological solutions that do not increase the costs of providing ADA paratransit.

Clipper 2.0 may be able to include paratransit as a parameter in the new system. Other solutions may be available using current technology (RTC Clipper Cards), such as a system in which payment for the trip is secured upon booking, and processed upon taking the trip.

#### Best Practice Example:

##### Access Services (Los Angeles County):<sup>41</sup>

Access Services provides paratransit services on behalf of Los Angeles County’s 44 fixed route transit providers. It is the county’s Consolidated Transportation Services Agency (CTSA). Access offers multiple options for riders to pay for

<sup>41</sup> Access Services. How to Pay for Your Ride. [accessla.org/riding\\_access/access\\_riders\\_guide/pay\\_your\\_ride.html#](https://accessla.org/riding_access/access_riders_guide/pay_your_ride.html#)

**Figure 5.2** Access Services Paratransit Payment Methods

Support Services	Payment Method
At Boarding	Cash
	Credit/Debit Card
In Advance	Purchase Coupons In-Person (Pomona Valley Transit Authority, City of Santa Fe Springs, City of Azusa Bus Pass Window)
	Order Coupons by Mail
	Order Coupons Online
	Pre-Load Access Rider ID/TAP card

SOURCE: Access Services

paratransit trips both before and at boarding (**Figure 5.2**).

Having several options for paying both in advance and at boarding allows riders the flexibility to reduce their boarding time with pre-payment options, or pay when they board if there was less planning in advance of the trip. Riders can pre-load funds for paratransit rides onto their Access Rider ID/TAP card. At boarding time, the driver can then swipe their card, and the fare will be deducted automatically from the rider’s Access Rider ID/TAP card account balance.

Riders can also pre-pay for upcoming trips by purchasing ride coupons in-person at a local transit agency, by mail, or online at Access’s website. If a rider does not have a form of prepayment for a paratransit trip, she/he can pay the driver with a credit/debit card, or cash in exact change. The pre-paid Access Rider ID/TAP card and coupons save time during boarding, because they forego the time spent providing exact change cash to a driver.

### Recommendations for MTC

#### Begin Policy Discussion around Medi-Cal Cost Recovery Program for the Bay Area

To address the growing costs of transportation to healthcare in the Bay Area, in the next 6 to 12 months, MTC can begin internal policy discussions regarding how to leverage available reimbursements for non-emergency medical trips. The first step is to identify the types of entities that would be eligible to participate in the program and those who would likely participate in such a program.

## Convene Task Force to Assist Implementation of In-Person Eligibility

MTC can use its position as a regional resource to convene a task force to assist in the implementation of in-person eligibility and functional testing procedures at each of the region's transit operators that do not currently use this eligibility model. This effort can increase the effectiveness of new funding made available to regional operators for the implementation of county-based mobility management.

## Recommendations for Partners

### Take Opportunities to Expand Subsidized Same-Day Trip Programs

Paratransit users and operators alike see benefits in expanding options for same-day trips. Same-day trip programs provide greater mobility options and flexibility to riders, and operators may realize cost savings through innovative partnerships. Some public transit agencies across the Bay Area already have programs, typically in partnership with local taxi companies, and some are exploring relationships with ride-hailing companies. In counties where local sales taxes have afforded the opportunity to provide additional supplemental service for seniors and people with disabilities, municipal programs also exist. However, many individuals who would benefit from such programs, including veterans and those with low incomes, lack access. In the next one to two years, operators and providers should explore opportunities to implement these programs.

### Implement Medi-Cal Cost Recovery Program

To address the growing costs of transportation to healthcare in the Bay Area, paratransit providers can implement Medi-Cal cost recovery programs. Recovered costs could be put back into the paratransit system, or used to fund less expensive non-ADA services.

## STRATEGY 3: PROVIDE MOBILITY SOLUTIONS TO SUBURBAN AREAS

The suburbanization of poverty has resulted in challenges providing fixed-route services in low-density development areas. MTC can help the region address some of these challenges by implementing recommendations for an expansion of suburban mobility options.

### Increase Suburban Mobility Options

New and expanded transportation solutions are

needed for addressing mobility challenges that result from the suburbanization of poverty and older adults. Suburban development patterns are characterized by medium- and low-density land uses, which are often incompatible with traditional fixed-route transit service. Flexible, demand-responsive solutions are necessary to provide mobility in these areas.

Technical assistance for Bay Area agencies and organizations interested in developing public-private partnerships for new suburban mobility options is needed. MTC can provide guidance on requirements and best practices for ensuring equitable access to all mobility options. MTC and Bay Area operators can establish minimum data sharing requirements and minimum service characteristics. Technical assistance and region wide policies can help transit agencies and human service transportation providers expand non-ADA subsidized same-day trip programs through partnerships with taxi or ride-hailing companies. Subsidized carshare programs and low-income vehicle loan programs are essential to ensuring that low-income people have access to vehicles when trip patterns render transit not an option.

### Best Practice Examples:

#### KEYS Auto Loan Program (Contra Costa County):

The Keeping Employment Equals Your Success (KEYS) Auto Loan Program at Contra Costa County's Employment and Human Services Department (EHSD) offers a low-interest auto loan for CalWORKs participants who are unable to qualify for an auto loan on their own. In order to qualify for an auto loan in the KEYS program, a CalWORKs participant must meet the following eligibility requirements:

- Valid driver's license
- No more than one point on driving record
- Employed full-time with the same employer for at least three months

An eligible CalWORKs participant may be eligible for a loan up to \$5000. The loan recipient must pay back their KEYS loan within a two-year period over monthly payments. Additionally, she or he must attend basic automobile maintenance and budget management classes.

**DriveForward (Peninsula Family Service):** Peninsula Family Service's DriveForward program offers auto loans to help individuals who cannot qualify for an auto loan on their own acquire a car, and mend their credit. To qualify for participation in the DriveForward program, a person must meet the following eligibility requirements:



- Valid California driver's license
- Annual household income of \$75,000 or less (for a family of three)
- Live or work in San Mateo or Santa Clara counties
- Demonstrate ability to afford loan payments
- Attend a financial workshop
- Meet one-on-one with a member of the Peninsula Family Service Financial Empowerment Team

If a person meets the requirements and is approved by the Peninsula Family Service Loan Committee, she or he must select a vehicle that passes third-party certified mechanic inspection before purchasing. DriveForward requires the inspection before issuing a loan in an effort to ensure that a vehicle is safe for the participant.

**LAVTA GoDublin Pilot:** In 2017, the Livermore-Amador Valley Transportation Authority launched GoDublin, a year-long pilot partnership between the agency, two ride-hailing companies, and a local taxi company. In the pilot, participants can use a unique code either through the ride-hailing apps or with the taxi company to receive a discount on rides that start and end within the jurisdictional boundaries of Dublin, CA. The pilot grew out of the agency's 2016 Comprehensive Operational Analysis, which revealed low productivity on two routes and spurred the agency to consider supplemental service as a way to maintain coverage more cost-effectively.

Like other transit/ride-hailing partnerships, this pilot is still in its early days and no formal evaluation of impacts has been conducted. The agency plans to conduct and release such an evaluation by mid 2018. As such, this, and other transit/ride-hailing partnerships, are not best practice examples per se, but rather demonstrate a recent trend for agencies trying to address suburban mobility challenges in a more cost effective manner.

## Recommendations for MTC

### Define the Channels to Provide Shared Mobility Technical Assistance

Human service providers, transit agencies, and municipalities serving seniors, people with disabilities, veterans, and low-income groups in the Bay Area want to leverage new mobility service providers — such as carshare, ride-hailing, and bikesharing — to serve their constituents and reduce costs.

MTC can help ensure that partnerships have the best interests of all, and can start by defining appropriate channels to provide technical assistance.

Key areas include:

- Providing regular venues for agencies who have piloted flexible transit in low-density areas (e.g. VTA and AC Transit) to communicate lessons learned and best practices to other transit agencies.
- Creating a region wide policy statement on the goals of public/private shared mobility partnerships and the values they should uphold in coordination and alignment with similar ongoing efforts within the agency.
- Establishing recommended policies for minimum data sharing requirements and service characteristics for public-private partnerships in coordination and alignment with similar ongoing efforts within the agency.

## Recommendations for Partners

### Fund Low-Income Vehicle Programs

County transportation and transit agencies should prioritize and fund low-income carshare subsidy programs to increase access to vehicles for occasional trip needs, such as shopping or medical appointments. Implementation partners may be cities with on-street carshare programs, senior centers or large developments that provide access to carshare vehicles on-site, or non-profits who can coordinate across several carsharing programs.

MTC and County transportation and transit agencies should prioritize and fund low-income vehicle loan programs for individuals whose typical trip patterns render transit not an option. This program would include funds for vehicle purchase, insurance, and maintenance, and could be implemented in coordination with county-level partners.

### Prioritize One-Click Systems

County transportation and transit agencies should prioritize the development and funding of one-click systems that increase the awareness of existing suburban mobility options, and potentially make it easier to pay for trips. CMAs and mobility managers should ensure the integration of all locally available public and private mobility options to increase the availability of non-driving options.

## STRATEGY 4: MEANS-BASED FARES\*

### Regional Means-Based Transit Fare Programs

Based on comprehensive input from stakeholders in the needs assessment of this plan, as well as other

Bay Area needs assessments and studies, transit affordability has been and continues to be a key issue for some segments of the population.

MTC has been leading a study to develop scenarios and evaluate the feasibility of implementing a regional means-based transit fare program in the nine-county Bay Area to make transit more affordable for low-income residents. The findings and recommendations of this study are expected to be available in early 2018. Recommendations for MTC and agency partners are outlined below.

## Recommendations for MTC and Partners

### Build Consensus for Implementation of Means-Based Fares

Pending the conclusion of the Means-Based Fare Study, MTC should continue working with transit operators to develop an implementable program and seek funding to support this effort.

## STRATEGY 5: SHARED AND FUTURE MOBILITY OPPORTUNITIES\*

### Advocate for the Accessibility of Emerging Shared Mobility Solutions and Autonomous Vehicles

Shared mobility solutions, such as bikeshare, carshare, ride-hailing, and microtransit are options available to the public today. Most shared mobility providers are private entities, and as such may or may not prioritize service to traditionally underserved groups. MTC, CMAs, cities and counties can play an important role in ensuring access to these systems and their future driverless products, which, when taken together with public transit, promise a more seamless and convenient mobility ecosystem. Innovation must be balanced with equity and accessibility concerns. Relying exclusively on the use of smart phones, credit/debit cards, English language only, and non-accessible vehicles limits who can use emerging mobility services. MTC, CMAs, cities and counties should:

- Leverage shared and future mobility programs to liaise with the technology and automotive industries and advocate for the physical, temporal, financial, and geographic accessibility of these systems for users of all abilities
- Develop a statement of guidance to formalize agency position on these topics

\*Pending Commission Direction

- Create and fund accessible bikeshare pilots with local partners
- Create and fund subsidized shared mobility programs, such as was recently implemented by MTC with Bay Area Bike Share (now Ford GoBike), to increase access to low-income populations by incentivizing private providers to locate in traditionally underserved areas at discounted rates
- Fund cities' and non-profits' purchase of wheelchair-accessible vehicles to contribute to a "flexible fleet," made available to taxi companies, ride-hailing services, or carsharing programs

### Best Practice Examples:

**San Francisco:** In 2017, the San Francisco County Transportation Authority and San Francisco Municipal Transportation Agency adopted Guiding Principle for Management of Emerging Mobility Services and Technologies.<sup>42</sup> That document serves as a framework for the implementation of policies and programs. Further, the principles will guide decision-makers in evaluating existing services, identifying best practices and strategies, and highlighting goals when the City collaborates with transportation providers. The ten guiding principles<sup>43</sup> are:

1. Maintain roadway safety through SF Vision Zero
2. Encourage mass transit through SF Transit First
3. Ensure equitable access for people of all backgrounds or means
4. Increase mobility opportunities for people of all abilities
5. Improve environmental sustainability and reduce greenhouse gas emissions through SF Climate Action Strategy
6. Reduce roadway congestion
7. Improve accountability through data driven decision making
8. Ensure fairness in labor practices
9. Promote positive financial impacts and a state of good repair
10. Collaborate openly with public agencies, the community and innovative companies to improve our city together

**Los Angeles:** In August 2016, the City of Los Angeles' Transportation Technology Strategist published "Urban Mobility in a Digital Age," a plan

42 Guiding Principle for Management of Emerging Mobility Services and Technologies. San Francisco, CA: City of San Francisco, 2017.

43 SFCTA. <http://www.sfcta.org/emerging-mobility/FAQ#gui>

to focus the City's regulatory and service provision responsibilities in an evolving ecosystem of mobility choices. Later that year, the Shared Use Mobility Center, TransitCenter, and the William and Flora Hewlett Foundation collaborated with Los Angeles County to create the "Shared Mobility Action Plan for Los Angeles County."

Each of these guiding documents highlights accessibility — both physical and economic accessibility — as necessary goals for shared mobility and autonomous vehicles within their jurisdictions. Further, both recognize the important role of local government in ensuring accessibility as a means to achieve community values.

*"Without a proactive role by local government, connected and automated vehicles may not fulfill the promise of making our roadways safer, more efficient, and more accessible."*<sup>44</sup>

"As California considers strategies to put TNCs and taxis on an 'even playing field' through statewide regulation, several of the taxi industry's legacy consumer and safety provisions — such as mandates to provide wheelchair-accessible vehicles and serve low-income neighborhoods — hang in the balance."

The Shared Mobility Action Plan makes a specific policy recommendation to apply public transit's focus on equity and accessibility to shared mobility. The plan encourages the County to work closely with Access Services — the county's ADA Paratransit provider and Consolidated Transportation Services Agency (CTSA) — to "identify and test how shared mobility can meet ADA requirements and improve the rider experience." In March 2017, a Shared Mobility Action Plan Implementers Council — comprised of stakeholders from transit agencies, cities, advocates, and mobility service providers — was formed to coordinate implementation efforts.

## STRATEGY 6: IMPROVE MOBILITY FOR VETERANS

### Veterans'-Specific Mobility Services

Some of veterans' mobility needs will be addressed by other strategies recommended in this plan — such as creating a more seamless transit experience or means-based fare programs. However, additional mobility services could address the affordability and access needs unique to veterans in the Bay Area, such as implementing new services for medical long-distance trips.

<sup>44</sup> Urban Mobility in a Digital Age. Los Angeles, CA: City of Los Angeles, 2016

### Serve Long-Distance Medical Trips for Veterans and Local Veterans' Shuttles

MTC can also support the development of new services designed specifically for veterans. While some of the Bay Area's veteran population is concentrated close to VA Hospitals and other veteran-specific health clinics, many parts of the region are more rural in nature, and veterans must travel long distances to reach the care they need. Other regions have set up frequent long-distance coach bus services to connect veterans with these health centers. In other locations, transit agencies have designed fixed-route shuttles around the specific needs of veterans (based on their home locations and health clinics or community centers). Volunteer driver programs have had difficulty serving these types of trips due to constraints in recruiting veteran drivers.

#### Best Practice Example:

- **Lufkin-Houston Veterans Bus:** Former U.S. Congressman Charlie Wilson was instrumental in obtaining private funding for the launch of a coach bus service between Lufkin and Houston — where the VA has a large medical center. The vehicle was funded by a local foundation that coordinated volunteers to distribute coffee and donuts to passengers each morning. The program, administered by the Brazos Transit District and operated by Coach America, transports 35 to 40 veterans every day. Since the launch of the service, additional "last-mile" shuttles have been initiated to connect people to Lufkin from smaller communities up to 40 miles away. Angelina County determined that a volunteer driver program was infeasible for this need given the distance and scale of demand.
- **Monterey-Salinas Transit (MST) Veterans Shuttle:** In May 2017, MST launched a new fixed-route service designed to meet the local mobility needs of veterans. A new VA clinic will open in August, and the route serves that destination as well as an integrated health facility and an area with veteran residential density.

### Create a Forum for Veterans to Advise MTC on Mobility Needs

This plan recognizes that there are further opportunities to address veterans' mobility needs in the Bay Area. In some cases, the needs are regional in nature; in others, there are specific local gaps. However, more dialogue is needed to refine strategies to meet Bay Area veterans' needs. MTC can coordinate forums for this dialogue to take place.



# RECOMMENDATIONS TIMELINE

This section outlines the recommended timeline for the immediate and longer-term steps required for MTC, CMAs, transit providers, and human services providers to adopt and implement this plan. **Figure 5.3** lists each component of the previously listed strategies. The recommended timeline for implementing each recommendation is included in the figure. The timeline categorizes the recommendations into the following periods: **Keep the Momentum (next 6-12 months)**, **Implement the Basics (next 1-2 years)**, and **Build Out the Program (next 3-5 years)**. Each recommendation is also marked with the anticipated level of effort required for implementation. These are categorized as minimal, moderate, and high.

**Figure 5.3** Implementation Timeline

Strategy	Recommendation	Timeline	Level of Effort
<b>STRATEGY 1: COUNTY-BASED MOBILITY MANAGEMENT</b>	Recognize Mobility Management as a Regional Priority	Keep the Momentum (next 6-12 months)	Minimal
	Set Schedule for Coordination Summits and Assess Opportunities to Incentivize Coordination	Keep the Momentum (next 6-12 months)	Minimal
	Identify Sustainable Sources of Flexible Funding for County-Based Mobility Management	Implement the Basics (next 1-2 years)	Moderate
	Plan and Implement Mobility Management Technical Assistance Program	Implement the Basics (next 1-2 years)	High
	Implement Regular Coordination Summits	Implement the Basics	Moderate
	Create Consolidated Transportation Service Agencies and Seek Funding for County-Based Mobility Manager Positions	Build Out the Program (next 3-5 years)	High
<b>STRATEGY 2: IMPROVE PARATRANSIT</b>	Begin Policy Discussion around Medi-Cal Cost Recovery Program for the Bay Area	Keep the Momentum (next 6-12 months)	Moderate
	Convene Task Force to Assist in Implementation of In-Person Eligibility	Implement the Basics (next 1-2 years)	Moderate
	Take Opportunities to Expand Subsidized Same-Day Trip Programs	Implement the Basics (next 1-2 years)	Moderate
	Implement Medi-Cal Cost Recovery Program	Build Out the Program (next 3-5 years)	High
<b>STRATEGY 3: PROVIDE MOBILITY SOLUTIONS TO SUBURBAN AREAS</b>	Define the Channels to Provide Shared Mobility Technical Assistance	Keep the Momentum (next 6-12 months)	Moderate
	Fund Low-Income Vehicle Programs	Implement the Basics (next 1-2 years)	High
	Prioritize One-Click Systems	Build Out the Program (next 3-5 years)	High
<b>STRATEGY 4: MEANS BASED FARE*</b>	Build Consensus for Implementation of Means-Based Fares	Keep the Momentum (next 6-12 months)	High
<b>STRATEGY 5: SHARED AND FUTURE MOBILITY OPPORTUNITIES*</b>	Advocate for Equity in Shared and Autonomous Mobility Services	Implement the Basics (next 1-2 years)	Moderate
<b>STRATEGY 6: IMPROVE MOBILITY FOR VETERANS</b>	Create a Forum for Veterans' Mobility Needs	Implement the Basics (next 1-2 years)	Moderate
	Identify Funding for Veterans'-Specific Mobility Services	Build Out the Program (next 3-5 years)	High

\*Pending Commission Direction

## PROGRESS REPORTING

Prior to the next Coordinated Plan update, MTC should assess progress made to implement the strategies called for in this Coordinated Plan. This assessment should include a report back to the members of this plan's Technical Advisory Committee and an update to the Commission. The evaluation will provide valuable input to the Coordinated Plan's next update, and should not wait until the next planning phase commences. Rather, a bi-annual progress reporting schedule is recommended.

# APPENDIX A

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## Demographics

Figure A.1 Existing 2014 Population Breakdown

Subject	Alameda County		Contra Costa County		Marin County		Napa County		San Francisco County	
	Total	65 years and over	Total	65 years and over	Total	65 years and over	Total	65 years and over	Total	65 years and over
<b>Total population</b>	1,610,921	200,925	1,111,339	157,940	256,802	46,638	139,253	22,271	852,469	122,906
<b>% over 65</b>	12.5%		13.0%		16.0%		16.0%		14.4%	
<b>% with disability</b>	9.6%	33.1%	11.0%	33.2%	9.0%	25.6%	11.2%	35.4%	10.4%	34.8%
<b>% below 200% of poverty level (2015)</b>	25.2%	26.7%	24.3%	22.2%	19.1%	16.6%	27.9%	21.4%	25.3%	35.8%
<b>% population without vehicle</b>	3.5%	10.1%	2.1%	6.4%	2.3%	7.1%	1.9%	6.8%	13.0%	24.2%
<b>% population who are veterans</b>	3.3%	13.6%	4.4%	17.9%	4.7%	17.6%	5.4%	22.0%	2.8%	11.0%

SOURCE: 2014 American Community Survey 5-Year Estimate S0101; 2014 American Community Survey 1-Year Estimate S0103; 2015 American Community Survey 1 year Estimate B17002; 2015 American Community Survey 5-year Estimate B17024; 2014 American Community Survey 3 year Estimate B25045; 2014 American Community Survey 1 year Estimate S0103; 2014 American Community Survey 1-Year Estimate S0103

Figure A.1 Existing 2014 Population Breakdown

Subject	San Mateo County		Santa Clara County		Solano County		Sonoma County		Region	
	Total	65 years and over	Total	65 years and over	Total	65 years and over	Total	65 years and over	Total	65 years and over
<b>Total population</b>	758,581	111,339	1,894,605	231,475	421,624	52,311	500,292	82,536	7,545,886	1,028,341
<b>% over 65</b>	14.0%		12.2%		12.4%		16.5%		13.6%	
<b>% with disability</b>	8.7%	30.7%	7.6%	33.5%	11.1%	36.4%	12.0%	32.1%	9.6%	32.9%
<b>% below 200% of poverty level (2015)</b>	20.6%	21.0%	20.7%	24.4%	30.2%	24.1%	28.3%	22.6%	23.8%	24.9%
<b>% population without vehicle</b>	1.9%	6.4%	1.7%	6.6%	1.8%	5.3%	2.1%	6.6%	3.5%	9.3%
<b>% population who are veterans</b>	3.2%	13.2%	2.9%	13.9%	7.5%	25.8%	5.7%	21.2%	3.8%	15.6%

Figure A.2 Veteran Statistics

County	Number of Veterans	% of Total Population who are Veterans	% of Veterans who Live in Poverty*	% of Veterans who are Disabled
<b>Alameda</b>	53,888	4%	7%	29%
<b>Contra Costa</b>	12,092	6%	5%	31%
<b>Marin</b>	23,875	6%	4%	26%
<b>Napa</b>	55,533	7%	2%	29%
<b>San Francisco</b>	31,694	3%	6%	28%
<b>San Mateo</b>	28,341	4%	3%	23%
<b>Santa Clara</b>	286,013	4%	6%	27%
<b>Solano</b>	53,888	10%	4%	29%
<b>Sonoma</b>	12,092	7%	8%	29%
<b>Region</b>	23,875	5%	6%	28%

\*Living below National Poverty Level

SOURCE: American Community Survey 1 year estimates 2000-2014

# APPENDIX B

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## List of Feedback Themes

**Figure B.1** List of Feedback Received in Order of Frequency

Themes	Comments Received
Spatial Gap	31
Fares	28
Information and I&R Services	26
Funding	22
Healthcare Access	20
Temporal	19
N/A	15
Ped/Bike	14
Taxi/TNC - Accessibility	12
Coordination & Cooperation	10
Public Transit - Accessibility	9
Transfers	8
Fare media	6
Emerging mobility services	6
Housing & Land Use	6
Public Transit - Amenities	6
Planning/Study	6
Eligibility	5
Travel Training	5
Transit Access	5
Non-ADA Paratransit	5
Volunteer Driver	5
Congestion	5
Mobility Management	5
Drivers	4
Auto access	3
Level of Service	3

Themes	Comments Received
Limited volunteers	3
Capital	2
Efficiency	2
Transportation Options	2
Regulation	2
Technology	2
Language	2
Job Access	2
ADA Paratransit	2
Public Transit - Access	2
On-time Performance	2
Same-Day Transportation	2
Resource sharing	2
Frequency	1
Safety	1
Mission creep	1
Senior Sensitivity	1
Enforcement	1
Providers	1
Quality of Service	1
Station Access	1
Constituency gaps	1
Equity	1
Youth	1
Fleet	1
Community connection	1
<b>Grand Total</b>	<b>329</b>



# APPENDIX C

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## List of Feedback Comments

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Solutions	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Solutions	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	

	Theme	Comment
	Spatial Gap	Since the study was last done, many seniors have moved into older adult communities on the Coastsides, so outreach to educate about available transit resources to seniors in that area is greatly needed.
	Spatial Gap	East Palo does not have a city-wide shuttle service at this time.
	Spatial Gap	More access to the College of San Mateo is needed. There is no direct service to Canada and other local colleges from the Coastsides.
	Spatial Gap	Demand-response service is available to residents of Pescadero, La Honda, and other Coastsides communities, but more is needed.
	Ped/Bike	Heller Street in Redwood City does not have curb cuts at many points. In general the sidewalks in Redwood City are in poor condition
	Ped/Bike	At Perimeter Road at CSM, there are no curb cuts to cross the road.
	Ped/Bike	Many cities in San Mateo County allow people to park on rolled curbs (sidewalks), blocking access to pedestrians.
	Public Transit - Amenities	The bus stop at El Camino and Trousdale in Burlingame is poorly lit and blocked by overgrown vegetation.
	Ped/Bike	In Burlingame non-intersection crosswalks are being identified with extra signs and lights.
	Ped/Bike	Many sidewalks in the county are uneven and inaccessible to individuals using mobility devices.
	Public Transit - Amenities	Bus shelters at Daly City Kaiser (395 Hickey Blvd.) have been missing.
	Ped/Bike	Audible crossing signal from El Camino is needed.
	Level of Service	Some people with disabilities need personalized assistance (escort service) that is not available on Redi-Wheels. *This statement may mean either door-to-door (which is not relevant as it is required under the ADA) or a ride escort.
	Transfers	Single vehicle (one seat ride) paratransit from the county of origin to other parts of the Bay Area would be helpful.
	Level of Service	Courtesy stops or ride wait (for pharmacy trips, etc.) should be available
	Non-ADA Paratransit	Taxi discount voucher programs (subsidized taxi).
	Taxi/TNC - Accessibility	There is a strong need for accessible taxis in the County
	Ped/Bike	Some portions of the Coastal Trail are in poor repair and inaccessible to individuals with mobility issues.
	Information and I&R Services	In Contra Costa County, resources are available at the DMV for individuals who are no longer able to drive.
	Information and I&R Services	511 information service is useful for individuals who use paratransit, as well.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Solutions	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Solutions	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Solutions	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Solutions	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Solutions	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Solutions	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Solutions	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	N/A	
6/13/2016	San Mateo County Paratransit Coordinating Council	San Mateo	Gaps	

	Theme	Comment
	Information and I&R Services	Information and referral service agencies like HART want to have more information about resources to further explain information to their clients. Information about connecting from San Mateo County to San Francisco is needed.
	Information and I&R Services	In Contra Costa County, resources are available at the DMV for individuals who are no longer able to drive.
	Information and I&R Services	The NBC has discussed the need for a Transit Information Hotline. Jean Conger presented information about this developing resource in her presentation to the PAL Committee at the May meeting. Programs at SamTrans include Veterans Program, Transit Mobil.
	Information and I&R Services	Many low-income individuals lack Internet-access. A suggestion was made that there be transportation information kiosks in shopping centers.
	Fares	SamTrans said that the price of Day Passes for SamTrans have been lowered to make them more affordable for families, since purchasing individual fares for families can be costly.
	Language	Alternative language service is available for fixed-route and paratransit service. SamTrans Customer Service use the AT & T language line to assist customers who do not speak English as a first language.
	Information and I&R Services	There are no direct trips from Pacifica to the SF VA Center. The American Cancer Society, HART, and the PJCC do not serve residents of Pacifica. All passengers going to the VA are sent to a transfer point in San Bruno. It was discussed that information should be provided to clients in this situation about temporary paratransit certification.
	Eligibility	The criteria for individuals to qualify for Lifeline Assistance make it hard for people who may be slightly above the Medi-Cal level but still can't afford transit. A pilot program with Lyft is being conducted at Little House, but funding is complicated.
	Healthcare Access	East Palo Alto individuals do not have direct, fixed-route service to San Mateo Medical Center. A transfer and drop off is located at El Camino Real and 37th Avenue, but patients are still required to walk the remaining distance up a hill to the SM Medical Center (County Hospital). The cost of this trip and transfers is a great hardship for low-income individuals. Craig added that getting to this medical facility is a hardship for many people because of the distance to the stop and the terrain.
	Public Transit - Amenities	A walk of two blocks is needed to get from the closest bus stop in Menlo Park to the Ravenswood Family Health Clinic. The bus stop lacks a bench, shelter, and busy cross-traffic makes using fixed-route service from the clinic very difficult.
	Healthcare Access	Health Plan of San Mateo County patients lack fixed-route service to that location, which is a significant hardship for people without cars. The Genentec option does not work well for them.
	N/A	Someone should reach out to the Caltrain and SamTrans Accessibility Advisory Committees for input on the MTC Coordination Study.
	Enforcement	Cars parking at bus stops affect the access for seniors and people with disabilities. People have to board and disembark in the street. If ramps are used to board buses, the slope is steeper if the ramp goes to the street, rather than to the curb. The parked cars also affect visibility, making it harder for Bus Operators to see people waiting at bus stops. Some customers would benefit from curb cuts at bus stops, especially in cases where the bus is not able to fully access the curb due to parked cars or other obstructions. The group also agreed that cities should be encouraged to lengthen less than full-size red zones at bus stops, since some marked bus stops are not actually large enough to be served easily by a 40-foot bus.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Solutions	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Contra Costa Paratransit Coordinating Council	Contra Costa	Gaps	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Gaps	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Gaps	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Gaps	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Gaps	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Gaps	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Gaps	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Gaps	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Gaps	

	Theme	Comment
	Funding	There is a concern with rising costs that Transit providers may roll back paratransit service to strict ADA rules, excluding seniors.
	Mobility Management	Lack of knowledge on the part of transit operators of other accessible services. They don't refer riders who don't qualify for paratransit.
	Eligibility	Conditional eligibility is an important aspect of ADA paratransit.
	Mobility Management	County level documentation doesn't address travel needs that go outside county lines
	Mobility Management	Paratransit service should go beyond requirements of ADA.
	Transit Access	Fixed-route bus stops are often not accessible or safe for on- and off-boarding with wheelchairs.
	Taxi/TNC - Accessibility	Not enough accessible taxis.
	Taxi/TNC - Accessibility	TNCs don't provide wheelchair service.
	Mobility Management	Paratransit should be divorced from transit service provision.
	Temporal	Paratransit doesn't serve Sunday religious services and weekends.
	Temporal	Paratransit service hours and locations are too restrictive.
	Funding	Not enough funding for services beyond ADA.
	Funding	Existing funding doesn't allow for everyone to be served.
	Spatial Gap	Access to and from West Marin (including communities such as Bolinas, Point Reyes Station and Nicasio) is difficult, with limited or no public transit available.
	Spatial Gap	There is no transportation or paratransit service in the Pt. San Pedro area.
	Temporal	There is a shuttle service called Stagecoach in West Marin, but provides limited service.
	Temporal	Temporal remains the same as in the 2013 Coordinated Plan. New information provided that weekend service stops at 8:00 pm so there are then no other transportation alternatives.
	Temporal	In Tiburon, transit service ends at 7:30 pm
	Taxi/TNC - Accessibility	Marin needs accessible taxi service. Taxi service in Novato is no longer serving Novato as North Bay Taxi Company shut down.
	ADA Paratransit	Currently, 40% of paratransit service needs are being met.
	ADA Paratransit	Between 2 and 3 p.m. there are service capacity issues. Trips are provided but timing of trips can be impacted.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Solutions	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Gaps	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Gaps	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Gaps	
7/18/2016	Marin Paratransit Coordinating Council	Marin	Gaps	
7/7/2016	Napa Paratransit Coordinating Council	Napa	Gaps	
7/7/2016	Napa Paratransit Coordinating Council	Napa	Gaps	
7/7/2016	Napa Paratransit Coordinating Council	Napa	Solutions	
7/7/2016	Napa Paratransit Coordinating Council	Napa	Gaps	
7/7/2016	Napa Paratransit Coordinating Council	Napa	Gaps	
7/7/2016	Napa Paratransit Coordinating Council	Napa	Gaps	
7/7/2016	Napa Paratransit Coordinating Council	Napa	Gaps	
7/7/2016	Napa Paratransit Coordinating Council	Napa	Solutions	
7/7/2016	Napa Paratransit Coordinating Council	Napa	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Solutions	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	



	Theme	Comment
	Public Transit - Access	Group indicated some upgrades have been made due to SMART train.
	Ped/Bike	Topography causes accessibility issues for seniors and persons with disabilities (valley/hills are challenging).
	Ped/Bike	Mobile home parks also currently don't have sidewalks.
	Housing & Land Use	Many residents age in place in inaccessible neighborhoods and don't have options to move into more affordable housing.
	Non-ADA Paratransit	Two service providers were mentioned as no longer being in business: Elton's and On the Move.
	Healthcare Access	Insufficient transit service outside the City of Napa, particularly Lake Berryessa, Middletown and Pope Valley. Also, St. Helena to Kaiser Hospital does not have service and there is no form of transit East of St. Helena. Note: Calistoga just put in a shuttle bus service from Santa Rosa to Calistoga due to two large developments. Interest by these employers to provide to employees. \$18 per rider, seems expensive.
	Healthcare Access	Not enough paratransit and fixed transit for people in nursing homes trying to get to doctors. If person does not qualify (ADA) there is insufficient transit service and taxi services may cost up to \$100 per trip. Person may take ambulance instead, very costly.
	Non-ADA Paratransit	Taxi Scrip provides seniors 65 or older, or ADA certified or disabled persons with 50% discount booklets for taxi service in the City of Napa, during off-hours of the Vine fixed-route transit or if the individual does not feel well enough to take the bus during regular hours. Would like to extend this service beyond City of Napa.
	Temporal	There is limited weekend transit service after 6pm. The only services available are in St. Helena and Calistoga through the Chamber of Commerce, due to tourism demand.
	Volunteer Driver	Volunteer Driver program - mileage reimbursement for drivers. Restricted to medical necessity rides. Have to be in rural area with no transit access whatsoever. Honor system. Molly's Angels also provides volunteer's to and from medical appointments, shopping, etc. in Napa Valley.
	Volunteer Driver	Reimbursement given to driver. Should there be a cap on subsidy per year?
	Healthcare Access	There is a new Health & Human Services campus and staff are reviewing providing a shuttle program for employees.
	Ped/Bike	Bicycle & Ped Plans. Sidewalks don't necessarily exist where needed. Difficult for persons with disabilities and some seniors. NVTA staff indicated they will be embarking on a Bus Stop Improvement Plan as new Planning staff are hired soon. In addition, NVTA staff will embark on a comprehensive operational analysis to review every transit service they operate. They will see how senior/low-income persons use fixed-route transit.
	Eligibility	Sonoma county transit doing in house eligibility- Petaluma and city bus on same contract.
	Public Transit - Accessibility	Bathroom access at transit centers crucial for people with disabilities.
	Public Transit - Accessibility	More wheelchair positions on fixed-route - flip seats.
	Taxi/TNC - Accessibility	Taxis - accessible and available.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Gaps	
7/19/2016	Sonoma Paratransit Coordinating Council	Sonoma	Solutions	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Gaps	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Gaps	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Solutions	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Solutions	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Gaps	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Gaps	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Gaps	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Gaps	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Gaps	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Gaps	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Gaps	

	Theme	Comment
	Taxi/TNC - Accessibility	Need smart phone for TNC vehicles.
	Taxi/TNC - Accessibility	TNC vehicles not accessible.
	Information and I&R Services	Info kiosks should provide real time status info for bus lines.
	Information and I&R Services	511 not working for city bus.
	Public Transit - Accessibility	Sidewalks and places to sit at bus stops.
	Ped/Bike	Auto countdown signals are preferable for people who are disabled.
	Ped/Bike	Longer time to cross streets.
	Funding	Not enough funding for all the needs.
	Ped/Bike	Pedestrian improvements - even streets and curb cuts.
	Transit Access	Complete streets philosophy should be adopted everywhere - move people all people not cars.
	Temporal	There are limited times you can travel on transit in the county.
	Spatial Gap	Disabled transportation to Travis is limited.
	Coordination & Cooperation	We need a countywide vehicle share program for non-profits to use paratransit vehicles.
	Temporal	There needs to be a coordinated system to provide after-hours transportation for people with disabilities.
	Fares	Transit is too costly.
	Spatial Gap	There is no direct service between some cities in the county.
	Transfers	Transfers on paratransit are difficult and expensive.
	Funding	There is not enough money for solutions.
	Funding	Funding that is available is limited in its eligibility.
	Temporal	Reverse commute from SF is difficult - no Owl service.
	Temporal	Paratransit should be extended beyond regular service hours.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Gaps	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Solutions	
7/21/2016	Solano Paratransit Coordinating Council	Solano	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Gaps	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Gaps	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Gaps	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Gaps	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Gaps	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Gaps	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Gaps	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Gaps	

	Theme	Comment
	Taxi/TNC - Accessibility	There are agencies in the county who have accessible vehicles that are not being used after hours -- should be coordinated with other programs.
	Coordination & Cooperation	Between coordination is needed for travel between systems out of the county.
	Transit Access	It is great there are passenger loaders at busy stations during rush hour. This helps people in wheelchairs load faster and also helps with people who have bikes.
	Temporal	Public transit hours should be extended so that paratransit can also be extended
	Spatial Gap	East county is isolated. Hardly any way to get over the hill in transit.
	Volunteer Driver	Volunteer driver programs are important.
	Funding	Match requirements are high for non-profits.
	Spatial Gap	AC Transit routes should go more into the hills so that paratransit can go into the hills.
	Travel Training	Travel training programs are important.
	Drivers	Driver training on how to deal with people with disabilities. Sensitivity and loading wheelchairs. Sensitivity for all disabilities.
	Funding	Not enough funding for these programs.
	Spatial Gap	Paratransit Tri-Valley to inner East Bay should be easier.
	Funding	Vehicle license fee for roadmap!
	Information and I&R Services	When is my bus or vehicle coming? Notifications are great! Don't have to wait outside
	Information and I&R Services	Would be nice to know when elevator is down at BART
	Transit Access	Bathrooms should be cleaner
	Fares	Fare structure for East Bay Paratransit is confusing. Should be simpler.
	Spatial Gap	Land use planning should be a part of transportation planning.
	Spatial Gap	More housing in Emeryville. Will transit serve it?
	Fares	Clipper type card for visitors who have disabilities to the region.
	Fares	Transit is too costly. Need means-based testing for ADA and non-ADA paratransit.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Gaps	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
7/25/2016	Alameda Paratransit Advisory and Planning Committee & Paratransit Technical Advisory Committee	Alameda	Solutions	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Gaps	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Gaps	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Gaps	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Solutions	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Gaps	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Gaps	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Gaps	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Solutions	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Solutions	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Solutions	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Solutions	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Solutions	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Gaps	

	Theme	Comment
	Spatial Gap	Better transit and paratransit connections for the Tri-Valley and the East Bay.
	Travel Training	Need more travel training services to direct people to public transit as opposed to paratransit, when possible.
	Information and I&R Services	Better communication from transportation providers, including ADA paratransit, on arrival times so passengers can be prepared.
	Information and I&R Services	Better standby process for ADA paratransit users.
	Station Access	Improve BART station elevators; need regular maintenance and cleaning
	Fare media	Universal senior and disabled fares and payment mediums across fixed-route transit
	Housing & Land Use	More coordination and planning around transportation, housing and other land use issues
	Fare media	Better access to public transit fare mediums for seniors and people disabilities visiting the area
	Fares	Transit is not affordable for a lot of people
	Congestion	Congestion is a major problem in SF. It makes it impossible for transit, paratransit and taxis to get around in a timely manner.
	Congestion	TNCs are responsible for uptick in congestion.
	Same-Day Transportation	Rideshare apps for seniors/low-income people to use to lower cost of taxis (Arro and Bandwagon).
	Congestion	Double parking makes it difficult for transit, paratransit and taxis to get around in a timely manner.
	Information and I&R Services	Automated voice information on transit should be louder.
	Information and I&R Services	Automated voice information on transit should announce that seats are reserved for seniors and people with disabilities.
	Frequency	Increase transit service on certain lines during tourist season.
	Information and I&R Services	A pamphlet about seats being reserved for seniors and people with disabilities should be provided with Muni tokens or short-term passes.
	Drivers	San Francisco should provide a universal license for drivers of taxis and paratransit.
	Congestion	There should be more enforcement for red lanes and the city should clarify that TNCs are private vehicles, not commercial vehicles.
	Congestion	Paratransit vehicles should be considered MUNI vehicles and should be able to turn left where buses are able to turn
	Healthcare access	Dialysis transportation continues to be a tremendous need. A more flexible transportation option, other than paratransit should be made available.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Solutions	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Gaps	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Solutions	
8/10/2016	San Francisco Paratransit Coordinating Council	San Francisco	Solutions	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Gaps	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Gaps	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Solutions	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Solutions	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Gaps	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Gaps	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Gaps	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Gaps	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Solutions	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Gaps	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Gaps	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Gaps	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Gaps	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Gaps	
10/12/2016	VTA Committee for Transit Accessibility	Santa Clara	Gaps	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Gaps	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Gaps	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Gaps	



	Theme	Comment
	Information and I&R Services	Electronic stop information signs are at the front of the bus, but should also be in the middle at the back of the bus.
	Transfers	Transfers into San Mateo County continue to be very difficult. SFMTA and SamTrans need a cost sharing agreement.
	Information and I&R Services	Elevator outage information should be on the 511 system or some other way.
	Fare media	It would be great if taxis and paratransit could take Clipper.
	Temporal	Weekend fixed-route service is lacking.
	Healthcare access	NEMT is lacking.
	Spatial Gap	Outreach provides crucial gap services.
	Fares	Voucher and subsidy programs are needed for low-income, seniors and people with disabilities.
	Fares	Transit, paratransit and same day paratransit service is very expensive
	Fares	Same day paratransit services at VTA is 4x the regular fare. This is too expensive for most people in an emergency.
	Information and I&R Services	Privately operated, but publically funded "Google" shuttles are open to the public. It is difficult to understand which shuttles are open to the public.
	Funding	It is difficult to access medical reimbursement funding for NEMT.
	Healthcare access	Hospital discharge plans used to be coordinated. A guaranteed ride home program with taxi should be provided.
	Taxi/TNC - Accessibility	There is a great need for accessible taxis.
	Healthcare access	VTA should serve all the hospitals and schools.
	Taxi/TNC - Accessibility	There is a need for accessible vehicles that can accommodate large mobility devices.
	Spatial Gap	Transit service in south county is lacking.
	Transfers	Inter-county paratransit transfers are difficult. Currently VTA has agreements with SamTrans and East Bay Paratransit.
	Healthcare access	Number one request for rides is medical appointments.
	Spatial Gap	Can't address work/commute trips.
	Spatial Gap	Distances between homes and medical centers is becoming greater (particularly in Solano County).

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Gaps	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Gaps	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Gaps	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Gaps	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Gaps	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Solutions	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Solutions	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Gaps	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Gaps	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Solutions	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Gaps	
6/29/2016	Faith in Action (Solano), Executive Director	Solano	Solutions	
7/7/2016	Home First (Santa Clara)	Santa Clara	Gaps	
7/7/2016	Home First (Santa Clara)	Santa Clara	Solutions	
7/7/2016	Home First (Santa Clara)	Santa Clara	Solutions	
7/7/2016	Home First (Santa Clara)	Santa Clara	Gaps	
7/7/2016	Home First (Santa Clara)	Santa Clara	Gaps	
7/7/2016	Home First (Santa Clara)	Santa Clara	Gaps	
7/7/2016	Home First (Santa Clara)	Santa Clara	Gaps	
7/7/2016	Home First (Santa Clara)	Santa Clara	Solutions	
7/7/2016	Home First (Santa Clara)	Santa Clara	Solutions	

	Theme	Comment
	Limited volunteers	Don't have volunteer driver capacity to say yes to all trip requests (number of denials is rising, forcing seniors to hold onto their licenses longer than would be safe).
	Healthcare access	Veterans at Travis Air Force Base being transported to Martinez for medical; more referrals to Sacramento.
	Healthcare access	Some seniors originally moved to Solano County because of the medical coverage.
	Healthcare access	Limited funding sources available for their program; trying to get hospitals to share some of the costs (some have community benefit funds).
	Healthcare access	Unable to meet weekly need for dialysis patients (particularly early morning or repeat trips).
	Coordination & Cooperation	STA contracts with Faith in Action.
	Resource sharing	Having a shared fleet of vehicles that volunteers could use would be helpful to them; cost of replacing old fleet is prohibitive.
	Funding	5310 funding delay (2 years) is too long.
	Funding	TDA funding is limited because of the 10% farebox recovery requirement; they're dealing with low-income seniors; want to be able to count the volunteer labor as revenue.
	Limited volunteers	Currently, they don't reimburse drivers for mileage; if they could, this might help increase pool of drivers.
	Limited volunteers	Last surviving volunteer program in Solano County; must shoulder all demand.
	Funding	SolTrans was looking at an FTA Mobility on Demand Sandbox grant for Uber-like app, but didn't win.
	Mission creep	They are the largest homes shelter in the county (250 beds/night; 80 of those are veterans) -- primary mission is to get people in homes quickly, but they are distracted with need to assist in transportation.
	Fares	They offer financial assistance for mechanical repairs, bus tokens/passes, sometimes taxi fares.
	Fleet	With a fleet of 8 vehicles, they provide shuttle service to key points in the area (social security office, VA office, Valley Medical Center, nearby bus/transit centers).
	Funding	Biggest expenses are bus passes and maintenance of their fleet.
	Funding	Majority of funding through public grants (85%), of which 70% is from county; limited private investment.
	Transportation Options	Only 10% of shelter individuals have a vehicle.
	Regulation	Shelter has a Conditional Use Permit with the City that requires them to be able to transport clients out of the area when the shelter is not open/available (they must have transportation services available).
	Regulation	Working to address the Conditional Use Permit (CUP) requirement to meet everyone's needs.
	Resource sharing	Resource sharing with other social service mobility providers hasn't been explored, but think there is opportunity within the County.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
7/11/2016	Contra Costa Employment & Human Services, Transportation Services Specialist	Contra Costa	Gaps	
7/11/2016	Contra Costa Employment & Human Services, Transportation Services Specialist	Contra Costa	Gaps	
7/11/2016	Contra Costa Employment & Human Services, Transportation Services Specialist	Contra Costa	Gaps	
7/11/2016	Contra Costa Employment & Human Services, Transportation Services Specialist	Contra Costa	Gaps	
7/11/2016	Contra Costa Employment & Human Services, Transportation Services Specialist	Contra Costa	Gaps	
7/11/2016	Contra Costa Employment & Human Services, Transportation Services Specialist	Contra Costa	Gaps	
7/11/2016	Contra Costa Employment & Human Services, Transportation Services Specialist	Contra Costa	Gaps	
7/11/2016	Contra Costa Employment & Human Services, Transportation Services Specialist	Contra Costa	Gaps	
7/11/2016	Contra Costa Employment & Human Services, Transportation Services Specialist	Contra Costa	Gaps	
7/11/2016	Contra Costa Employment & Human Services, Transportation Services Specialist	Contra Costa	Gaps	
7/6/2016	Cycles of Change, Advisor and Former Co-Director	Alameda	Gaps	
7/6/2016	Cycles of Change, Advisor and Former Co-Director	Alameda	Gaps	
7/6/2016	Cycles of Change, Advisor and Former Co-Director	Alameda	Gaps	
7/6/2016	Cycles of Change, Advisor and Former Co-Director	Alameda	Gaps	
7/6/2016	Cycles of Change, Advisor and Former Co-Director	Alameda	Gaps	
7/6/2016	Cycles of Change, Advisor and Former Co-Director	Alameda	Gaps	
7/6/2016	Cycles of Change, Advisor and Former Co-Director	Alameda	Solutions	
7/11/2016	North Bay Organizing Project, Executive Director (Sonoma)	Sonoma	Gaps	
7/11/2016	North Bay Organizing Project, Executive Director (Sonoma)	Sonoma	Gaps	
7/11/2016	North Bay Organizing Project, Executive Director (Sonoma)	Sonoma	Gaps	
7/11/2016	North Bay Organizing Project, Executive Director (Sonoma)	Sonoma	Gaps	

	Theme	Comment
	Fares	2012-2016 Area Agency on Aging Plan found that financial difficulty outweighs all other concerns about transportation in Contra Costa.
	Information and I&R Services	2012-2016 Area Agency on Aging Plan found that knowledge of services available is low.
	Constituency gaps	Department of Employment & Human Services is very constrained in who they can serve (due to funding): low-income youth, adults, and seniors.
	Job Access	Provide a door-to-door taxi service to assist job applicants in getting to interviews and first two weeks of job (20 free rides through CalWorks), but still have difficulty accessing work thereafter - uses MTC's LIFT funding (main source of program funding with 50% match).
	Temporal	Time spent on transit is the biggest barrier to getting employment and staying employed, particularly for low-income parents who must chain/link trips.
	Housing & Land Use	Affordable housing mainly in transit sparse areas.
	Transportation Options	Without transit options, constituents also lack personal vehicles; EHS offers a self-funding auto loan program.
	Fares	Cost of local bus is not prohibitive, but cost of BART is for this group of people.
	Funding	Funding gaps - primary through grants; expectation that successful programs will become self-sufficient after the grant period.
	Job access	Lack of access to transportation options within Oakland for job access, targeted to low-income individuals.
	Information and I&R Services	Lack of knowledge of how to bicycle, or how to combine bicycling with transit.
	Housing & Land Use	Focus on populations within 2-miles of BART stations, but housing often costly in these zones.
	Youth	Transportation gaps also exist for low-income youth; they would like to work more with schools and neighborhood-based community centers to reach parents and children at the same time (funding gaps for parental population; more funding available for low-income youth).
	Capital	Lack funding to purchase vehicles for hauling bicycles.
	Capital	Lack funding to purchase storage space for bicycle donations.
	Planning/Study	Want additional funding to do market analysis and planning to expand their model, create Neighborhood Bicycle Centers.
	Funding	Lack of funding for free transit for students pilot, advocated for by student groups at Sonoma State (couldn't identify funding to make up the farebox recovery requirement).
	Fares	Transit too expensive for students.
	Spatial Gap	Transit doesn't go to/from where students need to go (affordable housing far from transit).
	Spatial Gap	Transit doesn't serve the needs of seniors who are housed in centers far from transit or need access to services far from transit.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
9/1/2016	West Contra Costa Transportation Advisory Committee, Project Manager	Contra Costa	Gaps	
9/1/2016	West Contra Costa Transportation Advisory Committee, Project Manager	Contra Costa	Solutions	
9/1/2016	West Contra Costa Transportation Advisory Committee, Project Manager	Contra Costa	Solutions	
9/1/2016	West Contra Costa Transportation Advisory Committee, Project Manager	Contra Costa	Solutions	
9/1/2016	West Contra Costa Transportation Advisory Committee, Project Manager	Contra Costa	Gaps	
7/11/2016	Bay Area Partnership Accessibility Committee	Regional	Gaps	
7/11/2016	Bay Area Partnership Accessibility Committee	Regional	Solutions	
7/11/2016	Bay Area Partnership Accessibility Committee	Regional	Solutions	
7/11/2016	Bay Area Partnership Accessibility Committee	Regional	Gaps	
7/11/2016	Bay Area Partnership Accessibility Committee	Regional	Solutions	
7/11/2016	Bay Area Partnership Accessibility Committee	Regional	Solutions	
7/11/2016	Bay Area Partnership Accessibility Committee	Regional	Solutions	
7/11/2016	Bay Area Partnership Accessibility Committee	Regional	Solutions	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Gaps	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Gaps	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Solutions	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Gaps	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Gaps	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Gaps	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Solutions	

	Theme	Comment
	Spatial Gap	Western Contra Costa needs Greater connectivity from West County to destinations in Martinez, Berkeley and Oakland, especially for medical appointments.
	Information and I&R Services	Western Contra Costa County needs one stop center for communicating all transportation options for senior, disabled and low income residents in the County.
	Information and I&R Services	Western Contra Costa County needs enhanced wayfinding signage in and around transit hubs pertaining to the needs of seniors and disabled residents - where to pick up a paratransit vehicle, etc.
	Travel Training	Western Contra Costa County needs training at senior centers on how to use app based services like Lyft and Uber.
	Senior Sensitivity	Western Contra Costa County has a need for services to assist the frail elderly and disabled by noting the need for door thru door services and attendant or companion support services.
	Healthcare access	NEMT, specifically dialysis trips continue to be a huge need.
	Funding	Is it possible to cut Caltrans out of the 5310 process for FTA direct recipients?
	Coordination & Cooperation	Regional centers should be required to cooperate with transit operators.
	Fares	Regional center reimbursement rates are very low so providers don't want to contract with them.
	Coordination & Cooperation	30% of BART paratransit service is for regional centers - we need a project together for transit operator/regional center cooperation.
	Efficiency	We need ITS improvement performances for systems to bring costs down.
	Planning/Study	We need research and policies on autonomous vehicles and how paratransit/people with disabilities will benefit.
	Spatial Gap	Regional centers should be required to assign people to the center closest to home.
	Providers	Concerned that VTA's paratransit service will be diminished by the cancelation of the Outreach contract.
	Public Transit - Amenities	Transit experience for the North bay is not good. Long wait times, lack of well lit, clean shelters with trash cans.
	Public Transit - Amenities	MTC should encourage transit operators to create parklets at bus stops.
	Temporal	Weekend/evening service is lacking for paratransit service users.
	Level of Service	Escorted door to door service is necessary.
	Eligibility	The ADA paratransit eligibility process should be easier.
	Drivers	Transit drivers should be trained to be aware of guide dogs and other issues for disabled people.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Solutions	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Solutions	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Solutions	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Gaps	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Gaps	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Gaps	
7/6/2016	MTC Policy Advisory Council Equity and Access Subcommittee	Regional	Solutions	
6/16/2016	Regional Mobility Management Group	Regional	Gaps	
6/16/2016	Regional Mobility Management Group	Regional	Solutions	
6/16/2016	Regional Mobility Management Group	Regional	Solutions	
6/16/2016	Regional Mobility Management Group	Regional	Solutions	
8/4/2016	Health Policy and Planning Program, San Mateo County Health System, Senior Planner	San Mateo	Solutions	
8/4/2016	Health Policy and Planning Program, San Mateo County Health System, Senior Planner	San Mateo	Solutions	
8/4/2016	Health Policy and Planning Program, San Mateo County Health System, Senior Planner	San Mateo	Solutions	
8/4/2016	Health Policy and Planning Program, San Mateo County Health System, Senior Planner	San Mateo	Solutions	
8/4/2016	Health Policy and Planning Program, San Mateo County Health System, Senior Planner	San Mateo	Gaps	
8/4/2016	Health Policy and Planning Program, San Mateo County Health System, Senior Planner	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	



	Theme	Comment
	Travel Training	Travel training programs are very important.
	Volunteer Driver	Volunteer driver programs are very important.
	Transit Access	MTC should capture and document conditions at bus stops across the region. Easter Seals evaluation took kit way to consistently evaluate stops.
	Quality of Service	Drivers are under pressure to keep on time. This causes jerking and speed ups that are hard on seniors and people with disabilities.
	Spatial Gap	Express buses make it difficult to visit neighborhoods between stops.
	Public Transit - Accessibility	Over packed buses are difficult for seniors and people with disabilities.
	Drivers	Transit operators should provide an extra staff to help load passengers at busy stations during rush hour. This helps seniors and people with disabilities.
	Planning/Study	If the inventory is not going to be in the next Plan, can it be stored and maintained elsewhere? It is very helpful when creating county inventories.
	Technology	Make sure technology projects are included in the solutions.
	Technology	Transportation Network Companies were not really in existence during the last Plan update. Will TNCs be included in this plan update?
	Funding	MTC should host and pay for the Travel Training and PASS courses.
	Emerging mobility services	Discussed low-income solutions: TNCs.
	Auto access	Discussed low-income solutions: auto loan programs.
	Emerging mobility services	Discussed low-income solutions: car share.
	Emerging mobility services	Discussed low-income solutions: equity aspects of autonomous vehicles.
	Fares	Transit is unaffordable for many low-income people.
	Fares	Discounted fares should be listed as medium or high, instead of low.
	Housing & Land Use	Land use policies should require new developments to provide financial support for coordinated transportation.
	Emerging Mobility Services	TNCs should provide discounted rides to seniors and people with disabilities.
	Emerging Mobility Services	TNCs could provide concierge services (i.e., carrying groceries, etc.).

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Gaps	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
8/4/2016	Peninsula Family Service, Director, Financial Empowerment Program	San Mateo	Solutions	
9/6/2016	East Bay Paratransit Service Review Advisory Committee	East Bay	Gaps	
9/6/2016	East Bay Paratransit Service Review Advisory Committee	East Bay	Gaps	
9/6/2016	East Bay Paratransit Service Review Advisory Committee	East Bay	Gaps	
9/6/2016	East Bay Paratransit Service Review Advisory Committee	East Bay	Gaps	
9/6/2016	East Bay Paratransit Service Review Advisory Committee	East Bay	Gaps	
9/6/2016	East Bay Paratransit Service Review Advisory Committee	East Bay	Solutions	
9/6/2016	East Bay Paratransit Service Review Advisory Committee	East Bay	Gaps	
9/6/2016	East Bay Paratransit Service Review Advisory Committee	East Bay	Gaps	

	Theme	Comment
	Mobility Management	There is a real need for a centralized body to coordinated activities in and between all nine counties.
	Language	To address language barriers, use more symbols, numbers and electronic times in on-board transit vehicles and at stops. Also, to help with older adults, make the font larger.
	Fares	Transit fares should be decreased for seniors and people with disabilities.
	Ped/Bike	Expand bike lanes to include small scooters and motorized wheelchairs.
	Planning/Study	Strategic planning is needed to connect services to major and minor hubs (BART, Caltrans, bus stops; with taxis, TNCs and other ride sharing).
	On-time Performance	Transit services are often late - is driver training needed?
	Auto access	Coordinate with local repair garages to offer discounted repair services to seniors and people with disabilities - maybe the discount could provide them with credits on their income or other business taxes?
	Coordination & Cooperation	Collaborate with under-utilized transit providers during their non-peak periods. For example, school buses have lower utilization during the day, on weekends and during the summer. Also, bus drivers for organizations like Google wait for long periods to make the return trip at the end of the day.
	Public Transit - Accessibility	Convert some of the seats on all transit vehicles to a "fold-up" option. They would be in the down position when someone is sitting on them but could fold up to provide another wheelchair accessible space. In this way, space is not "lost" when it is a wheelchair only open space.
	Fares	Coordinate the fare structure throughout the 9 counties for seniors and people with disabilities. Make it the same for all day or monthly fares. Eliminate the change or need for additional fares for transfers from one provider to another.
	Funding	Discount paratransit fares to be offset with credits on income or other business taxes.
	Fares	Transit and paratransit is too expensive.
	Spatial Gap	There are parts of eastern and southern Alameda County that don't have very good transit service.
	Spatial Gap	There are places that paratransit-dependent riders cannot visit because transit doesn't reach those areas.
	Healthcare access	Non-emergency medical trips should be cheaper or free.
	Taxi/TNC - Accessibility	Uber-type services don't serve wheelchair-dependent riders.
	Healthcare access	There should be an Uber service for medical (dialysis) trips.
	Healthcare access	Non-emergency medical trips should be prioritized.
	Temporal	Owl service doesn't exist for disabled riders.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
9/6/2016	East Bay Paratransit Service Review Advisory Committee	East Bay	Gaps	
9/6/2016	East Bay Paratransit Service Review Advisory Committee	East Bay	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Gaps	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Gaps	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Gaps	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Gaps	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Gaps	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	

	Theme	Comment
	Transfers	Transfers between paratransit systems is very difficult. There are long wait times and sometimes an SUV is used and it is uncomfortable.
	Coordination & Cooperation	There should be better information sharing systems between paratransit systems to help coordinated transfers and eligibility.
	Transfers	Transfers between Sonoma County transit operators, as well as intercountry transfers, can be difficult. There are long wait times, there's poor lighting and transfer opportunities are infrequent.
	Fares	Transfers between fixed-route and paratransit are costly - double fares are charged.
	Fares	Paratransit and transit fares are unaffordable
	Information and I&R Services	There should be real time information for paratransit - like NextBus.
	Information and I&R Services	Since there are only up to two wheelchair positions on transit, it would be great to have NextBus information for wheelchair position availability.
	Fare Media	We need Clipper on paratransit.
	Coordination & Cooperation	Empty paratransit vehicles should be used to bring health care workers to people in their homes.
	Coordination & Cooperation	Empty paratransit vehicles should be shared with non-profit agencies.
	Fares	Transit should be free.
	Fares	Students and seniors should be able to ride free.
	Fares	Bulk discounts should be available to non-profit agencies who are purchasing vouchers/ passes for their clients.
	Spatial Gap	Paratransit is only available in the fixed-route area - there should be satellite paratransit availability.
	Auto Access	There is a need for low-income auto access - car share and auto loan.
	Same-Day Transportation	Taxi voucher programs should be expanded.
	Funding	A steady stream of funding is required for low-income, senior and people with disabilities programs.
	Taxi/TNC - Accessibility	There are parts of the county that have only one cab. There is a great need for accessible taxis and more taxis in general.
	Non-ADA Paratransit	Premium paratransit services are needed.
	Efficiency	Paratransit should use a brokerage model and "sell" seats on paratransit.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Gaps	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Gaps	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Gaps	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Gaps	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Gaps	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Gaps	
10/14/2016	Sonoma Access Coordinated Transportation Services (SACTS) Committee	Sonoma	Solutions	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Solutions	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Solutions	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Solutions	

	Theme	Comment
	Temporal	There is a need for evening, weekend and owl fixed-route/paratransit.
	Volunteer Driver	Rural counties depend on volunteer driver programs. There is a need for centralized recruitment and training of volunteers.
	Community connection	Transportation programs should be expanded to ensure people with disabilities and seniors have opportunities to socialize.
	Non-ADA Paratransit	Deviated and flex route transit should be explored.
	Fare Media	Clipper retail locations should be expanded.
	Equity	MTC needs to make sure that equity issues are addressed when planning and funding autonomous vehicles.
	Temporal	The paratransit service area is very limited outside of local bus hours.
	Transfers	Paratransit transfers for short trips between operators.
	Housing & Land Use	Funding and encouragement for increased density and complete neighborhoods to improve access to services and community.
	Fare Media	No RTC card center other than Oakland. Difficult for people to obtain. Richmond Hub would be a very good spot for this. San Pablo would be willing to do it too.
	Public Transit - Amenities	Bus stops are in poor condition, hardly any shelter for seniors and people with disabilities. Hard to recommend/increase public transportation ridership when the basic amenities aren't there.
	Transfers	Connections among providers are not very good, long waits between them (over an hour, in some cases).
	Temporal	Limited service on weekends (i.e. WestCAT)
	Coordination & Cooperation	Need more collaboration with transit agencies to coordinate rides to and from their destinations (City based service transfers between cities and other services).
	Healthcare Access	Difficult and scarce options for transportation to medical centers (County, Alta Bates).
	Spatial Gap	High demand for rides outside of service.
	Spatial Gap	Unincorporated areas are underserved.
	Funding	Additional funding opportunities for City-based service to accommodate more riders in Contra Costa County and alleviate East Bay Paratransit.
	Temporal	Need funding for affordable local transportation service from 5-10pm (M-F), Saturdays and Sundays.
	Information and I&R Services	One stop shops for East, Central and West County that dedicate themselves to any and all transportation assistance and referrals.

**Figure C.1** List of Feedback Comments

Date	Group	County	Category	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
10/17/2016	City of San Pablo	Contra Costa	Gaps	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Gaps	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Gaps	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Gaps	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Gaps	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Gaps	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Gaps	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Solutions	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Gaps	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Gaps	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Solutions	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Gaps	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Solutions	
9/13/2016	AC Transit Accessibility Advisory Committee	East Bay	Gaps	



	Theme	Comment
	Healthcare Access	Shorter wait time from dialysis to home with East Bay Paratransit.
	On-time Performance	Long waits, often late arrivals, for East Bay Paratransit pick-ups.
	Eligibility	Many people don't qualify for ADA Paratransit, but can't drive, walk to bus stops or have the option to take a city-based service.
	Spatial Gap	No volunteer driver program in West County.
	Fares	Cost of paratransit rides is difficult for low-income riders.
	Safety	Safety concerns for riders (re: public transportation mainly).
	Spatial Gap	Geography of Contra Costa is challenging.
	Spatial Gap	There's not enough transit service in south Alameda County - near Fremont.
	Public Transit - Accessibility	Crowding is a problem for people with mobility devices.
	Public Transit - Accessibility	There needs to be stronger policies for transit agencies to announce to free up space for riders with disabilities.
	Public Transit - Accessibility	Devices are getting bigger; transit agencies need to provide more space for people with disabilities.
	Planning/Study	The coordinated plan needs to give any solution for people in wheelchairs a higher priority.
	Planning/Study	The way that the current plan separates out low-income and people with disabilities is problematic because many people with disabilities are low-income.
	Fares	Transit discounts should exist on all systems.
	Fares	Transit affordability is a major concern.
	Public Transit - Accessibility	When transit agencies solve problems for one group of disabled group, it may be causing problems for another disabled group. For instance, tactile strips on the ground make it hard for people in wheelchairs.
	Emerging mobility services	Flex route services are an exciting development. More agencies should adopt flex routes.
	Public Transit - Access	Sidewalks are lacking in many places.
	Travel Training	There should be youth ambassador programs that teach kids how to use transit and how to behave on transit.
	Fares	It is difficult to access discounts - particularly youth discounts.

# APPENDIX D

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## Consolidated Transportation Service Agencies – MTC Designation Process

## CONSOLIDATED TRANSPORTATION SERVICE AGENCIES – MTC DESIGNATION PROCESS

MTC's process and conditions for designating Consolidated Transportation Service Agencies (CTSA) are set forth in MTC Resolution 4097, Revised. The designation process is as follows:

- Applicant makes request.
  - MTC notifies the County Board of Supervisors, the PCCs, and transit operators of its intent to designate a CTSA in the County.
  - MTC staff evaluates candidates for consistency with mobility management activities as outlined in the Coordinated Public Transit-Human Services Transportation Plan.
  - MTC's Programming and Allocations Committee reviews and recommends CTSA designation.
  - Commission adopts CTSA designation.
  - MTC notifies CTSA, transit operators, State of California and PCC of CTSA designation.
- Under this process, MTC evaluation of CTSA candidates would take into account various factors, including but not limited to:
- Past CTSA designations and performance; relevance of activities to current coordination objectives.
  - Scale of geography covered by designation request.
  - Extent to which the applicant was identified as the result of a county or subregionally based process involving multiple stakeholders aimed at improving mobility and transportation coordination for transportation-disadvantaged populations.
  - The applicant's existing and potential capacity for carrying out mobility management functions described in this chapter as well as other requirements of CSAAs as defined by statute.
  - Institutional relationships and support, both financial and in-kind, including evidence of coordination efforts with other public and private transportation and human services providers.

# APPENDIX E

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## Project Types Eligible for Funding

# PROJECT TYPES ELIGIBLE FOR FUNDING

One of the purposes of the Coordinated Public Transit-Human Services Transportation Plan is to identify projects eligible for FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program and other funding sources that require or encourage proposals to refer to this Coordinated Plan (e.g. 5311 or MTC's own competitive grant programs).

Accordingly, the list of eligible projects in the Coordinated Plan is inclusive enough for a wide range of proposals, but also specific enough to demonstrate regional support for competitive funds.

**Figure E.1** lists projects that would be eligible for these funds. Consistent with MTC's regional priorities, projects cover:

- Mobility Management and Travel Training
- Improvements to Paratransit that Exceed ADA Requirements and/or Demand-Responsive Services
- Improvements to ADA-mandated Paratransit
- Improvements to Public Transit Service and Access
- Pedestrian and Bicycle Improvements
- Shared Mobility Accessibility
- Other Solutions

These projects draw upon expressed needs in the 2013 Coordinated Plan; Section 5310 applications; and other proposed strategies.

**Figure E.1** Project Types Eligible for Funding

Project	Category
Mobility management/coordination with human service transportation, transit, jurisdictions, etc. (e.g. cost sharing arrangements, joint procurements, joint maintenance, vehicle sharing)	Mobility Management and Travel Training
Enhanced local/regional information and referral systems, including one-call/one-click centers, comprehensive mobility guides	Mobility Management and Travel Training
Travel training on all modes and promotion to seniors and/or people with disabilities, including ambassador/volunteer programs	Mobility Management and Travel Training
Technical support to non-profit agencies to apply for and maintain compliance for grant funding	Mobility Management and Travel Training
Customized guaranteed ride home programs for people with disabilities, seniors, low-income, and veterans	Mobility Management and Travel Training
Capital (including but not limited to vehicles, securement, and software) and operations projects to assist community organizations (and transit agencies where eligible) to provide transportation to seniors and people with disabilities (including but not limited to shuttles, group trips, vanpools, volunteer driver programs)	Improvements to Paratransit that Exceed ADA Requirements and/or Demand-Responsive Services
Volunteer driver programs, including training and recruitment of drivers; escorted travel on paratransit	Improvements to Paratransit that Exceed ADA Requirements and/or Demand-Responsive Services
Programs that provide same-day wheelchair accessible service (including capital investments in vehicles and operational incentives)	Improvements to Paratransit that Exceed ADA Requirements and/or Demand-Responsive Services
Subsidized taxi or transportation network company (TNC) programs and/or incentives or assistance to improve the quality of same-day service	Improvements to Paratransit that Exceed ADA Requirements and/or Demand-Responsive Services

**Figure E.1** Project Types Eligible for Funding

Project	Category
Premium services on ADA paratransit including but not limited to service beyond 3/4 mile and fixed-route transit times and days; same-day service	Improvements to Paratransit that Exceed ADA Requirements and/or Demand-Responsive Services
Non-emergency medical transportation for Medi-Cal patients and non-ADA eligible seniors, people with disabilities, low-income populations, and veterans	Improvements to Paratransit that Exceed ADA Requirements and/or Demand-Responsive Services
Feeder service connecting to fixed-route transit	Improvements to Paratransit that Exceed ADA Requirements and/or Demand-Responsive Services
Group trips (e.g. grocery shopping trips)	Improvements to Paratransit that Exceed ADA Requirements and/or Demand-Responsive Services
Sharing of provider training and methods	Improvements to Paratransit that Exceed ADA Requirements and/or Demand-Responsive Services
Projects and infrastructure to mitigate transfers and/or provide transfer assistance to help with multi-operator paratransit trips and transfers or access to or between paratransit and fixed-route service	Improvements to ADA-mandated Paratransit
Projects to implement coordinated in-person assessments to determine eligibility	Improvements to ADA-mandated Paratransit
Improved performance and service quality measurement, including increased rider participation	Improvements to ADA-mandated Paratransit
Restoration of accessible service where fixed-routes have recently been cut	Improvements to Public Transit Service and Access
Expanded fixed-route transit services and better connections between transit systems	Improvements to Public Transit Service and Access
Increased access to fare media and discounted transit fares for people with disabilities, seniors, low-income, and veterans	Improvements to Public Transit Service and Access
Transit safety education	Improvements to Public Transit Service and Access
Transit information in accessible formats, including real-time information, and other capital improvements	Improvements to Public Transit Service and Access
Targeted transit route and stop adjustments; courtesy or flag stops for people with disabilities	Improvements to Public Transit Service and Access
Wheelchair securement improvement programs; additional driver training on accessibility issues and features	Improvements to Public Transit Service and Access
Additional space for mobility devices on transit	Improvements to Public Transit Service and Access
Pedestrian infrastructure improvements in the vicinity of transit stops and/or targeted law enforcement to improve pedestrian safety near transit stops	Improvements to Public Transit Service and Access
Pedestrian and/or bicycle safety planning, especially for low-cost, high-impact solutions	Pedestrian and Bicycle Improvements

**Figure E.1** Project Types Eligible for Funding

Project	Category
Technology and/or other projects to facilitate the reporting and inventorying of barriers to help promote walkable communities and complete streets	Pedestrian and Bicycle Improvements
Pedestrian and/or bicycle safety education	Pedestrian and Bicycle Improvements
Projects to increase access for mobility device users including breakdown transportation, loaner/sharing programs	Pedestrian and Bicycle Improvements
Projects that support use of new shared mobility transportation options (such as bikeshare, carshare, ride-hailing services, microtransit, and autonomous transit) by people with disabilities, seniors, low-income, and veterans	Shared Mobility Accessibility
Projects to provide wheelchair accessible carsharing access	Shared Mobility Accessibility
Projects to provide accessible bikesharing	Shared Mobility Accessibility
Auto loans for low-income families/individuals	Other Solutions
Funding for the development of emergency planning and evacuation training programs	Other Solutions
Safety training for older drivers; projects for individuals who have lost drivers licenses	Other Solutions
Capital investments in fuel-efficient wheelchair-accessible vehicles	Other Solutions

# APPENDIX F

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## Promote Walkable Communities, Complete Streets, and the Integration of Transportation and Land Use Decisions



# PROMOTE WALKABLE COMMUNITIES, COMPLETE STREETS, AND THE INTEGRATION OF TRANSPORTATION AND LAND USE DECISIONS

Localities can seek funding for specific walkability and bikeability infrastructure improvements, which play an important role in the safety and mobility of all, and help to reduce the costs of paratransit by increasing the accessibility of fixed-route transit.

CMAAs and MTC can play a role in:

- Identifying **senior walking groups** for social engagement as an eligible project in appropriate funding guidelines
- **Coordinating with local agencies** responsible for the implementation of infrastructure improvements, such as Public Works and park and recreation departments, to ensure bike and pedestrian improvements related to the mobility of low-income populations, seniors and people with disabilities are programmed and prioritized

## Best Practice Example:

**United Seniors of Oakland and Alameda County (USOAC):**<sup>1</sup> USOAC established a Walkable Neighborhoods for Seniors (WN4S) task force in 2003 to promote health benefits of physical activity for older adults, conduct walking audits, advocate for built environment and policy changes supportive of older adult walkability, and plan for sustaining and growing itself after its initial funding expires.

California Department of Health Services trained USOAC staff for facilitation of the task force. The task force comprised representatives from the county's sheriff department, public works agency, department of public health (Senior Injury Prevention Program), community development agency, and county council, as well as the California Highway Patrol, pedestrian advocacy groups, and citizens representing targeted neighborhoods.

The task force used the following four steps

to assess neighborhood walkability:

1. Form walking groups
2. Community presentation
3. Walkability survey by older adults
4. Walkability audit by WN4S task force

WN4S formed walking groups to promote walking among older adults. These walking groups offer safety, socializing, exercise for participants, and cultivate confidence and interest in participation at WN4S task force walking assessments. The community presentations educated older adults on the importance exercise, encourage walking goals, and recruit walking survey participants. Older adults took part in the walking survey by walking selected routes and then completing a walkability survey.

Survey results informed the focus of WN4S walking audits. The WN4S walking surveys and walking audits ended in 2007, but USOAC continues to facilitate the WN4S walking groups established by the task force in 2003.

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<sup>1</sup> Steven P. Hooker, Lisa Cirill, and Lucy Wicks. Walkable Neighborhoods for Seniors: The Alameda County Experience. *Journal of Applied Gerontology* 2007; Volume 26; page 157-181.

[www.stopfalls.org/grantees\\_info/files/Wicks\\_Walkability.pdf](http://www.stopfalls.org/grantees_info/files/Wicks_Walkability.pdf)

# APPENDIX G

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## What is Mobility Management?

## WHAT IS MOBILITY MANAGEMENT?

There are a number of definitions for “mobility management.” The following are some of the most commonly used definitions.

### **MTC’s Definition in 2013 Coordinated Plan**

Mobility management is a strategic, cost-effective approach to encourage the development of services and best practices in the coordination of transportation services connecting people needing transportation to available transportation resources within a community. Its focus is the person — the individual with specific needs — rather than a particular transportation mode.

Through partnerships with many transportation service providers, mobility management enables individuals to use a travel method that meets their specific needs, is appropriate for their situation and trip, and is cost-efficient.

### **NADTC/5310 Definitions**

In 2016, the National Aging and Disability Transportation Center (NADTC) was launched by the Federal Transit Administration (FTA), to be administered by Easter Seals and the National Association of Area Agencies on Aging with guidance from the U.S. Department of Health and Human Services, Administration for Community Living. The NADTC assists states, communities and recipients in the development, selection, deployment and oversight of their 5310 projects and other accessible transportation initiatives. Guidance for 5310 funding defines mobility management and related activities as follows:

Mobility Management consists of short-range planning and management activities and projects for improving coordination among public transportation and other transportation service providers carried out by a recipient or sub-recipient through an agreement entered into with a person, including a government entity, under 49 U.S.C. chapter 53 (other than section 5309). Mobility management does not include operating public transportation services.

Mobility management activities may include:

1. The promotion, enhancement, and facilitation of access to transportation services, including the integration and coordination of services for individuals with disabilities, seniors, and low-income individuals;
2. Support for short-term management activities to plan and implement coordinated services;
3. The support of state and local coordination policy bodies and councils;
4. The operation of transportation brokerages to coordinate providers, funding agencies, and passengers;
5. The provision of coordination services, including employer-oriented transportation management organizations' and human service organizations' customer-oriented travel navigator systems and neighborhood travel coordination activities such as coordinating individualized travel training and trip planning activities for customers;
6. The development and operation of one-stop transportation traveler call centers to coordinate transportation information on all travel modes and to manage eligibility requirements and arrangements for customers among supporting programs; and
7. Operational planning for the acquisition of intelligent transportation technologies to help plan and operate coordinated systems inclusive of geographic information systems (GIS) mapping, global positioning system technology, coordinated vehicle scheduling, dispatching and monitoring technologies, as well as technologies to track costs and billing in a coordinated system, and single smart customer payment systems. (Acquisition of technology is also eligible as a standalone capital expense).

## National Center for Mobility Management

The National Center for Mobility Management (NCMM) is an initiative of the United We Ride program, and is supported through a cooperative agreement with the FTA. The Center is operated through a consortium of three national organizations — the American Public Transportation Association, the Community Transportation Association of America, and the Easter Seals Transportation Group. The Center supports FTA grantees, mobility managers, and partners in adopting proven, sustainable, and replicable transportation coordination, mobility management, and one-click transportation information practices. NCMM defines mobility management as follows:

Mobility management is an approach to designing and delivering transportation services that starts and ends with the customer. It begins with a community vision in which the entire transportation network — public transit, private operators, cycling and walking, volunteer drivers, and others — works together with customers, planners, and stakeholders to deliver the transportation options that best meet the community's needs.

Mobility management:

- Encourages innovation and flexibility to reach the “right fit” solution for customers
- Plans for sustainability
- Strives for easy information and referral to assist customers in learning about and using services
- Continually incorporates customer feedback as services are evaluated and adjusted

# **APPENDIX H**

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## **Public Comments on Draft Plan**

### **Draft Plan Public Comment Period**

**November 27, 2017 – January 11, 2018**

On November 27, 2017, the 2018 Draft Coordinated Plan Update was released to the public for review and comment. The draft plan was posted on MTC’s website, and over 900 stakeholders and interested members of the public were notified via email.

Below are comments received during the public comment period of November 27, 2017 – January 11, 2018.

**Figure H.1** Public Comments on Draft Coordinated Plan

Category		Comment/Commenter	Response
1	<b>Regional Strategies for Coordination</b>	Paratransit riders have been asking when Clipper will be available on paratransit. This should be a requirement for Clipper 2.0, providing equal access to this technology that continues to receive substantial regional funding.  <i>Petaluma Transit</i>	The issue of Clipper availability on paratransit is noted as an issue in Ch. 5.
2	<b>Transportation Gap or Solution</b>	The trend in transit is toward low-floor buses and LRVs, except in San Francisco. Steep stairs on MUNI LRVs make boarding difficult. Wheelchairs boarding buses are often disruptive and time-consuming. With the increase in seniors, especially in San Francisco, where car ownership is low, MUNI should be making changes to address the needs of seniors and the disabled.  <i>Robert Bregoff</i>	The plan presents general guidance for regional prioritization, and not recommendations for individual transit operators. All transit operators are required to provide accessible service on their fixed-route vehicles, which may include buses and trains equipped with wheelchair lifts or low floor ramps to allow easy access for people with disabilities.
3	<b>Transportation Gap or Solution</b>	The number of non-working escalators at BART and MUNI stations is shocking. Recently only 2 of the escalators at Civic Center station were operating.  <i>Robert Bregoff</i>	Accessibility of transit stops and stations is noted as a need in Chapter 4, Appendix C, and Appendix E.
4	<b>Transportation Gap or Solution</b>	Seniors driving unnecessarily are a danger to cyclists and pedestrians. The state should dissuade rather than encourage people over, say, 75, from driving, and provide them with reliable transport. I’m over 60 and very healthy but have noticed that my reflexes, vision, and hearing aren’t what they once were. Driving is more stressful for me because of this.  <i>Robert Bregoff</i>	The challenges of senior mobility as a result of losing the ability to drive is noted in Chapter 2. Travel training for seniors is noted as a need and solution in Chapter 3, Chapter 5, Appendix C and Appendix E.
5	<b>Implementation</b>	It would be helpful if the Coordinated Plan webpage had links to local mobility management efforts and service providers.  <i>Regional Mobility Management Group</i>	This will be considered during implementation.
6	<b>Other</b>	As discussed in Chapter 5 and in Appendix D, having a process to designate Consolidated Transportation Service Agencies in each county is a very good idea. It is important to have a community based collaborative process and a level playing field for the evaluation of agencies who wish to be CTSA’s, rather than agencies self-designating.  <i>Choice in Aging</i>	The process to designate Consolidated Transportation Service Agencies is described in Appendix D.
7	<b>Funding</b>	Is there funding from MTC (or another source) for a county mobility management plan, if one does not currently exist? Considering the “lack of capacity” of the existing system identified in the plan, such a funding source is critical if meaningful progress is to be made in this area.  <i>Choice in Aging</i>	Various funding sources such as the FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities and the Caltrans Planning Grant program allows planning for mobility management as an eligible activity.

**Figure H.1** Public Comments on Draft Coordinated Plan

Category		Comment/Commenter	Response
8	Implementation	In chapter 5 the text says that “MTC can host regular events with transit operators...” Hopefully, these events will be at a convenient location within the county where the transit operators and agencies are located.  <i>Choice in Aging</i>	Staff will make every effort to host events throughout the region.
9	Regional Strategies for Coordination	The strategy, “Improve Paratransit” includes the action to “...make it easier to pay for ADA paratransit services.” The County appreciates the Plan including this concept; it highlights the critical accounting component of an effective mobility management operation.  <i>Contra Costa County Board of Supervisors</i>	The issue of paratransit payment is noted in Chapter 5.
10	Transportation Gap or Solution	We appreciate the comprehensive discussion regarding paratransit transfer trips. Too often, plans superficially cover the topic of transfers on paratransit services, leaving the reader to assume they are similar to transfers on fixed route transit. This is far from the case; transfer trips are much more disruptive.  <i>Contra Costa County Board of Supervisors</i>	The issue of transfers between ADA paratransit providers is noted in Chapter 4, Chapter 5, Appendix B, Appendix C, and Appendix E.
11	Transportation Gap or Solution	One critical issue is left unaddressed in the transfer discussion, that of safety. We request that this additional safety information be included in order to have a complete and accurate discussion regarding transfers.  <i>Contra Costa County Board of Supervisors</i>	Safety concerns have been incorporated into Chapter 4.
12	Other	The Plan includes references to a “Roadmap Study” which includes recommendations for mobility management programs. Please include this Study as an appendix to the Plan.  <i>Contra Costa County Board of Supervisors</i>	The Roadmap Study was an implementation activity stemming from the 2013 Coordinated Plan. Recommendations from the study were incorporated into the 2018 Coordinated Plan update and can be the basis for future implementation.
13	Regional Strategies for Coordination	The County applauds MTC for providing a focused implementation timeline including the initial strategy of recognizing mobility management as a regional priority. We also appreciate the candid statement in the plan, “Current senior-oriented mobility services do not have the capacity to handle the increase in people over 65 years of age...” The County believes the strategies in the Plan should be correspondingly explicit.  <i>Contra Costa County Board of Supervisors</i>	The strategies presented in the plan have grown from feedback received from user groups, their advocates, and existing local providers of transportation and human services, and are intended to provide a general guidance.
14	Implementation	The Plan provides excellent background on the efforts at the federal and state level to increase coordination of paratransit services. The Plan should consider the impact of these efforts, whether or not they are adequate, and if we can achieve more.  <i>Contra Costa County Board of Supervisors</i>	The plan presents general and preliminary guidance for regional prioritization. Evaluation of efforts in the Bay Area can be considered during implementation.

**Figure H.1** Public Comments on Draft Coordinated Plan

Category		Comment/Commenter	Response
15	Other	<p>The Plan briefly touches on impactful approaches in discussing Consolidated Transportation Service Agencies, one-call/one-click operations, and the wide spectrum transportation provider types. Explicitly discussing the topic of consolidation of services (e.g. eligibility, maintenance, financial services, scheduling/dispatch, and transportation operations) and the various methods of doing so (e.g. non-profit, administrative vs. full-service brokerage) would provide a more complete discussion and increase the usefulness of the document.</p> <p><i>Contra Costa County Board of Supervisors</i></p>	<p>The plan presents general and preliminary guidance for regional prioritization, and recognizes that solutions may be approached differently in a local context. The strategy to implement county-based mobility management is intended to provide a regional framework, while still allowing each county to tailor local solutions. Chapter 3 notes that coordination and cooperation could increase cost efficiency and improve services for end users.</p>
16	Funding	<p>The Bay Area made great strides in our transportation system, due in part to the leadership of MTC. We urge MTC to bring this trend of success to the paratransit field and offer comprehensive, funded strategies to address the “lack of capacity” highlighted in the plan. This would allow the population assisted by this type of service to equitably benefit from MTC’s substantial regional efforts.</p> <p><i>Contra Costa County Board of Supervisors</i></p>	<p>The issue of funding availability and consistency is noted as a key gap in Chapter 4.</p>
17	Transportation Gap or Solution	<p>Same day accessible service is generally lacking in the Tri-Valley and across the region. This also includes options for wheelchair breakdown services.</p> <p><i>LAVTA Wheels Accessible Advisory Committee</i></p>	<p>Same day accessible service is noted as a need in Appendix C and in Appendix E.</p>
18	Regional Strategies for Coordination	<p>Expansion of low-income youth fare is highly desired, especially a continuation of the pilot Alameda County Student Transit Pass Program, funded for three years through Measure BB.</p> <p><i>LAVTA Wheels Accessible Advisory Committee</i></p>	<p>Affordability of transportation is noted as a need and solution in Chapter 4. Subsidized transportation services is listed as a strategy in Chapter 5.</p>
19	Regional Strategies for Coordination	<p>From a consumer’s perspective, there is a lack of standardization of administration of ADA-services throughout the MTC region. Development of a standard paratransit ID card that can be used throughout all systems in the Bay Area is highly desired.</p> <p><i>LAVTA Wheels Accessible Advisory Committee</i></p>	<p>The need for county-based and regional coordination is noted in Chapter 5. This can be considered during implementation.</p>
20	Transportation Gap or Solution	<p>Improvement of transfers and coordination between providers for regional trips is highly desired. <i>LAVTA Wheels Accessible Advisory Committee</i></p>	<p>Regional trip coordination is noted as a need in Chapter 4 and in Appendix E.</p>
21	Transportation Gap or Solution	<p>Expansion of LAVTA’s Go Dublin pilot, which utilizes Transportation Network Companies, to other areas in the Tri-Valley. TNCs offer a more cost-effective way to provide paratransit trips for able individuals. Encouraging TNCs to include wheelchair accessible vehicles is ideal for equitable service. The convenience of on-demand paratransit rides is highly desired.</p> <p><i>LAVTA Wheels Accessible Advisory Committee</i></p>	<p>The need for wheelchair accessible vehicles and for policies related to TNC service provision are noted in Chapters 4 and 5.</p>



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Category		Comment/Commenter	Response
22	<b>Regional Strategies for Coordination</b>	Incorporation of Mobility Management Programs is a great strategy; it could be beneficial to mirror a Mobility Management Program or software already in place in another region.  <i>LAVTA Wheels Accessible Advisory Committee</i>	This can be considered during implementation.
23	<b>Other</b>	Coordination with other public entities like public works, park and rec dept, etc. will better promote walkable communities.  <i>Alameda County Public Health Department</i>	Coordination with park and recreation departments has been incorporated into Appendix F.
24	<b>Regional Strategies for Coordination</b>	Equal to coordination should be communication. It seems like there is much to navigate and that there are many stakeholders, including the end-user (the client), who needs to know the information.  <i>Alameda County Public Health Department</i>	As noted in Chapter 5, the coordination of information and referral services provide a central point of contact for end-users to access mobility managers, who provide resources and traveler information.
25	<b>Transportation Gap or Solution</b>	I have a concern about charging premium rates for premium service and how it impacts low-income riders. Does paying fall on the client? Can the charge be shared or subsidized by the entity on the other end? How would the fee/rate be determined in a way so that it doesn't provide another barrier to low-income riders getting where they need to go?  <i>Alameda County Public Health Department</i>	Chapter 5 notes the need to expand subsidized same-day trip programs.
26	<b>Implementation</b>	Coordination summits for periodic discussion of mobility management-related issues and progress in the region, and the sharing of best practices is great. I think periodic and regularly soliciting feedback is always a good thing.  <i>Alameda County Public Health Department</i>	As noted in Chapter 5, coordination summits are being recommended during implementation.
27	<b>Regional Strategies for Coordination</b>	Create Mobility Managers and Designate Consolidated Transportation Service Agencies (CTSAs): Managers/coordinators are important. I'm just wondering if there are policies or guidelines laid out by the Feds or MTC Commission about how the managers should be engaging local cities, human service agencies, disability advocacy, etc. (all the stakeholders) because it would be good to have a way to measure efficacy in implementation.  <i>Alameda County Public Health Department</i>	Staff makes every effort to provide best practices and technical assistance to counties in establishing mobility management and engaging local partners.
28	<b>Transportation Gap or Solution</b>	Alternative Modes of Travel like taxis: I agree that alternative modes needs to be part of the mix of options available. The program has to be easy and low-tech to participate in. In addition to the list of available tools, what about offering a taxi voucher program? Also, I wanted to raise an example in South Alameda County where there is a large unaccompanied immigrant youth population. They often have to get to legal services based in Oakland. Navigating public transit from Hayward to Oakland for newcomers is very challenging, confusing and cost-prohibitive. If there were a free taxi voucher program available to them through the Hayward Unified School District, that would make it so much easier for them to see their lawyer and get to court to support their asylum case.  <i>Alameda County Public Health Department</i>	Taxi voucher programs are noted as a solution in Chapter 4 and Appendix E.

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Category		Comment/Commenter	Response
29	Implementation	<p>Create Mobility Managers and Designate Consolidated Transportation Service Agencies (CTSAs):</p> <p>In the engagement strategies, make sure that MTC is informed by the COC map and other data, and continue to use the stakeholder advisers to ensure MTC is reaching the local community stakeholders that need to be at the table to inform the development of and prioritizing of strategies.</p> <p><i>Alameda County Public Health Department</i></p>	<p>This can be considered during plan implementation. Staff will make every effort to include Communities of Concern mapping and data, along with other technical and outreach assistance.</p>
30	Other	<p>In suburban communities, members of the public have identified the need to better synchronize pedestrian walk signals with the traffic flow, especially at multi-lane intersections that are difficult to cross.</p> <p>Some communities like in Hayward near Tennyson High School are bisected by rail roads and there aren't frequent enough rail crossings to notify when a train is approaching.</p> <p>Furthermore, data collection is often challenging or non-existent. This makes planning and advocacy difficult.</p> <p><i>Alameda County Public Health Department</i></p>	<p>Appendix F identifies the need for promoting walkable communities, complete streets and the integration of transportation land use decision. Staff will make every effort to provide available data in support of local planning.</p>
31	Funding	<p>Our agency represents all the transit operators (BART, AC and WestCAT) and local cities in west Contra Costa County, as well as unincorporated west County.</p> <p>Our goal is to plan and fund subregional transportation needs ranging from bike/ped options to major interchange enhancements along the I-80 corridor of west county. As part of these goals, we are closely invested in assuring improved services for senior, disabled and low income residents.</p> <p>To this end, we are just completing a West Co Accessible Transportation Study. Based on the excellent information presented in the MTC Coordinated Plan and the information we gathered specifically on the needs of west county residents, the outstanding issue is dedicated funding. In order to have consistent, long term guaranteed services to meet the growing population of senior/disabled/low income residents, there needs to be a dedicated ongoing funding source beyond the 5310 funds.</p> <p>We feel strongly that new funds from sales tax, driver license fees, and other self-help efforts are not enough. SB1 and RM3 do not address the needs of this most vulnerable population. Money does not solve everything. But local efforts to better coordinate services are evolving and the communication between operators is impressive.</p> <p>Drennen Shelton at MTC does a fabulous job attending the many groups forming to address various ADA and non ADA services.</p> <p>More devotion from one person cannot be found. But we need more dedicated staff at the County level if this Plan is ever to get up on its legs and walk.</p> <p><i>West Contra Costa Transportation Advisory Committee</i></p>	<p>The issue of funding availability and consistency is noted as a key gap in Chapter 4.</p>

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Category		Comment/Commenter	Response
32	Transportation Resources	<p>Overall, I feel the plan is well presented and filled with doable items in the relatively short term along with long term wishes!</p> <p>Mobility Matters serves as a Mobility Management Center for Contra Costa County and operates two free volunteer driver programs, one for seniors and one for disabled veterans of any age.</p> <p><i>Mobility Matters</i></p>	Mobility Matters is referenced in Chapter 3.
33	Transportation Resources	<p>Page 59:</p> <p>Strategy 6: Improve Mobility for Veterans - In June 2017, Mobility Matters launched a free, volunteer driver program for disabled veterans of any age residing in Contra Costa County who are unable to take other forms of transportation.</p> <p>This program is called Rides 4 Veterans and is built on a model of veterans driving veterans, but non veteran drivers can also help since there are not enough veterans drivers to meet demand.</p> <p><i>Mobility Matters</i></p>	Mobility Matters and Rides 4 Veterans service are referenced in Chapter 3.
34	Outreach	<p>Page 100:</p> <p>Comment from City of San Pablo that there is no volunteer driver program in West County is misleading. Although West County does not operate its own volunteer driver program, both volunteer driver programs run by Mobility Matters serve seniors and disabled veterans in ALL parts of Contra Costa County.</p> <p>We also provide West County residents with the same Transportation I&amp;R Helpline and transportation guides that are provided to Central and East County.</p> <p><i>Mobility Matters</i></p>	These represent needs that were identified through the outreach process and subsequently documented in Chapter 4 and Appendix C.

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Category		Comment/Commenter	Response
35	Funding	<p>Develop County-Based Mobility Management: In November 2016, Measure X did not pass with 2/3 majority vote in hopes this funding would expand services and transportation options. Our program which is funded through Measure J does not have additional funding to provide a One Stop Shop to riders outside our service area.</p> <p>Moving forward, there needs to be funding for local agencies to build a Tri Partnership among neighboring agencies proving as a One Stop Ambassador for San Pablo, Richmond, and El Cerrito. Collaboration is needed based on the aging population is expected to double from 35 million nationally in 2000 to 71 million in 2030.</p> <p>In 2014, the cities of Richmond, San Pablo and El Cerrito submitted a collaborative grant application for the FTA section 5310. This was a first time collaboration among the three cities and funds was only granted for Travel Training. Although we do meet the needs of most of our ridership, we still have barriers and gaps in our service such as:</p> <ul style="list-style-type: none"> <li>- Requests for transportation to El Cerrito, Richmond, EL Sobrante, Martinez, Berkeley and Oakland</li> <li>- Some riders (particularly dialysis patients) are too fragile to travel on regular ADA paratransit</li> <li>- Volunteer driving program provided by Mobility Matters only service East and Central County</li> <li>- Increased population for underserved seniors in Contra Costa County</li> <li>- Insufficient funding resources for transportation for seniors and people with disabilities (Measure X)</li> </ul> <p><i>City of San Pablo</i></p>	<p>The issue of funding availability is noted as a key gap in Chapter 4. Mobility management is included as a recommended strategy in Chapter 5 as a two-fold solution: to improve the mobility of traditionally underserved groups and to increase the efficiency of the overall system of transportation through coordination.</p>
36	Funding	<p>Regional Transportation Resources: As it states in this draft, there are a number of different transportation resources that low-income populations, seniors, people with disabilities, and veterans can access in the Bay Area. Coordinating all of these mobility management elements will ensure the long term development for all three cities and improve overall service.</p> <p>Funding should not focus just on the traditional fixed routes but include smaller agencies to develop a pre scheduled route service that operates certain days and hours in the week. Proper funding allows us to effectively accomplish our goal by offering convenient, accessible and a time saving collaboration.</p> <p>We are in favor of this draft in hopes it will address the much needed access to transportation services and eliminate some of the barriers and gaps in serving our community.</p> <p><i>City of San Pablo</i></p>	<p>The issue of funding availability and diversity is noted as a key gap in Chapter 4. Coordination is noted as a strategy in Chapter 5.</p>

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Category	Comment/Commenter	Response
<p><b>37</b></p> <p><b>Transportation Gap or Solution</b></p>	<p>MTC should provide funding for and expand the types of eligible projects that provide more flexibility so that innovative projects can be proposed to address long regional paratransit cross county trips and enhancing fixed route service for seniors and people with disabilities.</p> <p><i>BART Customer Access and Accessibility</i></p>	<p>Project eligibility is determined by requirements of the fund sources. Currently, paratransit service beyond the ADA is eligible under FTA guidance for the Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program. The issue of transfers between ADA paratransit providers is noted in Chapter 4, Chapter 5, Appendix B, Appendix C, and Appendix E.</p>
<p><b>38</b></p> <p><b>Transportation Gap or Solution</b></p>	<p>Improve Regional Paratransit Trips:</p> <p>Long regional paratransit cross county trips with timed meets between transit agencies are costly, time consuming, and difficult for passengers. Improving timed transfers and meet times is a good goal but eligible projects should be expanded to include other options that address the underlying issues.</p> <p>The paratransit requirements for agencies has requirements for transfers between agencies which often are the cause for long trips and passengers being left on their own. There are no specific requirements or mechanizes for interjurisdictional travel beyond transfers. Regional travel is not the primary focus or responsibility of any single agency.</p> <p>MTC could assist in supporting a regional paratransit plan that looks at current travel paths and destinations in support of options for regional trips that are seamless for the passenger. Currently there is no incentive for transit agencies to take passengers past their borders as it is both time consuming, costly and maroons agency vehicles outside of their service area often during the periods of heavy traffic.</p> <p>Strategies could include a single provider to provide regional trips and eliminate transfers. Shared coordination between agencies which focuses on regional or long-haul trips could free up agency vehicles to focus on local trips. These regional vehicles could also provide supplemental local paratransit needs when they are in an area rather than dead-heading back.</p> <p>Also, using fixed route service (like BART, AC Transbay etc) for large sections of regional paratransit trips might be possible if additional assistance or an escort was provided to riders.</p> <p>Currently paratransit shuttles are only locally run but a regularly scheduled regional paratransit shuttle service targeting high demand key destination points such as medical centers could be also be a way to provide better service.</p> <p><i>BART Customer Access and Accessibility</i></p>	<p>This can be considered during plan implementation. The issue of transfers between ADA paratransit providers is noted in Chapter 4, Chapter 5, Appendix B, Appendix C, and Appendix E.</p>

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Category	Comment/Commenter	Response
<p>39</p> <p><b>Transportation Gap or Solution</b></p>	<p>Enhancing Fixed Route Service for Seniors and People with Disabilities:</p> <p>Fixed route service in the Bay Area is already very accessible but many seniors and persons with disabilities find there are aspects that are so challenging it limits or prevents them from using it and their only option is paratransit.</p> <p>Regional funding is needed for projects that go above the and beyond the minimum ADA requirements to keep more riders on fixed route transit. Technology assistive devices that target seniors and persons with disabilities could be used to help navigate the complex fixed route system.</p> <p>Many of us use apps on our phones but seniors or persons with disabilities may need different strategies, tools or different types of assistance with more personalized directions. As this is a smaller population it funding is needed to assist with getting these options developed. Strategically placed beacons for wayfinding could help guide the blind and low vision through complex transit areas and could assist seniors as well.</p> <p>These types of projects need regional consistency and density to become something that people can rely on. New ways could be developed to alert drivers that seniors need more time to board, get a seat, or help with directions. Staff Escorts/Assistants could be scheduled at key locations to assist with help getting seats, or moving through busy stations. Some riders only need an attendant for part of the trip. What if you could call/schedule for a travel attendant with your phone and have an attendant meet you. Regional pilot projects that are innovative need support and funding to help address the growing needs of the region.</p> <p><b><i>BART Customer Access and Accessibility</i></b></p>	<p>Project eligibility is determined by requirements of the fund sources. Currently, paratransit service beyond the ADA is eligible under FTA guidance for the Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program. The need for projects that enhance fixed-route service for seniors and people with disabilities is noted in Appendix C and included in Appendix E.</p>
<p>40</p> <p><b>Transportation Resources</b></p>	<p>Page 31 – Subsidized Fare Programs / Voucher Programs:</p> <p>The description of existing programs should distinguish between means-based fare programs and subsidies for particular groups, independent of income, like students, veterans, seniors, elderly, etc. Currently, Sonoma County Transit, Santa Rosa CityBus, and Petaluma Transit offer fare free rides for college students and Sonoma County Transit offers fare free rides for veterans.</p> <p><b><i>Sonoma County Transportation Authority (SCTA)</i></b></p>	<p>The plan presents broad definitions of the types of transportation services and programs offered in the Bay Area. Further clarification on program types has been incorporated into Chapter 3.</p>
<p>41</p> <p><b>Regional Strategies for Coordination</b></p>	<p>Strategy 4: Means-Based Fare:</p> <p>There is a need to think creatively about including means-based fare programs in areas with a high percentages of riders who would qualify and where transit agencies do not have the financial means to subsidize fares without cutting service.</p> <p>Where it is not financially feasible to have a full means-based fare program, the regional program could support some sort of limited subsidized pass product that is distributed to social service agencies.</p> <p><b><i>Sonoma County Transportation Authority (SCTA)</i></b></p>	<p>Through the Regional Means-Based Fare Study, MTC is working with transit agencies to develop an implementable program and seek funding to support this effort. Program implementation details have not been developed and is pending MTC Commission and transit agency board support to proceed. Comment will be forwarded to the Means-Based Fare Study project.</p>

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Category		Comment/Commenter	Response
42	Transportation Gap or Solution	<p>To address the Gaps 4 regarding high fare - how can transfer agreements be put in place between paratransit providers and also between paratransit and fixed route providers? An example would be a paratransit trip from Santa Rosa to San Rafael, could include a portion of the trip being completed on SMART.</p> <p><i>Santa Rosa CityBus</i></p>	<p>The plan presents general and preliminary guidance for regional prioritization, and recognizes that solutions may be different in a local context. The plan is intended to provide a regional framework, while still allowing each county, city or agency to tailor local solutions, including how transfer and cost sharing agreements are implemented between transit agencies.</p>
43	Transportation Gap or Solution	<p>To assist with the spatial gaps, Park-n-rides would increase access to fixed route as well as provide a place for those outside of the paratransit area to get to paratransit. Park-n-ride as a tool don't seem to be mentioned in the Plan.</p> <p><i>Santa Rosa CityBus</i></p>	<p>Infrastructure projects have been incorporated into Appendix E.</p>
44	Transportation Gap or Solution	<p>Encourage automatic locations technology for paratransit fleets. It would improve the rider experience, improve transfer experience, reduce no-shows and save staff time - talked about in summary of gaps 8.</p> <p><i>Santa Rosa CityBus</i></p>	<p>Transit information, including real time information and other capital improvements have been incorporated into Appendix E.</p>
45	Regional Strategies for Coordination	<p>Funding for low income passes: If this is important for the region the MTC could identify a funding source that agencies can apply for funding to implement a program. Or identify a certain amount of money and then provide it to the Bay area operators based on population or ridership.</p> <p>If not enough funds are available to fulfill all the needs, maybe just provide it on a first come first serve bases. Or develop a scholarship fund, where applicants can apply for a reduced transit pass for a certain period of time.</p> <p><i>Santa Rosa CityBus</i></p>	<p>Through the Regional Means-Based Fare Study, MTC is working with transit agencies to develop an implementable program and seek funding to support this effort. Program implementation details have not been developed and is pending MTC Commission and transit agency board support to proceed. Your comment will be forwarded to the Means-Based Fare Study project.</p>
46	Other	<p>Chapter 1, Planning Requirements: Will MTC require that other plans and projects be consistent with the CPT-HSTP, or give preference to those that do?</p> <p><i>SamTrans</i></p>	<p>One purpose of the Coordinated Plan is to identify projects eligible for FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities program. MTC encourages all grant applicants to draw on the information and recommendations presented in the Coordinated Plan to better serve transportation disadvantaged populations.</p>
47	Regional Strategies for Coordination	<p>From Chapter 4: <i>Comments from almost every county in the region raised concerns that transit and paratransit fares are too high for many people. Seniors and families with low incomes are a growing portion of our local demographics, and these groups are some of the least able to afford regional transit options like BART and Caltrain that increase access to medical facilities, jobs, and other critical services.</i></p> <p>These are the two most expensive options in the Bay Area. Overlooks more affordable bus service.</p> <p><i>SamTrans</i></p>	<p>Affordability of transportation, particularly regional transit trips, is noted as a need and solution in Chapter 4. Subsidized transportation services is listed as a strategy in Chapter 5.</p>



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Category	Comment/Commenter	Response
<p>48</p> <p><b>Regional Strategies for Coordination</b></p>	<p>From Chapter 5:</p> <p><i>Coordination is essential for meeting the needs of seniors, people with disabilities, veterans, and those with low incomes.</i></p> <p><i>To best serve the region's needs for mobility services, partnerships need to involve the entire spectrum of transportation providers: providers of public fixed route transit, human service transportation providers, private taxi and ridehailing services, departments of health and human services, advocacy groups, faith-based groups, medical and dialysis providers and providers of support services to low-income populations, seniors and individuals with disabilities.</i></p> <p>Although presumably included by implication under “providers of public fixed route transit”, and not included within the scope of Mobility Management, it would be helpful if this section mentioned ADA paratransit specifically in some way, since many in the community tend to view it as a standalone service.</p> <p><b>SamTrans</b></p>	<p>Paratransit has been incorporated into Chapter 5.</p>
<p>49</p> <p><b>Regional Strategies for Coordination</b></p>	<p>From Chapter 5:</p> <p><i>Address Access to Healthcare...costs are particularly burdensome for ADA paratransit providers who provide subscription trips to individuals requiring dialysis.</i></p> <p><i>ADA paratransit providers receive no financial contribution from the clinics whose clients receive these services.</i></p> <p><i>MTC could bring the parties together to arrive at cost sharing arrangements that would exceed the fare paid by riders.</i></p> <p>For-profit dialysis businesses have very little incentive to “share” the cost of their customers’ transportation, given the requirement that ADA paratransit operators provide those trips without capacity constraints.</p> <p><b>SamTrans</b></p>	<p>MTC will consider how best to initiate conversations between parties to explore cost sharing arrangements, reduce travel costs and expand travel options.</p>
<p>50</p> <p><b>Regional Strategies for Coordination</b></p>	<p>From Chapter 5:</p> <p><i>Piloting trip-screening modules in scheduling software to facilitate the implementation of conditional eligibility policies.</i></p> <p><i>Funding for this technology can be prioritized, and can assist in coordinating the phased development of a regional database of accessible bus stops to inform trip-screening.</i></p> <p>The biggest single obstacle to implementing meaningful conditional eligibility enforcement is the lack of GIS data.</p> <p>Assistance from MTC in developing the necessary databases would be extremely helpful.</p> <p><b>SamTrans</b></p>	<p>This can be considered during plan implementation.</p>



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Category	Comment/Commenter	Response
<p>51</p> <p><b>Regional Strategies for Coordination</b></p>	<p>From Chapter 5:</p> <p><i>Make it Easier to Pay for Paratransit Without contributing to the cost of providing ADA paratransit, operators can provide seamless paratransit payment options for passengers.</i></p> <p><i>The cost of on-vehicle card readers necessary for the use of Clipper cards is prohibitive given the relative lower volume of trips provided on paratransit as compared to fixed-route.</i></p> <p>The fact that the cost for onboard clipper readers is “prohibitive” suggests that this initiative could contribute substantially to the overall cost of providing paratransit.</p> <p><b>SamTrans</b></p>	<p>As noted in Chapter 5, Clipper 2.0 may be able to include paratransit as a parameter in the new system. Other solutions may be available using current technology, such as a system in which payment for the trip is secured upon booking, and processed upon taking the trip.</p>
<p>52</p> <p><b>Regional Strategies for Coordination</b></p>	<p><i>Riders can pre-load funds for paratransit rides onto their Access Rider ID/TAP card.</i></p> <p><i>At boarding time, the driver can then swipe their card, and the fare will be deducted automatically from the rider's Access Rider ID/TAP card account balance.</i></p> <p>What on-vehicle equipment is needed to process fare payments via TAP card?</p> <p><b>SamTrans</b></p>	<p>As noted in Chapter 5, Clipper 2.0 may be able to include paratransit as a parameter in the new system, and may or may not require on-vehicle equipment. Other solutions may be available using current technology, such as a system in which payment for the trip is secured upon booking, and processed upon taking the trip.</p>
<p>53</p> <p><b>Regional Strategies for Coordination</b></p>	<p>From Chapter 5:</p> <p><i>To address the growing costs of transportation to healthcare in the Bay Area, paratransit providers can implement Medi-Cal cost recovery programs.</i></p> <p><i>Recovered costs could be put back into the paratransit system, or used to fund less expensive non-ADA services.</i></p> <p>If this cost recovery practice were widely adopted, what is the likelihood that Medi-Cal would change the rules for reimbursement?</p> <p>Our understanding is that Medi-Cal must approve trips before they are provided, in order for the trips to be eligible for reimbursement.</p> <p>While this might be relatively straightforward in the case of subscription or standing-order paratransit trips, pre-approval could be exceedingly difficult in the case of same-day or next-day demand-responsive trips.</p> <p><b>SamTrans</b></p>	<p>The plan presents general and preliminary guidance for regional prioritization, and recognizes that solutions may be different in a local context. Implications and outcomes of seeing Medi-Cal cost recovery will need to be further explored during implementation.</p>

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Category	Comment/Commenter	Response
<p>54</p> <p><b>Regional Strategies for Coordination</b></p>	<p>From Chapter 5:</p> <p><i>Paratransit users and operators alike see benefits in expanding options for same-day trips. Same-day trip programs provide greater mobility options and flexibility to riders, and operators may realize cost savings through innovative partnerships.</i></p> <p>The document refers to city-based programs. How would this apply to countywide transit operators? While independent “non-ADA” ride-hailing or taxi based programs would be of great benefit to the users, listing this item under “<i>Strategy 2: Improve Paratransit</i>” creates the impression that MTC is requiring or encouraging ADA paratransit operators to provide same-day ADA paratransit service – including the prohibition against capacity constraints.</p> <p>We suggest moving it to another section for clarity’s sake.</p> <p><b>SamTrans</b></p>	<p>This section is not necessarily referring to city-based programs. The plan is intended to provide a regional framework, while still allowing each county, city or agency to tailor local solutions, including services beyond the ADA. Further, the plan presents general and preliminary guidance for regional prioritization, and recognizes that solutions may be different in a local context.</p>
<p>55</p> <p><b>Regional Strategies for Coordination</b></p>	<p>From Chapter 5:</p> <p><i>Convene Task Force to Assist Implementation of In-Person Eligibility MTC can use its position as a regional resource to convene a task force to assist in the implementation of in-person eligibility and functional testing procedures at each of the region’s transit operators that do not currently use this eligibility model.</i></p> <p><i>This effort can increase the effectiveness of new funding made available to regional operators for the implementation of county-based mobility management.</i></p> <p>Is MTC proposing a regional eligibility contract or MOU?</p> <p><b>SamTrans</b></p>	<p>MTC is not proposing a contract or an MOU. The plan presents general and preliminary guidance for regional prioritization, and recognizes that solutions may be different in a local context.</p>
<p>56</p> <p><b>Regional Strategies for Coordination</b></p>	<p>Strategy 3:</p> <p><i>Increase suburban mobility options. New and expanded transportation solutions are needed for addressing mobility challenges that result from the suburbanization of poverty and older adults.</i></p> <p><i>Suburban development patterns are characterized by medium- and low-density land uses, which are often incompatible with traditional fixed-route transit service. Flexible, demand responsive solutions are necessary to provide mobility in these areas.</i></p> <p>Privately operated demand responsive service depends on a critical mass of business (ridership) in order to be sustainable. The same land use issues that make fixed route bus service too inefficient to be sustainable in the suburbs also make it hard to get a cab.</p> <p>If they don’t have enough business to stay busy all the time, cab/TNC drivers will choose not to provide this service.</p> <p><b>SamTrans</b></p>	<p>The plan presents general and preliminary guidance for regional prioritization, and recognizes that solutions may be different in a local context. Some suburban areas are experimenting with TNC projects and the region hopes to learn from these projects.</p>

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Category	Comment/Commenter	Response
<p>57</p> <p><b>Regional Strategies for Coordination</b></p>	<p>From Chapter 5:</p> <p><i>Fund Low-Income Vehicle Programs. MTC and County transportation and transit agencies should prioritize and fund low-income vehicle loan programs for individuals whose typical trip patterns render transit not an option.</i></p> <p>This recommendation appears to run counter to efforts to promote public transit as an attractive option and decrease the prevalence of single-occupancy vehicles.</p> <p>If the intent is to address the needs of low income people in rural areas, or of graveyard-shift workers who must commute during hours when no bus service is provided, that should be stated clearly.</p> <p>From the Peninsula Family Services DriveForward website:</p> <p><i>“Life is infinitely more challenging when you must rely solely on public transportation; commutes become longer, errands more difficult, and arriving on time to work or school nearly impossible.”</i></p> <p><b>SamTrans</b></p>	<p>New and expanded transportation solutions are needed for addressing mobility challenges that result from the suburbanization of poverty. Solutions beyond fixed-route bus service are presented in recognition that a diversity of transportation solutions are needed.</p>
<p>58</p> <p><b>Regional Strategies for Coordination</b></p>	<p>Means-based fares:</p> <p>How will this affect compliance with standards for farebox recovery ratio?</p> <p><b>SamTrans</b></p>	<p>This concern has been raised by transit agencies through the Regional Means-Based Fare Study. The impacts of a means-based fare program on farebox recovery is not currently known. MTC will continue to discuss and address this issue with transit agencies if a regional means-based fare program is implemented.</p>
<p>59</p> <p><b>Regional Strategies for Coordination</b></p>	<p>From Chapter 5:</p> <p><i>Advocate for the Accessibility of Emerging Shared Mobility Solutions and Autonomous Vehicles Shared mobility solutions, such as bikeshare, carshare, ride-hailing, and microtransit are options available to the public today.</i></p> <p><i>Most shared mobility providers are private entities, and as such may or may not prioritize service to traditionally underserved groups.</i></p> <p>Unlikely without enforceable regulation, both in terms of ADA and Title VI. Most successful examples from the taxi industry require both significant incentives and severe coercive measures.</p> <p><b>SamTrans</b></p>	<p>Comment noted. Further examination of needs, opportunities, and constraints will be undertaken during implementation.</p>
<p>60</p> <p><b>Veterans Transportation</b></p>	<p>Many non-veterans have the same needs as veterans. This need could better be addressed at the federal level, by creating a VA transportation program.</p> <p><b>SamTrans</b></p>	<p>Veterans are included in this plan as a response to the growing veteran population and their transportation needs in the region. The FTA has occasionally issued funding opportunities to address veterans' transportation needs. MTC will continue to seek and advocate for funding.</p>

**Figure H.1** Public Comments on Draft Coordinated Plan

Category		Comment/Commenter	Response
61	Implementation	Ranking the recommendations or some direct statement about the importance of each would also be helpful.  <i>SamTrans</i>	The plan presents general and preliminary guidance for regional prioritization, and recognizes that solutions may be weighted differently in a local context. Prioritization of the recommendations will be considered during implementation.
62	Funding	Related to Appendix E (premium services on ADA paratransit including but not limited to service beyond 3/4 mile and fixed-route transit times and days; same-day service), can this funding be used to support existing service where the ADA paratransit provider already exceeds the time and distance requirements?  <i>SamTrans</i>	Project eligibility is determined by requirements of the fund sources. Currently, paratransit service beyond the ADA is eligible under FTA guidance for the Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program.
63	Projects Eligible for Funding	<i>Related to Appendix E, are "Group trips (e.g. grocery shopping trips)" compatible with the rules against providing charters?</i>  <i>SamTrans</i>	Project eligibility is determined by requirements of the fund sources. Currently, group trips are eligible under FTA guidance for the Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program, and are typically provided under city-based services and nonprofit providers. Transit operators should continue to abide by applicable charter rules.
64	Funding	Related to Appendix E, "Improved performance and service quality measurement, including increased rider participation", is this limited to increasing rider participation, or could funding be used for data reporting tools and other technical improvements?  <i>SamTrans</i>	Project eligibility is determined by requirements of the fund sources. Currently, some technological improvements are eligible under FTA guidance for the Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program.
65	Regional Strategies for Coordination	Strategy 1: County-Based Mobility Management.  We agree that MTC should continue to award extra points to projects and proposals that address cross-county or regional connections and that MTC should provide a venue for inter-agency coordination.  What are the current venues and is MTC staff able to provide grant-specific support that brings potential collaborators together before a call for projects?  <i>Marin Transit</i>	MTC provides technical assistance during calls for projects, and will continue to support regional coordination.
66	Regional Strategies for Coordination	Strategy 1: County-Based Mobility Management.  Partners regularly participate in informal collaboration meetings, including the Bay Area Regional Mobility Management Group and BAPAC (Bay Area Partnership for Accessibility working group).  We encourage MTC to recognize and leverage the informal coordination which already exists.  <i>Marin Transit</i>	This can be considered during plan implementation.

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Category		Comment/Commenter	Response
67	Funding	<p>Strategy 2: Improve Paratransit.</p> <p>Recommendation for partners to take opportunities to expand subsidized same-day trip programs: The draft plan recognizes that veterans and those with low incomes will likely not benefit from these programs, typically supported by local sales taxes.</p> <p>Does MTC foresee that counties will receive support through 5310 or other funding streams to supplement/bolster programs and include these groups or is the draft plan recommending that partners proceed with implementing these programs without funding for additional groups?</p> <p><i>Marin Transit</i></p>	<p>Project eligibility is determined by requirements of the fund sources. MTC and local agencies can evaluate the use of fund sources for this purpose as implementation efforts progress with consideration of impacts on other priorities.</p>
68	Regional Strategies for Coordination	<p>Strategy 2: Improve Paratransit.</p> <p>Recommendation for partners to implement Medi-Cal Cost Recovery Program: It is our understanding that establishing a Medi-Cal cost recovery program is a complex process that requires a considerable amount of staff time. Smaller transit agencies would require significant technical assistance.</p> <p><i>Marin Transit</i></p>	<p>This can be considered during plan implementation.</p>
69	Regional Strategies for Coordination	<p>Strategy 3: Provide Mobility Solutions to Suburban Areas.</p> <p>As emphasized in the draft plan, today's older adults are expected to stay healthy longer, with almost no growth expected in the portion of the population that is disabled.</p> <p>This is especially true in Marin County where we have the highest percent of seniors in the region but are below average in percent living with a disability, living in poverty, and without access to a vehicle.</p> <p>To provide this population with attractive mobility options beyond driving, we will require MTC's support in developing and piloting innovative, accessible, and equitable solutions beyond traditional fixed route transit and ADA-mandated paratransit. We commend MTC for including direction in this spirit among its key recommendations and look forward to a fruitful partnership that encourages innovation and flexibility.</p> <p><i>Marin Transit</i></p>	<p>This can be considered during plan implementation.</p>
70	Regional Strategies for Coordination	<p>Strategy 3: Provide Mobility Solutions to Suburban Areas.</p> <p>Recommendation for partners to prioritize one-click systems: We are committed to increasing access to information and encouraging coordination, however, it is a risk for small transit agencies to invest in software and development of one-click systems that may become obsolete or will be incompatible with regional partners.</p> <p>MTC can help provide guidance and support towards a cost-effective uniform regional solution.</p> <p><i>Marin Transit</i></p>	<p>This can be considered during plan implementation.</p>

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71	Regional Strategies for Coordination	<p>Strategy 4: Means-Based Fares.</p> <p>Poverty has risen faster in suburban than urban areas of the nine counties. In Marin County this contributes to an increasing income equality gap among residents.</p> <p>Our local funds support only a sub-set of low-income riders. Marin Transit supports regional efforts that will aid local efforts in establishing and funding an equitable means-based fare program where those operators that have already implemented some form of low income fare are recognized and are eligible to participate in a regional program.</p> <p><i>Marin Transit</i></p>	<p>Through the Regional Means-Based Fare Study, MTC is working with transit agencies to develop an implementable program and seek funding to support this effort. Program implementation details have not been developed and is pending MTC Commission and transit agency board support to proceed. Comment will be forwarded to the Means-Based Fare Study project.</p>
72	Regional Strategies for Coordination	<p>Strategy 5: Shared and Future Mobility Opportunities (pending Commission direction).</p> <p>We encourage the Commission to adopt the strategy in the Draft Plan and apply public transit’s focus on equity and accessibility to shared mobility.</p> <p>The Draft Plan outlines a number of promising ways to ensure access to private shared mobility providers and their future driverless products.</p> <p><i>Marin Transit</i></p>	<p>This can be considered during plan implementation.</p>
73	Outreach	<p>Concerned about how South Santa Clara County was not engaged for input to this study except through VTA advisory committee. The level of stakeholder input was quite limited.</p> <p>For Santa Clara County, where are the City Senior Centers and organizations that were stakeholders during Measure B such as Transit Justice Alliance?</p> <p><i>City of Morgan Hill</i></p>	<p>Input from Santa Clara County was provided from a range of stakeholders, including the MTC Policy Advisory Council Equity and Access Subcommittee, the Bay Area Partnership Accessibility Committee, Home First Santa Clara, VTA Committee for Transit Accessibility, and through the Coordinated Plan Technical Advisory Committee.</p>
74	Regional Strategies for Coordination	<p>Strategy 3 for Mobility solutions for Suburban Areas is insufficient to address transportation issues in suburban areas especially the South Santa Clara County.</p> <p>We suggest that Strategy 1 be expanded to include specific support for suburban areas through local extension of the Countywide Mobility Manager that is proposed.</p> <p>We believe that would offer an opportunity for greater impact than what is suggested in Strategy 3.</p> <p><i>City of Morgan Hill</i></p>	<p>The strategy to implement county-based mobility management is intended to provide a regional framework, while still allowing each county to tailor local solutions, including how to fund agencies. Further, the plan presents general and preliminary guidance for regional prioritization, and recognizes that solutions may be weighted differently in a local context.</p>
75	Other	<p>By study admission, South Santa Clara County workers are resolved to being automobile dependent, with “best practices” including low cost loans for lower income families to purchase a car and insurance.”</p> <p>This is in contrast to the ABAG Priority Development Area (PDA) policies which have located affordable and dense housing near transit lines and centers in south County to produce transportation mode-split opportunities.</p> <p><i>City of Morgan Hill</i></p>	<p>New and expanded transportation solutions are needed for addressing mobility challenges that result from the suburbanization of poverty. Solutions beyond fixed-route bus service are presented in recognition that a diversity of transportation solutions are needed.</p>

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Category		Comment/Commenter	Response
76	<b>Transportation Resources</b>	Morgan Hill and South Santa Clara County is served by numerous long-haul corporate shuttles.  <i>City of Morgan Hill</i>	Community-based shuttles, including employment based shuttles, are noted included in Chapter 3.
77	<b>Transportation Gap or Solution</b>	Note in the study that economic development in South Santa Clara County is heavily industrial/manufacturing employing people in good jobs, but not jobs which pay enough to allow the employee to live in this county, therefore more are auto dependent.  <i>City of Morgan Hill</i>	The issue of poverty growth in suburban areas is noted in Chapter 2 and providing mobility solutions to suburban areas is listed in Chapter 5.
78	<b>Transportation Gap or Solution</b>	Gilroy and Morgan Hill are not wealthy cities which can invest in their own transit options, and therefore rely on public transit agency investment.  <i>City of Morgan Hill</i>	Improvements to public transit service and access is noted in Chapter 4 and Appendix E.
79	<b>Transportation Gap or Solution</b>	Investment in transit, not disinvestment should be a South County priority to connect people to jobs and services, and reduce congestion on the freeways.  <i>City of Morgan Hill</i>	Improvements to public transit service and access is noted in Chapter 4 and Appendix E.
80	<b>Transportation Gap or Solution</b>	It should be a priority that Caltrain services shuttle to and from South County during the day, not just north in the morning and south in the evening promoting transit use and access to jobs and services.  <i>City of Morgan Hill</i>	Improvements to public transit service and access is noted in Chapter 4 and Appendix E.
81	<b>Funding</b>	With reference to mobility management the plan encourages formation of Consolidated Transportation Service Agencies (CTSA).  Other regions are able to sustain these agencies with funding from TDA section 4.5 funding. I think CTSA's are a good thing. I just didn't see a clear way to fund the agencies.  <i>Tighe Boyle</i>	The strategy to implement county-based mobility management is intended to provide a regional framework, while still allowing each county to tailor local solutions, including how to fund agencies.
82	<b>Regional Strategies for Coordination</b>	I totally support Strategy 1: County based mobility management. I would like to see an official government group bringing community managers together.  Currently a group (Regional Mobility Management Group) meets quarterly exchange ideas and information. I would like to see something more formal that would assist in inter-county coordination from a mobility management perspective.  <i>Tighe Boyle</i>	This can be considered during plan implementation.
83	<b>Transportation Gap or Solution</b>	Travel training should be available for all transportation services, not just fixed-route public transit.  <i>Tighe Boyle</i>	Incorporated into Chapter 4 and Appendix E.
84	<b>Transportation Gap or Solution</b>	Reimbursement vouchers should be made available on all modes of transportation.  <i>Sonoma Access Coordinated Transportation Services</i>	Affordability of transportation is noted as a need and solution in Chapter 4. Subsidized transportation services is listed as a strategy in Chapter 5.



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85	<b>Veterans Transportation</b>	Sonoma County veterans face particular challenges in taking public transit to the VA hospital in San Francisco.  <i>Sonoma Access Coordinated Transportation Services</i>	Healthcare access is noted as a need in Chapter 4 and improving mobility for veterans is listed in Chapter 5.
86	<b>Transportation Gap or Solution</b>	Transfer agreements and easier connections between ADA-paratransit and fixed route transit should be established.  <i>Sonoma Access Coordinated Transportation Services</i>	Noted as a need in Chapter 4 and Appendix E.
87	<b>Transportation Gap or Solution</b>	Park and Ride lots are a good tool for providing access to paratransit services, and should be listed under as a need for the region.  <i>Sonoma Access Coordinated Transportation Services</i>	Infrastructure projects have been incorporated into Appendix E.
88	<b>Transportation Gap or Solution</b>	We appreciate the incorporation of emerging mobility services, and agree they provide an opportunity to innovate the way mobility services are provided to low income users, seniors, people with disabilities, and veterans. For a more robust snapshot of what is available, we recommend incorporating a discussion of available services beyond ridesharing and ride hailing, for example microtransit services such as Chariot.  <i>San Francisco County Transportation Authority</i>	Reference to microtransit has been incorporated into Chapter 3, and is noted in Chapter 5.
89	<b>Transportation Gap or Solution</b>	As the Coordinated Plan indicates, it is currently a challenge to ensure physical accessibility of shared or hailed vehicles. We recommend addressing additional equity-related concerns such as gaps in technology for users (e.g. access to a smart phone) and the need to make mobility services available for those without access to credit cards or other banking services.  <i>San Francisco County Transportation Authority</i>	References to additional equity-related concerns have been incorporated into Chapter 5.
90	<b>Regional Strategies for Coordination</b>	On July 25, 2017, our Board adopted Guiding Principles for Management of Emerging Mobility Services and Technologies. We encourage you to review these principles and incorporate them into the Coordinated Plan. At our December 12, 2017 meeting, we released a new report that could serve as an additional reference, entitled “The TNC Regulatory Landscape - An Overview of Current TNC Regulation in California and Across the County.”  <i>San Francisco County Transportation Authority</i>	SFCTA’s Guiding Principles have been incorporated into Chapter 5 as a best practice.
91	<b>Other</b>	We suggest making the final report available in full page version for electronic viewing, as it is difficult to read the double-pane report on standard page size.  <i>San Francisco County Transportation Authority</i>	Noted. Staff will make every effort to ensure a more readable electronic version is posted.
92	<b>Other</b>	Throughout, the Coordinated Plan should distinguish between ridesharing (defined as carpool matching platforms where drivers are paired with riders who share similar destinations as them and are not fare motivated e.g. Waze Carpool and Scoop) and ridehailing (defined as platforms which connect fare-motivated drivers with riders similar to taxi services e.g. Uber and Lyft).  <i>San Francisco County Transportation Authority</i>	The Coordinated Plan defines ride-hailing as services that are often demand-responsive and initiated and paid for by the rider, most typically taxis and TNCs like Uber and Lyft. Ridesharing services such as Waze Carpool and Scoop are not discussed in the plan.



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Category		Comment/Commenter	Response
93	Transportation Resources	<p>Consider including an appendix cataloging the different mobility services MTC researched that are available for the targeted population. Useful examples are provided in Chapter 3 such as the Palo Alto Shuttle, the Monument Shuttle in Concord, the Lamorinda Spirit Van, and the Emeryville Emery Go-Round). This would serve as a valuable resource that describes the breadth of services provided in each jurisdiction all in one place.</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>Guided by the Coordinated Plan Technical Advisory Committee and stakeholder feedback, staff opted for providing a chapter on the types of transportation services available to the plan's target population, rather than an exhaustive inventory of services that would quickly become outdated.</p>
94	Outreach	<p>We appreciate the extensive outreach that has been conducted to develop this plan and encourage additional outreach to emerging mobility companies about this plan if it hasn't happened already.</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>Outreach for the Coordinated Plan focused on transportation-disadvantaged individuals, advocates, organizations and agencies. We did not conduct outreach to providers of private transportation.</p>
95	Bay Area Demographics	<p>Ch 2 - The fourth key finding bullet point on page 9 indicates that San Francisco is an outlier and that there is a need to allocate additional resources to infrastructure that supports transit and multi-modal mobility since the share of no-car households increased since 2000. Rather than demonstrating as a city we aren't investing enough in transit and multi-modal mobility, we actually see this as a success - more people are able to go without a car since there are so many non-auto resources available (Transit First policies and a robust paratransit program).</p> <p>And, the report doesn't adequately acknowledge the significant proliferation of ride-hailing and other technology services in San Francisco that are attracting and enabling so many households that choose to not own a car. We request revising this key finding as follows to simply call out the trend or key data point and not point to strategies, which is the case for almost all of the other key findings.</p> <p>"San Francisco is an outlier. It is the most urban of all counties, with the greatest density of transit services, and has the highest percentage of residents without access to a vehicle. As of 2012, San Francisco was the fifth most carfree city in the county, a much higher ranking than in 2000."</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>Changes to this section have been incorporated.</p>
96	Bay Area Demographics	<p>Ch 2 - Based on latest data shown in the figures, the fifth key finding that "San Francisco has one of the highest percentages of people living in poverty and people living with a disability" does not appear to reflect the actual data (for poverty it is 25% or rank 4 tied with Alameda and for disability it is 10% or rank 5 tied with Alameda).</p> <p>We suggest deleting this text or replace it with another San Francisco key finding such as:</p> <p>"San Francisco has the highest percentage of seniors living in poverty."</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>These changes have been incorporated.</p>

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Category		Comment/Commenter	Response
97	Bay Area Demographics	<p>Ch 2 - We suggest adding additional context that the household income needed to afford housing varies across the region, so defining low income flatly as 200% of the federal poverty line may underrepresent those experiencing poverty conditions in high-cost areas such as San Francisco and the Peninsula.</p> <p><i>San Francisco County Transportation Authority</i></p>	MTC uses 200 percent of the federal poverty line to assess poverty rates in many contexts, including in Plan Bay Area 2040.
98	Bay Area Demographics	<p>Ch 2 - On Page 14, in “Poverty - Trends” section, there is a statement - “Almost a quarter of seniors living in San Francisco are living in poverty.”</p> <p>However, Figure 2.6 shows that the percent is 36% which is well over a third.</p> <p><i>San Francisco County Transportation Authority</i></p>	This correction has been incorporated.
99	Bay Area Demographics	<p>Ch 2 - On page 18, in “Access to Vehicles - Current Conditions,” there is mention of both “senior household” and “households with senior at head.”</p> <p>Please clarify what a “senior household” is if it is different than a household with a senior at head. If both phrases refer to the same population, please adjust the intro sentences - “For senior household, it is 15 percent.</p> <p>For households with a senior at the head, this number is closer to 1 in 10.”</p> <p><i>San Francisco County Transportation Authority</i></p>	The second reference has been deleted.
100	Transportation Resources	<p>Ch 3 - The illustration provided on page 25 presents taxis and ridesharing but should say “taxis and ridehailing.”</p> <p><i>San Francisco County Transportation Authority</i></p>	This correction has been incorporated.
101	Transportation Resources	<p>Ch 3 - In addition to TNCs as private transportation options filling accessibility gaps for seniors and disabled people, we encourage MTC to study microtransit/private transit vehicle services such as Chariot to perform similar services.</p> <p><i>San Francisco County Transportation Authority</i></p>	Reference to microtransit has been incorporated into Chapter 3, and is noted in Chapter 5.
102	Transportation Gap or Solution	<p>Ch 3 - When considering barriers to private transportation services, particularly those driven by mobile applications, please include access to a smart phone, 508 compliance of mobile applications, and how to serve people without access to credit or banking services (unbanked).</p> <p><i>San Francisco County Transportation Authority</i></p>	References to additional equity-related concerns have been incorporated into Chapter 5.
103	Transportation Gap or Solution	<p>Ch 4 - We appreciate seeing the mention of temporal gaps.</p> <p>San Francisco’s Late Night Transportation Study found that late-night and early-morning commuters are disproportionately low-income compared to daytime commuters, and we suggest noting the importance of providing travel options during these gaps in terms of providing access to employment opportunities for low-income workers.</p> <p><i>San Francisco County Transportation Authority</i></p>	To reveal top transportation gaps in the Bay Area, outreach was conducted and comments were collected. Temporal gaps, of all kinds, were cited as a top gap, and is reflected as such in Chapter 4.

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104	Transportation Gap or Solution	<p>Ch 4 - Feedback by County: In looking at the list of feedback comments, San Francisco participants also were concerned with Information and Referral Services, which should be reflected in the summary.</p> <p><i>San Francisco County Transportation Authority</i></p>	A reference to the lack of transportation information and referral has been incorporated into Chapter 4.
105	Transportation Gap or Solution	<p>Ch 4 - We appreciate the gaps identified so far and suggest an additional gap of access to technology.</p> <p>Low income and senior residents may be less likely to have access to a smartphone, and therefore lack access to emerging mobility services and technologies such as ridesharing, ridehailing, and bikesharing.</p> <p><i>San Francisco County Transportation Authority</i></p>	Access to technology was not cited as a transportation gap through the plan's outreach efforts. However, references to smartphone requirements for emerging mobility services has been incorporated into Chapter 5.
106	Regional Strategies for Coordination	<p>Ch 5 - Shared and future mobility: We agree with MTC's position to advocate for emerging mobility services and technologies to ensure equity and accessibility of these shared services.</p> <p>The Transportation Authority has adopted ten guiding principles for emerging mobility services and technologies, and we recommend incorporating these as appropriate into the Coordinated Plan.</p> <p><i>San Francisco County Transportation Authority</i></p>	SFCTA's Guiding Principles have been incorporated into Chapter 5 as a best practice.
107	Regional Strategies for Coordination	<p>Ch 5 - Thank you for providing examples of best practices, which is a significant enhancement to prior drafts.</p> <p><i>San Francisco County Transportation Authority</i></p>	Comment noted.
108	Regional Strategies for Coordination	<p>Strategy 2 - We recommend including: Make paratransit more flexible by allowing customers to book and cancel trips more easily, and with less time restrictions, based on their needs.</p> <p><i>San Francisco County Transportation Authority</i></p>	The strategies presented in Chapter 5 are big picture initiatives, and are not meant to be an exhaustive list. The recommendations in Strategy 2 are intended to improve paratransit without raising costs.
109	Regional Strategies for Coordination	<p>Strategy 2 we recommend including: Modernize ride reservations to allow customers to book and pay for trips in advance online. We are proposing that this service be added to any call-in reservation process.</p> <p><i>San Francisco County Transportation Authority</i></p>	The strategies presented in Chapter 5 are big picture initiatives, and are not meant to be an exhaustive list. The recommendations in Strategy 2 are intended to improve paratransit without raising costs.
110	Regional Strategies for Coordination	<p>Strategy 2 we recommend including: Encourage agencies to minimize the window of time when a paratransit vehicle may arrive.</p> <p>We recognize that this strategy, in particular, has to be considered in concert with associated cost implications.</p> <p><i>San Francisco County Transportation Authority</i></p>	The strategies presented in Chapter 5 are big picture initiatives, and are not meant to be an exhaustive list. The recommendations in Strategy 2 are intended to improve paratransit without raising costs.
111	Regional Strategies for Coordination	<p>Strategy 2 we recommend including: Encourage agencies to provide call-in and online real-time arrival information.</p> <p><i>San Francisco County Transportation Authority</i></p>	This is included in the strategy as "Promoting the use of Interactive Voice Response (IVR) systems to remind passengers of upcoming trips and communicate imminent arrival."

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112	<b>Regional Strategies for Coordination</b>	<p>Strategy 2 we recommend including:</p> <p>Allow customers to rate rides and provide feedback so that agencies can better assess performance and customer needs and satisfaction.</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>The strategies presented in Chapter 5 are big picture initiatives, and are not meant to be an exhaustive list. The recommendations in Strategy 2 are intended to improve paratransit without raising costs.</p>
113	<b>Regional Strategies for Coordination</b>	<p>Strategy 5 - Shared and Future Mobility Opportunities:</p> <p>It would be great to see San Francisco's work to develop and implement guiding principles included as a best practice.</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>SFCTA's Guiding Principles have been incorporated into Chapter 5 as a best practice.</p>
114	<b>Regional Strategies for Coordination</b>	<p>Strategy 6 - Improve Mobility for Veterans:</p> <p>We encourage MTC to recommend a feedback service to allow agencies to assess veterans' needs and satisfaction.</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>This can be considered during implementation.</p>
115	<b>Transportation Gap or Solution</b>	<p>We recommend a clearer strategy for addressing temporal gaps in transit service, which we have found to be of particular importance to low income workers and while presenting a funding challenge for operators given relatively lower ridership at off-peak hours.</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>The strategies presented in Chapter 5 are big picture initiatives for the region, and are not meant to be an exhaustive list of solutions to gaps.</p>
116	<b>Other</b>	<p>We appreciate the strategies included in Appendix F to promote walkable communities, but suggest providing more robust strategies for improving pedestrian and bicycle mobility as part of this chapter as well.</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>Pedestrian and sidewalk right-of-ways, bicycles lanes and other safety improvements for pedestrian and cyclists are discussed in Chapter 3.</p>

**Figure H.1** Public Comments on Draft Coordinated Plan

Category		Comment/Commenter	Response
117	<b>Projects Eligible for Funding</b>	<p>In Figure E.1, please indicate which project types are eligible for the FTA 5310 funds, 5311 funds, and the other fund sources encompassed in MTC’s regional competitive funds (e.g. STA Population funds).</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>Appendix E includes a list of eligible projects for the FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program. Project eligibility for other fund sources is not included.</p>
118	<b>Projects Eligible for Funding</b>	<p>In Appendix E, please acknowledge the significant role that local funds play in funding these project types to meet the needs of the targeted users.</p> <p>Federal funds continue to be a shrinking resource, and we must rely more heavily on self-help from local, regional, and state sources.</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>Appendix E includes a list of eligible projects for the FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program. This appendix does not include project eligibility requirements, including local matching fund rates. The issue of funding availability and consistency is noted as a key gap in Chapter 4.</p>
119	<b>Projects Eligible for Funding</b>	<p>In Appendix E, please acknowledge the difficulty in identifying funds, particularly a sustainable source of funds, for operating projects (e.g. education, training, service operations) and fare subsidies (e.g. low income transit pass), since most grant programs focus on capital infrastructure.</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>Appendix E includes a list of eligible projects for the FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program, and does not provide information on other fund sources or requirements. The issue of funding availability and inconsistency of grant-based funding is noted as a key gap in Chapter 4.</p>
120	<b>Other</b>	<p>Appendix F does not seem to include recommendations for the integration of transportation and land use decisions to improve needs of low-income people, seniors and people with disabilities.</p> <p>Please either re-title the section to exclude “Integration of Transportation and Land Use Decisions” or add an example such as strategies to link transportation resources to the production of affordable housing.</p> <p><i>San Francisco County Transportation Authority</i></p>	<p>Changes to Appendix F have been incorporated.</p>



METROPOLITAN TRANSPORTATION COMMISSION

Bay Area Metro Center  
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San Francisco, CA 94105

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# APPENDIX A – 10

## *Regional Policies: Long-Range Planning / Plan Bay Area*

**Regional Transit Expansion Program (RTEP)  
MTC Resolution No. 3434**



Date: December 19, 2001  
W.I.: 12110  
Referred by: POC  
Revised: 01/30/02-C 07/27/05-C  
04/26/06-C 10/24/07-C  
09/24/08-C

ABSTRACT

Resolution No. 3434, Revised

This resolution sets forth MTC's Regional Transit Expansion Program of Projects.

This resolution was amended on January 30, 2002 to include the San Francisco Geary Corridor Major Investment Study to Attachment B, as requested by the Planning and Operations Committee on December 14, 2001.

This resolution was amended on July 27, 2005 to include a Transit-Oriented Development (TOD) Policy to condition transit expansion projects funded under Resolution 3434 on supportive land use policies, as detailed in Attachment D-2.

This resolution was amended on April 26, 2006 to reflect changes in project cost, funding, and scope since the 2001 adoption.

This resolution was amended on October 24, 2007 to reflect changes in the Transit-Oriented Development (TOD) Policy in Attachment D-2.

This resolution was amended on September 24, 2008 to reflect changes associated with the 2008 Strategic Plan effort (Attachments B, C and D).

Further discussion of these actions are contained in the MTC Executive Director's Memorandum dated December 14, 2001, July 8, 2005, April 14, 2006, October 12, 2007 and September 10, 2008.



Date: December 19, 2001  
W.I.: 12110  
Referred by: POC

RE: Regional Transit Expansion Program of Projects

METROPOLITAN TRANSPORTATION COMMISSION  
RESOLUTION NO. 3434, Revised

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code Section 66500 et seq.; and

WHEREAS, MTC adopted Resolution No. 1876 in 1988 which set forth a new rail transit starts and extension program for the region; and

WHEREAS, significant progress has been made in implementing Resolution No. 1876, with new light rail service in operation in San Francisco and Silicon Valley, new BART service extended to Bay Point and Dublin/Pleasanton in the East Bay, and the BART extension to San Francisco International Airport scheduled to open in 2002; and

WHEREAS, MTC's long range planning process, including the Regional Transportation Plan and its *Transportation Blueprint for the 21<sup>st</sup> Century*, provides a framework for comprehensively evaluating the next generation of major regional transit expansion projects to meet the challenge of congestion in major corridors throughout the nine-county Bay Area; and

WHEREAS, the Commission adopted Resolution No. 3357 as the basis for assisting in the evaluations of rail and express/rapid bus projects to serve as the companion follow-up program to Resolution No. 1876; and

WHEREAS, local, regional, state and federal discretionary funds will continue to be required to finance an integrated program of new rail transit starts and extensions including those funds which are reasonably expected to be available under current conditions, and new funds which need to be secured in the future through advocacy with state and federal legislatures and the electorate; and

WHEREAS, the Regional Transit Expansion program of projects will enhance the Bay Area's transit network with an additional 140 miles of rail, 600 miles of new express bus routes, and a 58% increase in service levels in several existing corridors, primarily funded with regional and local sources of funds; and

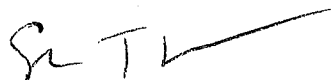
WHEREAS, MTC recognizes that coordinated regional priorities for transit investment will best position the Bay Area to compete for limited discretionary funding sources now and in the future; now, therefore, be it

RESOLVED, that MTC adopts a Regional Transit Expansion Program of Projects, consistent with the Policy and Criteria established in Resolution No. 3357, as outlined in Attachment A, attached hereto and incorporated herein as though set forth at length; and be it further

RESOLVED, that this program of projects, as set forth in Attachment B is accompanied by a comprehensive funding strategy of local, regional, state and federal funding sources as outlined in Attachment C, attached hereto and incorporated herein as though set forth at length; and, be it further

RESOLVED, that the regional discretionary funding commitments included in this financial strategy are subject to the terms and conditions outlined in Attachment D, attached hereto and incorporated herein as though set forth at length.

METROPOLITAN TRANSPORTATION COMMISSION



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Sharon J. Brown, Chair

The above resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in Oakland, California, on December 19, 2001.

**ATTACHMENT A - Regional Transit Expansion Policy Criteria Evaluation Matrix**

Project	Sponsor	Project Cost 2001 \$ Millions	Resolution 1876-Tier 1	TEA-21 Funds	TCRP	Dedicated Local Funding	Operations/ Maintenance	Supportive Land Use		Cost- Effectiveness	System Connectivity			System Access	Project Readiness
			prior 1876 Tier 1 commitment	TEA-21 authorization or other federal appropriations	TCRP or other state level commitments	Local funds as a percent of total capital cost	Demonstrated operating plan	Residential densities around stations	Employment densities around stations	Cost per new transit rider	# connecting operators	Frequency	Regional gap closures	# of modal access options	# of pre-construction activities completed or in progress
BART to Warm Springs	BART	\$ 634	Yes	Yes	Yes	H	Yes	M	M	M	M	H	No	H	M
BART: Warm Springs to San Jose	VTA	\$ 3,710	No	Yes	Yes	H	Yes	H	M	M	H	H	Yes	H	L
MUNI 3rd St. LRT Phase 2 - New Central Subway	SFCTA/Muni	\$ 647	No	Yes	Yes	M	Yes	H	H	L	H	H	No	H	H
BART/Oakland Airport Connector	BART	\$ 232	No	Yes	No	M	Yes	M	M	H	M	H	Yes	H	M
Caltrain Downtown Extension/Rebuilt Transbay Terminal	SFCTA	\$ 1,885	Yes	Yes	No	H	Yes	H	H	L	H	H	Yes	H	M
Caltrain Rapid Rail/Electrification	JPB	\$ 602	No	No	No	H	Yes	M	H	L	H	M	No	H	M
Caltrain Express: phase 1	JPB	\$ 127	No	No	Yes	L	Yes	M	H	H	H	M	No	H	H
Downtown East Valley: Light Rail and Bus Rapid Transit Phase 1 and 2	VTA	\$ 518	No	No	No	H	Yes	H	M	L	H	H	No	H	M
Capitol Corridor: Phase 1 Expansion	CCJPA	\$ 129	No	No	Yes	L	Yes	H	M	H	H	L	No	H	M
AC Transit Oakland/San Leandro Bus Rapid Transit: Phase 1 (Enhanced Bus)	AC Transit	\$ 151	No	No	No	L	Yes	H	H	H	L	H	No	H	L
Regional Express Bus Phase 1	MTC/Operators	\$ 40	No	No	Yes	L	Yes	-	-	H	M	-	Yes	H	H
Dumbarton Rail	JPB	\$ 129	No	No	No	H	No	M	M	L	H	L	Yes	H	L
BART/East Contra Costa Rail Extension	CCTA	\$ 345	No	No	Yes	L	No	-	-	-	-	-	-	-	L
BART/Tri-Valley Rail Extension	ACCMA	\$ 345	No	No	Yes	L	No	-	-	-	-	-	-	-	L
Altamont Commuter Express (ACE): service expansion	ACE	\$ 121	No	No	No	L	-	M	M	H	M	L	No	M	-
Caltrain Express Phase 2	JPB	\$ 330	No	No	No	H	-	M	H	-	H	-	No	H	-
Capitol Corridor: Phase 2 Enhancements	CCJPA	\$ 284	No	No	Yes	L	Yes	H	M	-	H	L	No	H	M
Sonoma-Marin Rail	SMART	\$ 200	No	No	Yes	L	No	L	M	-	H	L	No	H	L
AC Transit Enhanced Bus: Hesperian/Foothill/MacArthur corridors	AC Transit	\$ 90	No	No	No	L	-	H	M	H	L	H	No	H	-

Note: "--" indicates that complete information is not available.

Date: December 19, 2001  
W.I.: 12110  
Referred by: POC

Attachment A  
Resolution No. 3434  
Page 2 of 3

## **Resolution No. 3357 Criteria: Definitions and Measurement**

### **Financial Criteria:**

Honor 1876 commitments: Priority assigned to those projects of the original seven “Tier 1” Resolution No. 1876 projects that do not yet have a defined and secured financial agreement.  
*Rating: “Yes” or “No”*

TEA-21/federal reauthorization: Current federal financial support exists for the project, through TEA-21 authorizing language for New Starts funding, or other federal appropriation commitments.  
*Rating: “Yes” or “No”*

TCRP/State commitments: Current state financial commitment is secured by the project, through Traffic Congestion Relief Program funds, or other existing state funding commitments.  
*Rating: “Yes” or “No”*

Dedicated local commitments: Local financial commitment for the project, based on percentage of local funds to total capital costs.  
*Rating: “High”: Greater than 50%; “Medium”: 30% to 50%; “Low”: under 30%*

Operations/Maintenance: Project can be maintained and operated once built, based on financial plans and policies submitted by the project sponsor, outlining sources and commitments of funds for the period of operations through the end of the RTP (2025) or for at least 10 years, whichever is longer. Any financial burden imposed by the transit expansion project may not undermine core bus service within the same system, especially that needed by transit dependent persons.  
*Rating: “Yes” or “No”*

### **Performance Criteria:**

Land Use: Evaluate potential system benefits accrued as a result of adjacent land uses along rail/bus corridors, based on year 2025 projected net residential and employment land use densities around planned stations or transit corridors.  
*Rating: “High”: urban or urban core/CBD; “Medium”: suburban; “Low”: rural or rural suburban, as measured below:*

Net Population Density	Total Population/ Residential Area square miles	Net Employment Density	Total Employment/ Commercial Area square miles
Rural	< 5,000	Rural	< 5,000
Rural-Suburban	5,000-10,000	Suburban	5,000-20,000
Suburban	10,000-20,000	Urban	20,000-50,000
Urban	20,000-50,000	Urban Core	50,000-100,000
Urban Core	>50,000	Urban CBD	>100,000

Cost-effectiveness: “Cost per new rider”, measured as dollars per new rider (shifting from auto to transit; not transit to transit).

*Rating: “High”: \$0 - \$15/new rider; “Medium”: \$16 - \$30/new rider; “Low”: over \$30/new rider*

Note: Resolution No. 3357 also provides for another measure of cost effectiveness: “transit user benefits” that will be incorporated into this analysis at a later date once the methodology is available from the Federal Transit Administration.

System Connectivity: Assess the interconnected relationship of the transit expansion and the existing transit network, through measures of connections, service frequency and gap closures.

*Rating:*

*A. Number of Connecting Operators: “High”: 5 or more; “Medium”: 3 to 4; “Low”: 1 to 2*

*B. Frequency: Peak Period Headways: “High”: 10 minutes or less; “Medium”: 20 minutes to 11 minutes; “Low”: Greater than 20 minutes*

*C. Gap Closures: “Yes” or “No” for completion of a major closure in the regional network.*

System Access: Determine the ability of users to easily access (via walking, biking, auto or transit transfers) the new extensions, based on number of modal access options

*Rating: “High”: 4 or more; “Medium”: 3; “Low”: 1 to 2*

Project Readiness: Priority assigned to projects that are able to proceed expeditiously to implementation, based on pre-construction activities completed or in progress as of December 2001.

*Rating: “High”: corridor evaluation+environmental analysis+preliminary design and engineering; “Medium”: corridor evaluation+environmental analysis; “Low”: Sketch planning or corridor evaluation only.*

Date: December 19, 2001  
W.I.: 12110  
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04/26/06-C  
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Attachment B  
Resolution No. 3434  
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**Regional Transit Expansion Policy: Recommended Program of Projects**

PROJECT	COST (millions of YOE \$)
AC Transit Berkeley/Oakland/San Leandro Bus Rapid Transit	250
AC Transit Enhanced Bus: Hesperian/Foothill/MacArthur corridors	41
BART/Oakland Airport Connector	459
Tri-Valley Transit Access Improvements to BART	168
East Contra Costa BART Extension (eBART)	525
BART to Warm Springs	890
BART: Warm Springs to San Jose/Santa Clara	6,133
Caltrain Express: Baby Bullet ** OPEN FOR SERVICE**	128
Caltrain Electrification	785
Caltrain Express: Phase 2	427
Transbay Transit Center: Phase 1	1,189
Transbay Transit Center: Phase 2	2,996
Capitol Corridor Expansion	108
Capitol Corridor: Phase 2 Enhancements	89
Regional Express Bus **OPEN FOR SERVICE**	102
MUNI Third Street Light Rail Transit Project - Central Subway	1,290
SFCTA and SFMTA: Van Ness Avenue Bus Rapid Transit	88
Altamont Commuter Express (ACE): service expansion	150
Sonoma-Marin Rail	646
Dumbarton Rail	596
Downtown to East Valley: Light Rail and Bus Rapid Transit Phase 1 and 2	465
Expanded Ferry Service to Berkeley, Alameda/Oakland/Harbor Bay, Hercules, Richmond, and South San Francisco; and other improvements.	180

**Attachment C: Regional Transit Expansion Policy - Funding Strategy**

Project Capital Cost/Funding in Millions and Year of Expenditure \$ Alphabetical by Tier			Committed Funding						Regional Discretionary Funding											Capital Shortfall		
Project	Sponsor	Project Cost (YOE \$)	TCRP	Sales Tax	Resolution 1876	RTIP	Federal Earmarks	Other [see notes]	Section 5309 New Starts	Section 5309 Small Starts	Section 5309 Fixed Guideway Modernization	Ferryboat Discretionary	RM1	RM 2	AB 1171	Prop 1B - Transit	Prop 1B - SLPP	ITIP	ITIP Intercity Rail	CARB/ AB 434	Capital Shortfall	
Caltrain Express: Baby Bullet ** OPEN FOR SERVICE**	Caltrain JPB	128	127					1														-
Regional Express Bus **OPEN FOR SERVICE**	MTC	102	40											62								-

**Tier 1 - No Current Scope, Schedule, Budget Issues as Reported By Sponsors**

AC Transit Berkeley/Oakland/San Leandro Bus Rapid Transit	AC Transit	250		24		50	2	35		75				65								-
BART to Warm Springs	BART	890	100	221	205	69		26					53	85	5	40	86					-
East Contra Costa BART Extension (eBART)	BART/CCTA	525	7	196		14		6					52	96	115	40						-
Capitol Corridor Expansion	CCJPA	108	24			4		15											64			-
Capitol Corridor: Phase 2 Enhancements	CCJPA	89	1											3					85			-
MUNI Third Street Light Rail Transit Project - Central Subway	SFMTA	1,290	14	126		92		45	762							250						-
SFCTA and SFMTA: Van Ness Avenue Bus Rapid Transit	SFCTA and SFMTA	88		18						70												-
Transbay Transit Center: Phase 1	TJPA	1,189		105		28	64	646					53	142	150							-
Tri-Valley Transit Access Improvements to/from BART	BART/ACCMA/LAVTA	168	3	10				14		11			16	16	95	2						-
Downtown to East Valley: Light Rail and Bus Rapid Transit Phase 1 and 2	VTA	465		318		58										90						-
Alameda/Oakland/Harbor Bay, Hercules, Richmond, and South San Francisco; and other improvements.	WETA	180		47			19					25		89								-

**Tier 2 - Projects Needing More Scope/Cost Refinement**

BART/Oakland Airport Connector	BART	459		99		21		231					31	68					10			TBD
Caltrain Electrification	Caltrain JPB	785		360		28		23			4									29		341

**Tier 3 - Projects Needing Ongoing Operating Funds**

Sonoma-Marin Rail	SMART	646	37	24			7	65						35								478
BART: Warm Springs to San Jose/Santa Clara	VTA	6,133	649	4,734					750													-

**Tier 4 - Shortfall is equal to or greater than 50% project cost**

AC Transit Enhanced Bus: Grand-MacArthur corridor	AC Transit	41				7		1						3								30
Caltrain Express: Phase 2	Caltrain JPB	427						13		41						15						358
Dumbarton Rail	SMTA, ACCMA, VTA, ACTIA, Capitol Corridor	596		113		15								135					39			295
Altamont Commuter Express (ACE) Right-of-Way Acquisition for Service Expansion	SJRRC, ACCMA, VTA	150		67				3		5												75
Transbay Transit Center: Phase 2	TJPA	2,996		73				868						8								2,047
<b>TOTAL</b>		<b>\$ 17,703</b>	<b>\$ 1,002</b>	<b>\$ 6,533</b>	<b>\$ 205</b>	<b>\$ 385</b>	<b>\$ 92</b>	<b>\$ 1,994</b>	<b>\$ 1,512</b>	<b>\$ 156</b>	<b>\$ 50</b>	<b>\$ 25</b>	<b>\$ 205</b>	<b>\$ 807</b>	<b>\$ 365</b>	<b>\$ 437</b>	<b>\$ 10</b>	<b>\$ 188</b>	<b>\$ 29</b>	<b>\$ 3,624</b>		

**Attachment C: Regional Transit Expansion Policy - Funding Strategy (cont.)**

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**Notes: For all projects, see Terms and Conditions.**

Detail on other funding is provided below:

1. AC Transit Berkeley/Oakland/San Leandro Bus Rapid Transit: \$35 million in CMAQ bonus funds programmed in 2008.
2. BART to Warm Springs: \$2.2 M local CMA funds. \$24 M in BART agency contribution. Prop 1B Transit funds are 50% MTC and 50% BART. Of the \$205 million in Resolution 1876 commitment, \$145 million is SFO Extension Revenues. Then SFO Extension revenues are subject to the provisions outlined in Attachment D, subsection 5.
3. East Contra Costa BART Extension: \$6 million in developer fees. Prop 1B Transit funds are 50% MTC and 50%
4. Capitol Corridor Expansion: Other includes \$10 million in ACE funds, \$.5 million in Caltrain funds, \$2.1 million in CCJPB funds, \$2.3 million in State PTA funds and \$0.5 million in Prop 116 funds.
5. Muni Third Street Light Rail Project: New Starts request is \$762 million in Year of Expenditure dollars. Prop 1B Transit funds are 40% MTC and 60% SFMTA.
6. Transbay Transit Center Phase 1: Other funds include \$411 million in land sales and tax increment revenue, \$8.8 million in FTA 1601 funds, and \$227 million in TIFIA loan proceeds.
7. Tri-Valley Transit Access Improvements to BART: \$6 million in federal CMAQ funds, \$6.4 million in federal 5307 funds, and \$1.6 million in TDA funds. Prop 1B Transit funds are LAVTA Revenue-based.
8. VTA Downtown to East Valley: Prop 1B Transit funds are 50% MTC and 50% VTA.
9. BART/Oakland Airport Connector: \$31.5 million is Port of Oakland funds, \$25 million federal Public/Private Pilot Program and \$174 million private financing.
10. Caltrain Electrification: \$12 million in regional STP/CMAQ funds and \$11.3 million in PJPB funds.
11. Sonoma-Marin Rail: Other includes \$28 million in Prop. 116 and \$37.2 million in North Coast Rail Authority funds
12. BART: Warm Springs to San Jose/Santa Clara: New Starts request is \$750 million in Year of Expenditure dollars. Confirmation of RTP commitment pending reconciliation by VTA between the Santa Clara county-wide plan and MTC's Transportation 2030.
13. AC Transit Enhanced Bus: Grand MacArthur Corridor: \$.8 million is Transportation Fund for Clean Air funds through BAAQMD
14. Caltrain Express: \$13.2 million is Joint Powers Board member contributions.
15. ACE Service Expansion: Other includes \$3 million in San Joaquin federal fund contributions.
16. Transbay Transit Center Phase 2: Other funds include \$424 million in land sales and tax increment revenue and \$445 million in TIFIA loan proceeds.



Date: December 19, 2001  
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### **Definitions and Assumptions of Regional Discretionary Funding**

- Federal Section 5309 New Starts: the total shown is an estimate for the 25-year RTP period. This estimate trends against recent historical averages of the Bay Area's New Starts funding compared to the nation, an average of 7% over the last 10 years. This represents a target for advocacy in Washington, D.C.; actual authorizations and appropriations are at the discretion of Congress.
- Federal Section 5309 Small Starts: estimate for the 25-year RTP period, beginning with the federal reauthorization in 2005. Small Start Capital Grants may not exceed \$75 million under law. This represents a target for advocacy in Washington D.C.; actual authorization and appropriations are at the discretion of Congress. This estimate does not include the Very Small Starts program.
- Federal Section 5309 Rail Modernization: These Federal Transit Administration formula funds are eligible for fixed guideway infrastructure projects. In the MTC region these funds are by policy devoted to capital replacement. The funding would replace diesel locomotives with electric locomotives when eligible for the Caltrain Electrification project.
- Federal Ferryboat Discretionary Program: estimate for the 25-year RTP period, beginning with the federal reauthorization in 2005; provides a special category for the construction of ferry boats and ferry terminal facilities. This represents a target for advocacy in Washington D.C.; actual authorization and appropriations are at the discretion of Congress.
- Regional Measure 1 Rail Reserve: the total shown is an estimate for the 25-year RTP period, net of existing commitments to the BART Warm Springs extension. These funds from the base \$1 Bay Bridge toll are directly allocated by the Commission to rail projects in the bridge corridor according to a statutory formula splitting the funds 70% to East Bay projects, and 30% to West Bay projects. This funding estimate assumes debt financing against this revenue stream. This estimate was revised as part of the 2008 Strategic Plan effort.
- Regional Measure 2: Regional voter-approved measure providing \$812 million to Resolution 3434 projects. The specific amounts are identified in statute for each project. This funding estimate assumes debt financing against this revenue stream.

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- AB 1171: This is a discretionary funding source passed by the Legislature and signed by the Governor in October 2001. AB 1171 (Dutra) extends the \$1 seismic surcharge (the second half of the current \$2 auto toll) on the seven state-owned Bay Area toll bridges for up to 30 years to finance retrofit work. Under certain financing provisions, a portion of that toll revenue will return to MTC acting as the Bay Area Toll Authority (BATA). This funding can be used for projects consistent with the voter approved Regional Measure 1 program—including congestion relief projects in corridors served by some proposed transit expansion projects—and is estimated over the 25-year period of the RTP to total \$570 million; \$370 million of this amount is being assigned to the Regional Transit Expansion program of projects. This estimate was revised as part of the 2008 Strategic Plan effort.
- Proposition 1B Transit: Proposition 1B, approved by California voters in November 2006, directed \$3.6 billion toward transit capital improvements, including about \$1.3 billion for projects in the Bay Area. Within this \$1.3 billion, roughly \$1 billion is distributed directly to the transit operators, and about \$347 million is anticipated to come directly to MTC through statutorily defined formulas. On June 27th, 2007 the Commission adopted the MTC Proposition 1B Regional Transit Program - Resolution 3814. Resolution 3814 committed \$185 million in Proposition 1B - Population-based funds conditioned upon operators committing \$185 million in Propostion 1B - Revenue-based funds. Operator contributions may exceed the matching requirement of Resolution 3814.
- Proposition 1B State Local Partnership: Proposition 1B, approved by California voters in November 2006, directed \$1 billion toward the State/Local Partnership Program (SLPP). This program was included in the bond measure to reward local jurisdictions for their financial contributions to California's transportation system. The program may match county sales taxes, transit sales taxes, and voter-approved bridge tolls such as Regional Measures 1 and 2. Should the eligible match element of the program include bridge tolls, MTC commits the initial \$40 million to Resolution 3434 projects conditioned on SLPP contributions from partner agencies, as outlined in Attachment D. The remaining amount, estimated to be roughly \$26 million, would be held in an unrestricted reserve.
- Interregional Transportation Improvement Program: the total shown is an estimate for the 25-year RTP period; other ITIP funding is assumed for highway and other projects. As ITIP funds are the state's discretionary portion of the State Transportation Improvement Program, this represents a target for advocacy in Sacramento. Actual programming commitments and allocations are at the discretion of the California Transportation Commission.

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- CARB/AB 434: Both the California Air Resources Board (CARB) and the Bay Area Air Quality Management District (AB 434) administer discretionary funding programs focused in whole or in part on reducing emissions from diesel engines. \$29 million is assumed from the two programs combined to help fund the Caltrain electrification project. This funding target for advocacy over the RTP period is sized to the annual funding levels of the two programs.

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Attachment D  
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## **Terms and Conditions**

### **General Terms**

1. Operating Funding – In order for an extension of service to be included in the Regional Transportation Plan (RTP), the project sponsor must provide evidence of its ability to fund operation of the service for a minimum of 10 years, or the duration of operations within the 25-year RTP time horizon, whichever is longer. These financial capacity determinations must also include a demonstration of the transit operator's ability to sustain levels of core bus services to low-income and minority populations, as required under MTC Resolution No. 3357. Should the transit operator's financial stability deteriorate, or the expansion project in question experience significant cost increases, these financial capacity determinations will be revisited in MTC's review of the operator's applicable Short Range Transit Plan.
2. Cost Increases – Commitments of regional discretionary funds (Section 5309 New Starts, Small Starts, and Fixed Guideway Modernization, Regional Measure 1 Rail Reserve, ITIP, AB 1171, CARB/AB 434, Regional Measure 2, Ferry Boat Discretionary) are capped at the amounts shown in Attachment C in year of expenditure dollars. Project sponsors are responsible for funding any cost increases (including financing costs) above the estimates shown in Attachment C from other sources. Funding shortfalls must be addressed for projects to be included in the Regional Transportation Plan.
3. Amendment – The Commission shall consider amending this regional transit expansion program following the passage of major new funding sources that could advance projects with current shortfalls into the RTP. New funding sources also could be used to offset cost increases for projects already included in the RTP.
4. Station Access Planning: Consistent with recommendations of MTC's Regional Bicycle Plan, all new transit stations that are built as result of Resolution No. 3434 investments must provide direct and convenient pedestrian and bicycle access from adjacent walkways and bicycle facilities. Station access planning shall be consistent with the conclusions reached from the evaluation of FSM 5 in the 2001 Bay Area Ozone Attainment Plan.

Date: December 19, 2001  
W.I.: 12110  
Referred by: POC  
Revised: 04/26/06-C  
09/24/08-C

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## Specific Conditions

1. Section 5309 New Starts – The region’s priorities for federal New Starts funds are the BART Extension to Silicon Valley and the Muni Central Subway project, with equal priority.
2. Section 5309 Small Starts – The region’s priorities for federal Small Starts funds are the AC Transit Oakland/San Leandro Bus Rapid Transit project and the Van Ness Avenue Bus Rapid Transit project in San Francisco, with equal priority.
3. AB 1171 – These funds will be subject to terms and conditions established by MTC acting as the Bay Area Toll Authority (BATA). The balance of these funds not committed in Attachment C will be reserved as follows:
  - **Corridor Improvements Adjacent to the I-80/680 Interchange:** \$100 million reserved for improvements in the vicinity of the I-80/680 interchange. These AB1171 funds are in addition to the \$100 million approved through Regional Measure 2 (RM2) for corridor improvements in the vicinity of the I-80/680 interchange.
  - **Other Improvements:** \$100 million for other corridor improvements.
4. BART Warm Springs to San Jose – In addition to the general terms for operating funding imposed on all projects, the BART Warm Springs to San Jose project is included in the RTP contingent upon approval by the BART and VTA Boards of an operating and maintenance agreement regarding extension of service into Santa Clara County and associated impacts of the extension on the core BART system. If a TDA “lien” is implemented pursuant to the BART/VTA agreement after 2009, MTC will condition allocation of the remaining TDA funds subject to the following:

At the time that the BART to San Jose extension commences revenue service, or at any point thereafter, should VTA’s bus service levels have not achieved, or later fall below, a 600 fleet/500 peak target, then MTC shall hold public hearings at which VTA must demonstrate that services to Title VI communities have been assured, based on MTC’s Lifeline Transportation analysis, as validated and amended by transit operators and the Congestion Management Agencies.

Should VTA choose to identify TDA funds as the guaranteed operating and maintenance subsidy pursuant to the BART/VTA agreement and demonstrate that it has secured other funding sources

Date: December 19, 2001  
W.I.: 12110  
Referred by: POC  
Revised: 04/26/06-C  
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to replace the TDA revenue so guaranteed, then MTC shall not condition its allocation of TDA funds as described above.

5. BART Extension to Warm Springs: MTC commits the following funds subject to availability: \$40 million from MTC's share of Proposition 1B State Local Partnership Program, \$29 million in RM1 and \$5 million in AB 1171. These funding commitments are conditioned upon: 1) BART contributing an additional \$24 million; 2) Alameda and Santa Clara Counties contribute \$30 million and \$16 million, respectively, from Proposition 1B State Local Partnership Program proceeds; and 3) VTA's Board committing to a full funding plan for an operable BART segment in Santa Clara County.

To address the cash flow challenges wherein the \$145 million surplus fare revenue on the BART SFO Extension are not expected to be available during the BART to Warm Springs construction period, \$91 million of Regional Measure 2 (RM2) and \$54 million, shared equally, in funding advanced from MTC and BART/ACTIA are proposed. This proposal is conditioned on the following: 1) the Commission holding a public hearing and approving reassignment of \$91 million in RM2 funds from the Dumbarton Rail project to the BART to Warm Springs project; and 2) first priority and equivalent repayment of \$27 million each to MTC and ACTIA/BART from the surplus BART SFO Extension revenues

6. AC Transit Berkeley/Oakland/San Leandro Bus Rapid Transit: MTC commits \$35 million in CMAQ funds subject to the following conditions: 1) Alameda County Congestion Management Agency (ACCMA) adopts an RTIP funding commitment plan and explores a strategy to advance the \$40 million RTIP funds commitment; 2) AC Transit submits documentation for inclusion into the 2009 Federal Transit Administration (FTA) Small Starts report; and 3) AC Transit adopts a board resolution committing to the following: a) use the \$35 million to deliver a useable bus rapid transit segment; and b) develop a phasing plan to deliver the full Berkeley/Oakland/San Leandro Bus Rapid Transit project, if the entire project as submitted to FTA for the Small Starts program, is not immediately deliverable.
7. Dumbarton Rail: Should the Commission hold an RM2 Public Hearing and reassign \$91 million in RM2 funds from the Dumbarton Rail project to the BART to Warm Springs project, the \$91 million will be replaced with \$91 million in Alameda Regional Transportation Improvement Program (RTIP) funds. The reassignment is conditioned on the Alameda County Congestion Management Agency adopting a board resolution committing the RTIP funds to the project. MTC, in cooperation with Caltrain and the other funding partners, shall:

Date: December 19, 2001  
W.I.: 12110  
Referred by: POC  
Revised: 04/26/06-C  
09/24/08-C

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1. Support completion of the alternatives analysis and environmental phase
2. Support steps toward the purchase of Right-of-Way in the ACE, Capitol, and Dumbarton Corridors
3. Support expanded cost-effective express bus service in the corridor to build ridership
4. Explore other funding opportunities, including the potential for future bridge tolls, to accelerate repayment of the reassigned \$91 million in RM2 funds.
5. In conjunction with all funding partners, explore other funding opportunities, including the potential for future bridge tolls, to close the \$300 million project shortfall.

Date: July 27, 2005  
W.I.: 12110  
Referred by: POC  
Revised: 10/24/07-C

Attachment D-2  
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## **MTC RESOLUTION 3434 TOD POLICY FOR REGIONAL TRANSIT EXPANSION PROJECTS**

### 1. Purpose

The San Francisco Bay Area—widely recognized for its beauty and innovation—is projected to grow by almost two million people and one and a half million jobs by 2030. This presents a daunting challenge to the sustainability and the quality of life in the region. Where and how we accommodate this future growth, in particular where people live and work, will help determine how effectively the transportation system can handle this growth.

The more people who live, work and study in close proximity to public transit stations and corridors, the more likely they are to use the transit systems, and more transit riders means fewer vehicles competing for valuable road space. The policy also provides support for a growing market demand for more vibrant, walkable and transit convenient lifestyles by stimulating the construction of at least 42,000 new housing units along the region's major new transit corridors and will help to contribute to a forecasted 59% increase in transit ridership by the year 2030.

This TOD policy addresses multiple goals: improving the cost-effectiveness of regional investments in new transit expansions, easing the Bay Area's chronic housing shortage, creating vibrant new communities, and helping preserve regional open space. The policy ensures that transportation agencies, local jurisdictions, members of the public and the private sector work together to create development patterns that are more supportive of transit.

There are three key elements of the regional TOD policy:

- (a) Corridor-level thresholds to quantify appropriate minimum levels of development around transit stations along new corridors;
- (b) Local station area plans that address future land use changes, station access needs, circulation improvements, pedestrian-friendly design, and other key features in a transit-oriented development; and
- (c) Corridor working groups that bring together CMAs, city and county planning staff, transit agencies, and other key stakeholders to define expectations, timelines, roles and responsibilities for key stages of the transit project development process.

### 2. TOD Policy Application

The TOD policy only applies to physical transit extensions funded in Resolution 3434 (see Table 1). The policy applies to any physical transit extension project with regional discretionary funds, regardless of level of funding. Resolution 3434 investments that only entail level of service improvements or other enhancements without physically extending the system are not subject to



**TABLE 1**  
**Resolution 3434 Transit Extension Projects Subject to Corridor Thresholds**

Project	Sponsor	Type	Threshold is met with current development?
BART East Contra Costa Rail Extension	BART/CCTA	Commuter Rail	No
BART – Downtown Fremont to San Jose / Santa Clara  (a) Fremont to Warm Springs (b) Warm Springs to San Jose/Santa Clara	(a) BART (b) VTA	BART extension	No
AC Transit Berkeley/Oakland/San Leandro Bus Rapid Transit: Phase 1	AC Transit	Bus Rapid Transit	Yes
Caltrain Downtown Extension/Rebuilt Transbay Terminal	TJPA	Commuter Rail	Yes
MUNI Third Street LRT Project Phase 2 – New Central Subway	MUNI	Light Rail	Yes
Sonoma-Marin Rail	SMART	Commuter Rail	No
Dumbarton Rail	SMTA, ACCMA, VTA, ACTIA, Capitol Corridor	Commuter Rail	No
Expanded Ferry Service to Berkeley, Alameda/Oakland/Harbor Bay, Hercules, Richmond, and South San Francisco; and other improvements.	WTA	Ferry	No
<p><i>* Ferry terminals where development is feasible shall meet a housing threshold of 2500 units. MTC staff will make the determination of development feasibility on a case by case basis.</i></p>			

the TOD policy requirements. Single station extensions to international airports are not subject to the TOD policy due to the infeasibility of housing development.

### 3. Definitions and Conditions of Funding

For purposes of this policy “regional discretionary funding” consists of the following sources identified in the Resolution 3434 funding plan:

- FTA Section 5309- New Starts
- FTA Section 5309- Bus and Bus Facilities Discretionary
- FTA Section 5309- Rail Modernization
- Regional Measure 1- Rail (bridge tolls)
- Regional Measure 2 (bridge tolls)
- Interregional Transportation Improvement Program
- Interregional Transportation Improvement Program-Intercity rail
- Federal Ferryboat Discretionary
- AB 1171 (bridge tolls)
- CARB-Carl Moyer/AB434 (Bay Area Air Quality Management District) <sup>1</sup>

These regional funds may be programmed and allocated for environmental and design related work, in preparation for addressing the requirements of the TOD policy. Regional funds may be programmed and allocated for right-of-way acquisition in advance of meeting all requirements in the policy, if land preservation for TOD or project delivery purposes is essential. No regional funds will be programmed and allocated for construction until the requirements of this policy have been satisfied. See Table 2 for a more detailed overview of the planning process.

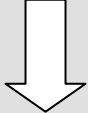

### 4. Corridor-Level Thresholds

Each transit extension project funded in Resolution 3434 must plan for a minimum number of housing units along the corridor. These corridor-level thresholds vary by mode of transit, with more capital-intensive modes requiring higher numbers of housing units (see Table 3). The corridor thresholds have been developed based on potential for increased transit ridership, exemplary existing station sites in the Bay Area, local general plan data, predicted market demand for TOD-oriented housing in each county, and an independent analysis of feasible development potential in each transit corridor.

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<sup>1</sup> The Carl Moyer funds and AB 434 funds are controlled directly by the California Air Resources Board and Bay Area Air Management District. Res. 3434 identifies these funds for the Caltrain electrification project, which is not subject to the TOD policy.

**TABLE 2  
 REGIONAL TOD POLICY IMPLEMENTATION PROCESS  
 FOR TRANSIT EXTENSION PROJECTS**

<b>Transit Agency Action</b>	<b>City Action</b>	<b>MTC/CMA/ABAG Action</b>
<p><i>All parties in corridors that do not currently meet thresholds (see Table 1) establish Corridor Working Group to address corridor threshold. Conduct initial corridor performance evaluation, initiate station area planning.</i></p> <p style="text-align: center;"></p>		
<p><b>Environmental Review/            Preliminary Engineering            /Right-of-Way</b></p>	<p>Conduct Station Area Plans</p>	<p>Coordination of corridor working group, funding of station area plans</p>
<p><i>Step 1 Threshold Check: the combination of new Station Area Plans and existing development patterns exceeds corridor housing thresholds .</i></p>		
<p><b>Final Design</b></p>	<p>Adopt Station Area Plans.            Revise general plan policies and zoning, environmental reviews</p>	<p>Regional and county agencies assist local jurisdictions in implementing station area plans</p>
<p><i>Step 2 Threshold Check: (a) local policies adopted for station areas; (b) implementation mechanisms in place per adopted Station Area Plan by the time Final Design is completed.</i></p> <p style="text-align: center;"></p>		
<p>Construction</p>	<p>Implementation (financing, MOUs)            Solicit development</p>	<p>TLC planning and capital funding, HIP funding</p>

**TABLE 3: CORRIDOR THRESHOLDS  
 HOUSING UNITS – AVERAGE PER STATION AREA**

Project Type \ Threshold	BART	Light Rail	Bus Rapid Transit	Commuter Rail	Ferry
Housing Threshold	3,850	3,300	2,750	2,200	2,500*

*Each corridor is evaluated for the Housing Threshold. For example, a four station commuter rail extension (including the existing end-of-the-line station) would be required to meet a corridor-level threshold of 8,800 housing units.*

*Threshold figures above are an average per station area for all modes except ferries based on both existing land uses and planned development within a half mile of all stations. New below market rate housing is provided a 50% bonus towards meeting housing unit threshold.*

*\* Ferry terminals where development is feasible shall meet a housing threshold of 2500 units. MTC staff will make the determination of development feasibility on a case by case basis.*

- Meeting the corridor level thresholds requires that within a half mile of all stations, a combination of existing land uses and planned land uses meets or exceeds the overall corridor threshold for housing (listed in Table 3);
- Physical transit extension projects that do not currently meet the corridor thresholds with development that is already built will receive the highest priority for the award of MTC’s Station Area Planning Grants.
- To be counted toward the threshold, planned land uses must be adopted through general plans, and the appropriate implementation processes must be put in place, such as zoning codes. General plan language alone without supportive implementation policies, such as zoning, is not sufficient for the purposes of this policy. Ideally, planned land uses will be formally adopted through a specific plan (or equivalent), zoning codes and general plan amendments along with an accompanying programmatic Environmental Impact Report (EIR) as part of the overall station area planning process. Minimum densities will be used in the calculations to assess achievement of the thresholds.
- An existing end station is included as part of the transit corridor for the purposes of calculating the corridor thresholds; optional stations will not be included in calculating the corridor thresholds.

- New below-market housing units will receive a 50 percent bonus toward meeting the corridor threshold (i.e. one planned below-market housing unit counts for 1.5 housing units for the purposes of meeting the corridor threshold. Below market for the purposes of the Resolution 3434 TOD policy is affordable to 60% of area median income for rental units and 100% of area median income for owner-occupied units);
- The local jurisdictions in each corridor will determine job and housing placement, type, density, and design.
- The Corridor Working Groups are encouraged to plan for a level of housing that will significantly exceed the housing unit thresholds stated here during the planning process. This will ensure that the Housing Unit Threshold is exceeded corridor-wide and that the ridership potential from TOD is maximized.

## 5. Station Area Plans

Each proposed physical transit extension project seeking funding through Resolution 3434 must demonstrate that the thresholds for the corridor are met through existing development and adopted station area plans that commit local jurisdictions to a level of housing that meets the threshold. This requirement may be met by existing station area plans accompanied by appropriate zoning and implementation mechanisms. If new station area plans are needed to meet the corridor threshold, MTC will assist in funding the plans. The Station Area Plans shall be conducted by local governments in coordination with transit agencies, Association of Bay Area Governments (ABAG), MTC and the Congestion Management Agencies (CMAs).

Station Area Plans are opportunities to define vibrant mixed use, accessible transit villages and quality transit-oriented development – places where people will want to live, work, shop and spend time. These plans should incorporate mixed-use developments, including new housing, neighborhood serving retail, employment, schools, day care centers, parks and other amenities to serve the local community.

At a minimum, Station Area Plans will define both the land use plan for the area as well as the policies—zoning, design standards, parking policies, etc.—for implementation. The plans shall at a minimum include the following elements:

- Current and proposed land use by type of use and density within the ½ mile radius, with a clear identification of the number of existing and planned housing units and jobs;
- Station access and circulation plans for motorized, non-motorized and transit access. The station area plan should clearly identify any barriers for pedestrian, bicycle and wheelchair access to the station from surrounding neighborhoods (e.g., freeways, railroad tracks, arterials with inadequate pedestrian crossings), and should propose strategies that will remove these barriers and maximize the number of residents and employees that can access the station by these means. The station area and transit village public spaces shall be made accessible to persons with disabilities.
- Estimates of transit riders walking from the half mile station area to the transit station to use transit;
- Transit village design policies and standards, including mixed use developments and pedestrian-scaled block size, to promote the livability and walkability of the station area;

- TOD-oriented parking demand and parking requirements for station area land uses, including consideration of pricing and provisions for shared parking;
- Implementation plan for the station area plan, including local policies required for development per the plan, market demand for the proposed development, potential phasing of development and demand analysis for proposed development.

The Station Area Plans shall be conducted according to the guidelines established in MTC's Station Area Planning Manual.

## 6. Corridor Working Groups

The goal of the Corridor Working Groups is to create a more coordinated approach to planning for transit-oriented development along Resolution 3434 transit corridors. Each of the transit extensions subject to the corridor threshold process, as identified in Table 1, will need a Corridor Working Group, unless the current level of development already meets the corridor threshold. Many of the corridors already have a transit project working group that may be adjusted to take on this role. The Corridor Working Group shall be coordinated by the relevant CMAs, and will include the sponsoring transit agency, the local jurisdictions in the corridor, and representatives from ABAG, MTC, and other parties as appropriate.

The Corridor Working Group will assess whether the planned level of development satisfies the corridor threshold as defined for the mode, and assist in addressing any deficit in meeting the threshold by working to identify opportunities and strategies at the local level. This will include the key task of distributing the required housing units to each of the affected station sites within the defined corridor. The Corridor Working Group will continue with corridor evaluation, station area planning, and any necessary refinements to station locations until the corridor threshold is met and supporting Station Area Plans are adopted by the local jurisdictions.

MTC will confirm that each corridor meets the housing threshold prior to the release of regional discretionary funds for construction of the transit project.

## 7. Review of the TOD Policy

MTC staff will conduct a review of the TOD policy and its application to each of the affected Resolution 3434 corridors, and present findings to the Commission, within 12 months of the adoption of the TOD policy.

# APPENDIX A – 11

## *Regional Policies: Long-Range Planning / Plan Bay Area*

Transit Sustainability Project  
MTC Resolution No. 4060



Date: May 23, 2012  
Referred by: TSP Select Committee  
Revised: 04/24/13-C

ABSTRACT

Resolution No. 4060, Revised

This resolution approves the recommendations of the Transit Sustainability Project.

This resolution was amended on April 24, 2013 to include the Inner East Bay Comprehensive Operational Analysis recommendations.

Discussion of the recommendations made under this resolution is contained in the Executive Director Memorandum presented to the Select Committee on Transit Sustainability on April 11, 2012 and March 27, 2013.



Date: May 23, 2012  
Referred by: TSP Select Committee

Re: Transit Sustainability Project

METROPOLITAN TRANSPORTATION COMMISSION  
RESOLUTION NO. 4060

WHEREAS, pursuant to Government Code § 66500 *et seq.*, the Metropolitan Transportation Commission (“MTC”) is the regional transportation planning agency for the San Francisco Bay Area; and

WHEREAS, MTC develops a long-range Regional Transportation Plan (RTP), pursuant to Government Code §§ 66513 and 65080; and

WHEREAS, the last major update of the RTP, adopted in April 2009 (Transportation 2035 - MTC Resolution No. 3893), identified twenty-five year transit capital and operating shortfalls of \$17 billion and \$8 billion, respectively; and

WHEREAS, to address these shortfalls, as well as address immediate transit operators’ service reductions and budget shortfalls, to improve transit performance for the customer, and to attract more customers to the transit system, in January 2010, the Commission created the Select Committee on Transit Sustainability to guide the Transit Sustainability Project (TSP); and

WHEREAS, the TSP focused on three project elements: financial, service performance and institutional frameworks; and

WHEREAS, to inform the TSP, a Project Steering Committee was formed, made up of transit agency, government, labor, business, environmental and equity representatives to provide executive-level input into the project; and

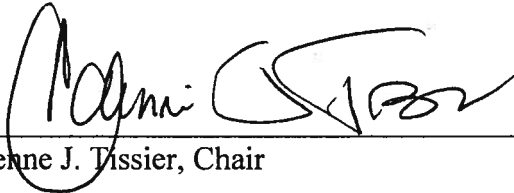
WHEREAS, additional input and guidance was received from the MTC Policy Advisory Committee, as well as from multiple public events and forums sponsored by interested parties; now, therefore, be it

RESOLVED, that based on project findings related to the financial and service performance of the Bay Area transit system, MTC approves the performance measures and targets and investment recommendations set forth in Attachment A to this resolution; and, be it further

RESOLVED, that based on project findings related to the financial, service performance, and institutional framework of the Bay Area transit system, MTC approves the policy recommendations set forth in Attachment B to this resolution; and, be it further

RESOLVED, that MTC will conduct periodic reviews of progress toward the performance targets and policy recommendation implementation.

METROPOLITAN TRANSPORTATION COMMISSION

A handwritten signature in black ink, appearing to read 'Adrienne J. Tissier', written over a horizontal line.

Adrienne J. Tissier, Chair

The above resolution was approved by the Metropolitan Transportation Commission at a regular meeting of the Commission held in Oakland, California, on May 23, 2012.

## **Performance and Investment Policies**

### ***Performance Measures and Targets***

To monitor the performance of the seven largest transit agencies in the Bay Area, the Commission establishes the following TSP performance target, measures, and monitoring process:

#### Performance Target

5% real reduction in at least one of the following performance measures by FY2016-17 and no growth beyond CPI thereafter. To account for the results of recent cost control strategies at agencies, the baseline year will be set at the highest cost year between FY2007-08 and FY2010-11.

#### Performance Measures

- Cost Per Service Hour\*
- Cost Per Passenger\*
- Cost Per Passenger Mile\*

*\*As defined by the Transportation Development Act*

#### Monitoring Process

In FY2012-13, agencies are to adopt a strategic plan to meet one or more of the targets and submit to MTC.

On an annual basis, starting in FY2013-14, the transit agencies submit performance measure data on all three targets to MTC.

In FY2017-18, MTC will analyze agency progress in meeting target

In FY2018-19, MTC will link existing and new operating and capital funds administered by MTC to progress towards achieving the performance target.

The following agencies, the largest seven transit agencies in the Bay Area, are subject to the performance measures and targets: AC Transit; BART, Caltrain, Golden Gate Transit, SFMTA, SamTrans, and Santa Clara VTA.

### ***Transit Performance Initiative and Customer Satisfaction Survey***

The Commission establishes an investment, incentive and monitoring strategy to improve service performance and attract new riders to the region's transit system. The target for each agency is to increase ridership levels at or above the rate of population growth in counties/corridors in which the agency operates service. Agencies are encouraged to utilize the Transit Competitive Index tool, developed for the Bay Area as part of the TSP, to achieve this target.

*Investment*

As part of the OneBayArea Grant program, the Commission has established an initial commitment of \$30 million to fund service improvements on major bus and light rail corridors, focusing on improvements to major corridors in the AC Transit, SFMTA, SamTrans, and Santa Clara VTA service areas. If successful in demonstrating achievement of operational and ridership goals, similar investments would be recommended in the future.

*Incentive*

The Commission will reward transit agencies that achieve ridership increases and productivity improvements and will allocate transit funds on the basis of performance, thereby encouraging *all* of the region's transit operators to continuously improve their service and attract more riders. Funding sources, amounts and distribution formulas shall be established by the Commission. In establishing distribution formulas, the Commission shall consider at least one alternative that does not reduce the cumulative current funding level for small operators for the fund sources established by the Commission for this incentive program.

*Monitor*

Maintaining and/or improving customer satisfaction ratings is an important indicator of whether transit is meeting the needs of the traveling public. The Commission will conduct a bi-annual regional customer satisfaction survey to provide a consistent region-wide mechanism to measure customer satisfaction and provide information to build new ridership and improve service. Agencies will be required to coordinate data collection efforts, either through cost sharing, resource sharing, or project management.

## **Service, Paratransit and Institutional Recommendations**

### **Service**

- 1. Integrate bus/rail scheduling software to facilitate schedule coordination and customer travel planning. Establish a regional schedule change calendar.**

The Commission finds that schedule coordination between connecting agencies will increase the attractiveness of public transit but that connecting agencies make schedule changes on different dates and in some cases use incompatible scheduling software systems that make schedule integration difficult. This recommendation would align the schedule change calendar for major schedule changes among the region's operators and require all connecting operators to implement a compatible scheduling software system. Implementation would be subject to each transit agency's future scheduling system procurement timeline, and, for some agencies, may be subject to negotiation of changes to existing labor contract provisions that govern schedule change dates.

- 2. Conduct multi-agency Short-Range Transit Plans (SRTPs) at the county or subregion-level to promote interagency service and capital planning.**

The Commission has historically provided federal planning funds for each transit agency to independently prepare an SRTP of the agency's 10-year operating and capital plan. This recommendation would strengthen the joint planning that has begun in the region and recommend that transit agencies in a county or multi-agency travel corridor collaborate on a 10-year plan. The multi-agency SRTPs should develop capital replacement priorities and schedules, consider connectivity in service planning, establish fare policy consistency, establish common performance measures, and identify opportunities for shared functions. Future funding for SRTPs will take into account coordination opportunities.

- 3. Support transit agency operations on major corridors by requiring local jurisdictions to consider transit operating speeds and reliability in projects affecting these corridors.**

Travel time savings are a key component in building customer satisfaction and attracting new passengers. Under the Commission's proposed OneBayArea Grants program, local jurisdictions are required to adopt a complete streets resolution to be eligible for regional funding. Complete streets aims to consider all road network users including pedestrians, bicyclists and transit riders. MTC is further proposing to expand the scope of the Freeway Performance Initiative to include investments to improve transit operations on key arterial roadways.

**4. Consider fare policies focused on the customer that improve regional/local connections.**

Implement the Phase III Clipper requirements to revise existing operations and fare policies to a standardized set of business rules. Continue to work towards a more consistent regional standard for fare discount policies and minimize transfer penalties so that passengers can choose the most optimal route for their transit trip.

**5. Recommendations specific to Marin, Sonoma, and Solano Counties**

The Commission is committed to achieving more rational service delivery in geographic areas served by multiple transit agencies by supporting the collaboration, coordination and consolidation efforts already underway to bring them to implementation stage.

*Sonoma:* County-level SRTP work is underway in Sonoma County. MTC will provide funding to the Sonoma County Transportation Authority to collect customer opinion and demographic survey data to better inform service planning throughout the county.

*Marin/Sonoma:* The commencement of SMART service in Marin and Sonoma counties will alter transit travel patterns. This presents an opportunity to strengthen coordination and service planning among Marin and Sonoma transit providers serving the 101 Corridor and local connections. In coordination with the SRTP process, MTC will work with transit operators and the Marin and Sonoma County CMAs to develop a two-county corridor transit plan for submittal and presentation to the Commission.

*Solano:* County-level SRTP work is underway in Solano County. MTC will provide funding to the Solano Transportation Authority (STA) to complete the analysis to better inform service planning throughout the county. STA and the Solano transit operators are to use this process to identify service improvements, performance objectives and potential service functional and institutional consolidation opportunities.

**6. Inner East Bay Comprehensive Operational Analysis**

The Commission supports the following recommendations developed by AC Transit and BART for the Inner East Bay shared service area to: 1) promote a seamless Inner East Bay bus and rail system; 2) build the urban core to allow for spontaneous bus and rail network use by customers; 3) match bus and rail service levels with demand, focusing on improving service productivity while increasing overall system ridership; and 4) ensuring on-going financial sustainability.

*BART Service Recommendations for the Inner East Bay*

1. Change the dominant BART role from commute to Urban Metro integrated with the Inner East Bay bus network.
2. Implement capacity utilization strategies.
3. Ensure Title VI/Environmental Justice considerations are addressed in both service quality and coverage.

*AC Transit Service Recommendations for the Inner East Bay*

1. Focus resources on key urban trunk corridors to provide “spontaneous use” Metro network.
2. Redefine “coverage service” or service that provides basic access to transit regardless of ridership levels, as 30 minutes or higher.
3. Invest in service speed improvements.
4. Transbay pilots based on the following design options:
  - i. Current service model modified to improve productivity and cost effectiveness
  - ii. Fast, frequent shuttles to BART stations
  - iii. Augment BART with Transbay service
5. Ensure Title VI/Environmental Justice considerations are addressed in both service quality and coverage.

*Joint Fare Product Pilot Programs Recommendation*

Implement two pilot fare product programs to provide incentives for customers to use AC Transit and BART interchangeably. The pilots will test the concept that reducing transfer barriers between AC Transit and BART service allows customers to select the optimal mode for each trip. The evaluation of the programs will assess the tradeoffs between Inner East Bay fare revenue and ridership growth.

## **Paratransit Cost Containment and Service Strategies**

The Commission finds that transit agencies must consider strategies to contain the cost of ADA paratransit service using tools that are available to them individually or collectively. MTC expects individual agencies to consider the following strategies:

### **1. Fixed Route Travel Training and Promotion to Seniors**

Expanding fixed route travel training – through mobility orientation sessions and one-on-one individualized training – would increase mobility for the users and help reduce growth of ADA paratransit demand. Ideally, training and outreach should be conducted before individuals apply for paratransit service or, at a minimum, should be made available during the process of determining eligibility for these services.

### **2. Premium Charges for Service Beyond ADA Requirements**

Where transit agencies provide paratransit service that goes beyond what the ADA requires, they may charge extra for those “premium” services. For example, transit agencies that serve an entire jurisdiction (for example they may serve an entire city or taxing district) can define a “two-tiered” service area, with the first tier being the ADA required service area within  $\frac{3}{4}$  mile of the fixed route service and the second tier extending to the jurisdictional limits. A higher fare can then be charged for trips in that second tier. The transit agency can also adopt

differing policies for that premium second tier, such as more limited service hours, denials of service once capacity is reached, and so forth.

**3. Enhanced ADA Paratransit Certification Process**

A robust certification process that includes in-person interviews as well as evaluations of applicants' functional mobility by trained professionals provides more accurate determinations of applicants' travel skills and may result in more applicants being referred to fixed route service based on their individual abilities. This may result in some reduction in ADA paratransit costs and also result in improving the mobility of riders due to the increased spontaneity afforded by fixed-route transit. Depending on the transit agency, available cost savings range from none to substantial. One centralized regional process is not needed, but many transit agencies can enhance their processes. Some smaller agencies could combine this function for efficiency and to support staff with specialized skills.

**4. Implement Conditional Eligibility**

Conditional eligibility finds that some applicants can use fixed-route service for at least some of their trips and specifies the particular conditions under which paratransit service is required. While this requires a more sophisticated eligibility certification process of conditional eligibility avoids ADA paratransit costs for those trips that ADA-eligible riders take on fixed-route service. Opportunities exist at several transit operators in combination with an enhanced eligibility process.

**5. Creation of sub-regional Mobility Managers (e.g. CTSA) in one or more sub-regional area to better coordinate resources and service customers**

National and local coordinated models exist and should be evaluated to deliver high quality and efficient paratransit services across transit agency boundaries and shared costs with social services. Several MTC programs, including Lifeline and New Freedom, have funded mobility management efforts to identify best practices and develop mobility management models for regional replication. The Commission will use the information from these efforts to recommend specific areas and agency leads for implementation of sub-regional mobility managers in the Bay Area.



**6. Improve Fixed-Route Transit (per Plan Bay Area)**

Continuous improvements to the fixed route system will shift some demand from paratransit to the fixed route system.

**7. Walkable Communities, Complete Streets, and Land Use Planning (per Plan Bay Area)**

The term “walkable communities” refers to communities that are pedestrian friendly, with sidewalks and pathways connecting residential areas with activity centers. Improving the “walkability” of a community is a more holistic approach to addressing ADA paratransit sustainability than other strategies. Similarly, planning efforts should, to the extent possible, ensure that senior housing and other senior-related facilities are sited in locations that are close to fixed-route services and close-in within the community and proximate to activity centers featuring shopping, medical and other services, as opposed to locations outside the community and isolated from activity centers. The ultimate impact of this recommended strategy is very large, even though this is a long-term strategy in which transit agencies will only play a supportive role. It requires an active role from cities and counties.

An integrated land-use/transportation plan is the primary goal of Plan Bay Area, under development and scheduled for adoption in 2013. In addition, the proposed OneBayArea grant program seeks to reward local jurisdictions for building housing near transit and conditions funding on adherence to complete streets policies.

**Institutional**

**1. Complete service consolidations for Soltrans and ferry services (Vallejo, Alameda-Oakland, and Harbor Bay).**

Per the Solano Transit Consolidation Study conducted by the Solano Transportation Authority – the cities of Vallejo and Benicia have formed a joint powers authority (Soltrans) to operate their transit service as a consolidated system. Senate Bill 1093 called for the consolidation of Vallejo, Alameda-Oakland, and Harbor Bay ferry services under WETA. WETA has adopted a transition plan to guide the consolidation of all ferry service, except the Golden Gate ferry services. WETA is currently operating the Alameda-Oakland and Harbor Bay ferry service and set to assume Vallejo service in 2012. Soltrans has completed the initial stages of the consolidation. The Commission will support these agencies and monitor progress during the consolidation process and support Solano County to move forward to consider further consolidations as supported through local planning.

**2. Pursue functional and institutional consolidation among smaller operators where supported by local planning and input.**

Through the local planning process and, as transit agencies do coordinated planning and fare policy setting, the benefits of functional and institutional consolidation should be further evaluated. Work with Congestion Management Agencies and operators, focusing on

Marin/Sonoma and Solano to continue to improve coordination and evaluate the benefits of additional functional and/or institutional consolidation to improve the financial stability and service for the customer. The appropriateness of these efforts and timeline will be established based on local planning and input.

**3. Integrate multiple transportation functions (transit operating, planning, sales tax, etc).**

The importance of other transportation decisions, such as roadway projects and pricing, in the success and performance of the public transit system was highlighted throughout the TSP. Therefore, opportunities to better integrate these decision-making authorities should be explored. Currently, the Santa Clara Valley Transportation Authority is the one example of an agency in the region that serves as the sales tax authority, transit agency, and congestion management agency. Work with transit operators and Congestion Management Agencies to identify potential vertical integration opportunities and local support for such integration.

**4. Expand regional capital project planning/design to include sharing existing expertise (e.g., BRT) and facilities (e.g., maintenance shops).**

Several transit agencies and congestion management agencies in the region have developed robust expertise in capital project development and delivery. As new projects or systems are developed, expertise should be shared across transit agencies to optimize resources. Using Plan Bay Area project listings, MTC will identify specific upcoming projects that may benefit from a sharing of resources and convene a joint discussion of county CMAs and transit agencies to identify specific projects and terms for sharing resources.

**5. Formalize joint procurement of services and equipment.**

Transit agencies currently have an informal process to monitor each other's bus purchases, allowing agencies to "piggy-back" on another Bay Area or national procurement. This reduces administrative costs of duplicative procurement processes and lowers the unit cost of the purchase because of the higher volume order. The TSP recommends that these joint procurements be strengthened and formalized.

The Commission will identify typical annual procurements (scope and cost) in addition to those included in the Regional Transit Capital Inventory (major capital replacements), convene transit agencies to identify strong candidate services and equipment for joint procurement, and work with transit operators to evaluate and implement joint procurement models.

# APPENDIX A – 12

## *Regional Policies: Long-Range Planning / Plan Bay Area*

**MTC's Transit Coordination Implementation Plan  
MTC Resolution No. 3866**



Date: February 24, 2010  
W.I.: 1227  
Referred By: Operations Committee  
Revised: 10/26/11-C  
07/22/15-C

ABSTRACT

Resolution No. 3866, Revised

This resolution updates and adopts MTC's Transit Coordination Implementation Plan pursuant to the requirements of California Government Code §§ 66516 (SB 1474) and 66516.5; Public Utilities Code §§ 99282.51 and 99314.7; and Streets and Highways Code § 30914.5.

This resolution supersedes Resolution No. 3055, as amended.

Attachment B to this resolution was revised on July 22, 2015 to update and revise requirements for the 511 transit information program (Appendix B-1), the regional hub signage program (Appendix B-2), and the Clipper<sup>®</sup> program (Appendix B-3), and to add a new Appendix B-5 containing coordination requirements applicable to transit rider surveys.

Date: February 24, 2010  
W.I.: 1227  
Referred By: Operations Committee

Re: Transit Coordination Implementation Plan

METROPOLITAN TRANSPORTATION COMMISSION

RESOLUTION NO. 3866

WHEREAS, pursuant to Section 66516 of the California Government Code, the Metropolitan Transportation Commission (MTC) is required to adopt rules and regulations to promote the coordination of fares and schedules for all public transit systems within its jurisdiction and to require every system to enter into a joint fare revenue sharing agreement with connecting systems; and

WHEREAS, pursuant to Section 66516.5 of the Government Code, MTC may identify and recommend consolidation of those functions performed by individual public transit systems that could be consolidated to improve the efficiency of regional transit service and;

WHEREAS, pursuant to Section 99282.5 of the California Public Utilities Code (PUC), MTC is required to adopt rules and regulations to provide for governing interoperator transfers so that the public transportation services between public transit operators are coordinated; and

WHEREAS, pursuant to Section 99314.7 of the Public Utilities Code, MTC is required to evaluate an operator's compliance with coordination improvements prior to an operator receiving allocations of State Transit Assistance (STA) funds; and

WHEREAS, pursuant to Section 30914.5 of the Streets and Highways Code, MTC must adopt, as a condition of Regional Measure 2 fund allocation, a regional transit connectivity plan to be incorporated in MTC's Transit Coordination Implementation Plan pursuant to Section 66516.5, requiring operators to comply with the plan, which must include Policies and procedures for improved fare collection; and

WHEREAS, MTC previously adopted Resolution No. 3055 to implement these requirements; and

WHEREAS, in order to ensure progress toward implementing coordination recommendations, MTC wishes to formalize these recommendations by adopting the rules and requirements required pursuant to Government Code Section 66516 and PUC Section 99282.5 as set forth in this MTC Transit Coordination Implementation Plan, which includes a regional Transit Connectivity Plan and Implementation Requirements, attached to this Resolution as Attachments A and B, and incorporated herein as though set forth at length;

WHEREAS, MTC has consulted with the region's transit agencies to develop the regional Transit Connectivity Plan and Implementation Requirements, as required by Government Code §§ 66516 and Streets and Highways Code § 30914.5; now therefore be it

RESOLVED, that MTC adopts the Transit Connectivity Plan ("Plan") as set forth in Attachment A; and be it further

RESOLVED, that MTC adopts the Implementation Requirements, as set forth in Attachment B; and, be it further

RESOLVED, that prior to determining fund programming and allocations for an operator, MTC shall review the efforts made by the operator to implement the requirements identified in Attachments A and B, and if MTC determines that the operator has not made a reasonable effort to implement the requirements of Attachments A and B, MTC may, at its discretion, withhold, restrict or re-program funds and allocations to such operator to the extent allowed by statute, rule, regulation, or MTC policy; and, be it further

RESOLVED, that all funds subject to programming and/or allocation by MTC are covered by this resolution including but not limited to State Transit Assistance, Transportation Development Act, Regional Measure 2, Congestion Mitigation and Air Quality, Surface

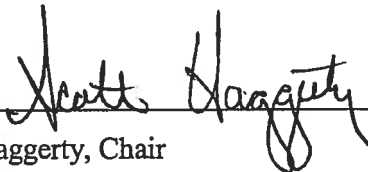
Transportation Program and Transit Capital Priorities funds, to the extent permitted by statute; and, be it further

RESOLVED, that this resolution shall be transmitted to the affected transit operators to guide them in development of their annual budgets and short-range transit plan revisions; and, be it further

RESOLVED, that the Operations Committee is authorized to approve amendments to Attachments A and B, following consultation with the affected transit operators; and be it further

RESOLVED, this resolution supersedes Resolution No. 3055.

METROPOLITAN TRANSPORTATION COMMISSION

  
\_\_\_\_\_  
Scott Haggerty, Chair

The above resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in Oakland, California, on February 24, 2010

Date: February 24, 2010  
W.I.: 1227  
Referred By: Operations Committee

Attachment A  
Resolution No. 3866  
Page 1 of 1

## **Attachment A**

### **MTC Transit Connectivity Plan**

This Attachment A incorporates by reference the Transit Connectivity Plan, previously approved by MTC in MTC Resolution No. 3055, which may be downloaded at:  
<http://www.mtc.ca.gov/planning/connectivity/index.htm>.



Date: February 24, 2010  
W.I.: 1227  
Referred By: Operations Committee  
Revised: 10/26/11-C  
07/22/15-C

Attachment B  
Resolution No. 3866, Revised  
Page 1 of 28

## **Attachment B Implementation Requirements**

The purpose of these Implementation Requirements is to establish the expectations and requirements for each transit agency with respect to implementing the recommendations of the Commission's Transit Connectivity Plan (2006) and maintaining other transit coordination programs, to outline the process by which MTC will involve transit operators in changes to coordination requirements, and to establish the process for Commission action in the event of transit agency non-compliance with these implementation requirements. A copy of this Resolution 3866 is available for download at <http://www.mtc.ca.gov/planning/tcip/>.

Per the Transit Connectivity Plan, MTC places high priority on improvements that:

- Accomplish tangible improvements for the passenger;
- Benefit the largest number of transit users, including both inter- and intra-system transit riders, to the extent possible;
- Improve system productivity by sharing agency resources; and
- Enhance the ability of transit riders to reach significant destinations in adjoining jurisdictions and along regional corridors by (1) improving the connections between system services and (2) providing through service to adjoining jurisdictions in those cases where the market clearly justifies such service.

In order to manage resources effectively, MTC will focus on a limited number of high priority improvements, transfer project leadership from MTC to one or more transit agencies where possible upon agreement of project partners, and establish priorities for implementing new projects.

The Commission has established specific transit operator requirements to implement a coordinated regional network of transit services and to improve overall service productivity as defined in the Transit Connectivity Plan. Any agency that is an eligible recipient of funds subject to allocation or programming by MTC is subject to these requirements, including, but not limited to the following:

- |  |  |
|--|--|
| 1. Altamont Corridor Express                               | 18. Sonoma Marin Area Rail Transit                   |
| 2. Alameda-Contra Costa Transit District                   | 19. Transbay Joint Powers Authority                  |
| 3. Caltrain  | 20. Union City Transit                               |
| 4. Capital Corridor Joint Powers Authority                 | 21. Water Emergency Transportation Authority         |
| 5. Central Contra Costa Transit Authority                  | 22. Western Contra Costa Transit Authority           |
| 6. Eastern Contra Costa Transit Authority                  | 23. City of Dixon                                    |
| 7. Golden Gate Bridge, Highway and Transportation District | 24. City of Emeryville                               |
| 8. Livermore/Amador Valley Transit Authority               | 25. City of Fairfield (Fairfield and Suisun Transit) |
| 9. Marin County Transit District                           | 26. City of Petaluma                                 |
| 10. Napa County Transportation Planning Agency             | 27. City of Rio Vista                                |
| 11. San Francisco Bay Area Rapid Transit District          | 28. City of Santa Rosa                               |
| 12. San Francisco Municipal Transportation Agency          | 29. City of Vacaville                                |
| 13. San Mateo County Transit District                      |  |
| 14. Santa Clara Valley Transportation Authority            |  |
| 15. Solano County Transit (SolTrans)                       |  |
| 16. Solano Transportation Authority                        |  |
| 17. Sonoma County Transit                                  |  |

Unless a particular action is reserved for the Commission or the Operations Committee in this Attachment B (including any Appendices hereto), where reference is made in this Attachment B to approval, determination, clarification or the development of guidelines or policies by MTC, such action may be taken or made by MTC staff in a manner that is consistent with the principles set forth in Resolution 3866 and this Attachment B.

## **A. Operator Implementation Requirements**

### **1. Implementation Requirements**

The region has a history of implementing projects to improve transit coordination. Early efforts focused on regional programs and policies such as disseminating tax-free transit benefits and making paratransit eligibility determinations. More recent efforts, such as the Transit Connectivity Plan and efforts to increase Transit Sustainability, identified improvements to (1) designated regional transit hubs, including way-finding signage and transit information, real time transit information, schedule coordination, last-mile services and hub amenities, (2) system wide connectivity improvements, including 511 information and Clipper® and (3) coordination of demographic and travel pattern transit rider surveys.

Specific implementation requirements for transit operators are listed in Appendices to this Attachment:

- Appendix B-1, 511 Transit Program Requirements (including real-time transit);
- Appendix B-2, Regional Transit Hub Signage Program Requirements;
- Appendix B-3, Clipper® Implementation Requirements; and
- Appendix B-4, Maintenance of Existing Coordinated Services.
- Appendix B-5, Cooperative Demographic and Travel Pattern Transit Rider Survey Program Requirements

As MTC continues to address recommendations from the Transit Connectivity Plan and other emerging issues such as Transit Sustainability, new implementation requirements may become necessary. The appendices may be modified to reflect changes in implementation responsibilities, following the procedures outlined in this Attachment B, and subject to approval by the Commission.

## **2. SB 602 Fare and Schedule Coordination Requirements**

Currently, each operator certifies its adherence to the provisions of SB 602 (Statutes 1989, Chapter 692, Government Code Section 66516, and as subsequently amended) as part of the annual allocation process for TDA and STA funds when requests for these funds are submitted to MTC. The SB 602 requirements are now incorporated into this Res. 3866, and each operator's compliance will be monitored accordingly. Per the requirements of SB 602, each transit agency in the region has a revenue sharing agreement with every connecting agency. In some cases, this takes the form of a reciprocal agreement to accept each other's passengers free of charge or to honor each other's period passes or single-trip transfers for a discounted fare. The BART/Muni FastPass is an example of a joint fare instrument to address SB602 requirements. Each transit agency in the region is required to maintain these reciprocal agreements as a condition of receiving STA funds (Gov. Code 66516).

## **3. Preserve Ability to Post and Disseminate Transit Information**

MTC expects transit operators to preserve rights for MTC and connecting transit operators to post and disseminate connecting transit information for free within their facilities. This would include but not be limited to route, schedule, fare, real-time transit information and information about regional transit projects (511, Clipper®). For any transit agency that has already entered into a third-party agreement that compromises these rights, MTC expects the transit agency to make good faith efforts to reinstate these rights in their agreement at the earliest opportunity and, at a minimum, to reinstate such rights in future agreements or renewals entered into after adoption of this Resolution. Nothing herein shall be interpreted as requiring transit agencies to display advertising. Rather, the objective is to provide transit customers with pertinent information that improves their transit experience.

## **B. Cost-Sharing**

Implementation activities and other new transit connectivity and coordination efforts added to these Implementation Requirements will be funded with MTC discretionary funds, transit agency funds, and/or in-kind contributions of MTC and transit agency staff resources. If MTC considers

adding new projects or services, MTC would implement the consultation process described in Section C below to vet any expected cost impacts on the operators. Transit agencies are required to waive all agency fees (for permits, etc.) they would otherwise charge to MTC, other transit operators or third-party contractors to implement and maintain regional transit coordination projects detailed in these requirements. Unless otherwise noted, MTC and transit agencies are expected to cover the cost to implement their respective roles and responsibilities as identified in these requirements or in pre-existing agreements. As specific initiatives move to implementation, a lead agency may be designated to coordinate implementation activities on behalf of the other participating transit agencies. Any agency that assumes this lead role and incurs costs that it would otherwise not assume in order to perform this function may be reimbursed, based upon an equitable agreement with the participating agencies, on a marginal cost basis (i.e., the additional cost the transit operator incurs to perform the work).

### **C. Consultation Process**

MTC will consult with transit agencies when defining new coordination requirements for inclusion in Res. 3866 or when updating or revising requirements already in Res. 3866.

MTC will first consult with one or more of its technical advisory committees (TACs) to receive transit agency input on the specific implementation requirements. MTC will notify TAC members of the meetings and provide agendas in advance, and facilitate TAC discussions. Affected transit operators are expected to participate. Transit agencies are responsible for ensuring that the appropriate staff attends TAC meetings, that they participate in discussions in good faith, and that they communicate with other relevant staff within their agency (including those employees whose work may be affected) and executive management so that timely and constructive agency feedback can be provided to MTC. MTC will consider TAC input when formulating draft policy. In cases where there is no relevant TAC to address the issue under consideration, MTC will formulate draft policy and solicit feedback from general advisory groups, such as the Partnership Technical Advisory Committee (PTAC) or the Transit Finance Working Group.

At its discretion, MTC may also solicit input from the Partnership Board, the Partnership Technical Advisory Committee, the Transit Finance Working Group and MTC's Policy Advisory Council prior to Commission action. Following consultation with the TAC(s) and/or other advisory groups, MTC will solicit feedback from the Partnership Transit Coordination Committee. MTC will provide notification of the proposed PTCC meeting and agenda through written communication to transit general managers and transit program coordinators and posting of the meeting materials on MTC's web site.

After consulting with transit agencies, MTC will forward staff's recommendations to the MTC Operations Committee and the Commission.

### **D. Sanctions**

The Commission expects each transit agency to comply with the requirements outlined in this Resolution and its Attachments as a condition of eligibility for STA and TDA funds, Regional Measure 2 funds, transit capital funds (including federal transit formula funds, STP, CMAQ and

STIP funds) and other funds subject to Commission programming and allocation actions. MTC intends that the region's transit agencies will implement these requirements in good faith and cooperation among themselves and with MTC. The sanction of withholding, restricting or re-programming funds to enforce cooperation will be exercised by MTC through an action of the Commission in cases where an agency fails to meet or fails to exhibit good faith in meeting these requirements. In such cases, MTC staff will notify the agency of the possibility that a sanction may be imposed. This notification will also recommend corrective actions that the agency should take to meet the implementation requirements. The notification will be sent no less than sixty (60) days prior to forwarding an MTC staff recommendation to the Commission.

## **Appendix B-1 511 Transit Information Requirements**

MTC provides static transit data through the 511 phone and web service and real-time transit departure information through the 511 phone and web services and the Regional Hub Signage Program. MTC requires the full participation and support of all transit agencies to deliver quality and timely information. MTC and the transit agencies have jointly developed data transfer mechanisms for static and real-time transit data and identified appropriate roles and responsibilities for all parties, as documented in “*511 Transit and Real-Time Transit Program Roles and Responsibilities*.” MTC will review these requirements on an as-needed basis with transit agency partners, and they may be updated from time to time. The document is available at: <http://www.mtc.ca.gov/planning/tcip/>. The key roles and responsibilities to provide transit agency data on 511 services are as follows:

### **Transit Agencies will:**

#### Generally:

1. Participate in MTC’s 511 Regional Transit Information System (RTIS) and Real-Time Transit Technical Advisory Committee (511 TAC).
2. Support, fund and staff their roles and responsibilities related to the 511 services as described below.
3. Notify transit customers of the availability of 511 information and 511.org on transit agency web sites, in printed materials, at bus stops/rail stations, and on other transit agency information channels.

#### For Static Transit Information:

4. Provide accurate, complete, and timely information regarding transit routes, stops, schedules, and fares for dissemination on 511 and/or through data feeds to third parties.
5. Transmit and maintain transit schedule data and other transit service information to MTC, through provided tools, protocols and processes as discussed, updated and agreed in 511 TAC meetings, in advance of any schedule changes to allow for MTC’s timely inclusion on 511 and/or data feeds to third parties. MTC will provide a schedule identifying the necessary advance time.
6. Perform quality control review (focusing on data changed for upcoming service revisions) on a representative sample of agency service data prior to transmittal to MTC.

#### For Real-time Transit Information:

7. Provide prediction data to the Regional System by establishing and maintaining a data connection to the Regional System and operating and maintaining an interface application.
8. Meet requirements, as defined in “*511 Transit and Real-Time Transit Program Roles and Responsibilities*.”
9. Conduct on-going performance monitoring to ensure accurate and timely transfer of data to the Regional System and accurate provision of prediction data to the public, in collaboration with MTC.
10. Ensure that there is no impact to its provision of prediction data to 511 in the event that the transit agency provides its specific prediction data to a third party.

11. Provide service disruption information to 511 where available and logistically feasible through agreed upon formats.

**MTC will:**

Generally:

1. Organize and facilitate the 511 TAC.
2. Fund, operate, and maintain the 511 traveler information program for regional transit information, including 511.org, 511 phone, regional electronic Transit Information Displays (eTIDs) at transit hubs, and other relevant applications.
3. In collaboration with transit agencies, conduct performance monitoring to ensure accurate and timely transfer of both static and real-time transit data to the Regional 511 System.

For Static Transit Information:

4. Notify transit customers of the availability of transit agency websites at appropriate locations on web site pages of 511.org.

For Real-time Transit Information:

5. Share with third party vendors and the general public the real-time transit data as described in “*511 Transit and Real-Time Transit Program Roles and Responsibilities.*”
6. Provide agencies with contact information for the 511 Traveler Information Center (TIC) to allow for the posting of real-time transit service disruption/emergency information on 511.

## **Appendix B-2 Regional Transit Hub Signage Program Requirements**

MTC and transit agencies have developed the Regional Transit Hub Signage Program Technical Standards and Guidelines (e.g. ‘the Standards’) to ensure consistency across the region as the signage is deployed and maintained. A detailed version of the Standards is available at: <http://www.mtc.ca.gov/planning/tcip/>. The Standards may be periodically updated.

The Standards include:

1. Four main sign types: directional signs, wayfinding kiosks, transit information displays, real-time transit information displays.
2. Guidance to locate signs at key decision points between transit operator services.
3. Design elements to establish a common “look” and “feel” for the signage including:
  - Orange ‘i’ icon on a green background;
  - Standard logos, icons, arrows and messages and an organizing hierarchy;
  - Standard ‘frutiger’ font;
  - Hierarchy for the location of information in each sign;
  - Consistent map orientation and colors;
  - Directional map compass and walking distance/time radius;
  - Transit stop designation through agency logo/mode icon/route number ‘bubbles’; and
  - Prominent 511 logo/message and regional transit program information.

**Transit Agencies will:**

1. Participate on the Transit Connectivity TAC as needed to raise and consider any further revisions to the Standards or other relevant transit connectivity policies.
2. Comply with the Standards. Where exceptions to the Standards are desired, transit operators must seek prior approval from MTC. Where ambiguity in the Standards exists, transit operators shall request clarification from MTC.
3. Comply with task responsibilities (O&M, replacement and ownership) further detailed in Appendix B-2, Attachment 1. In most cases, the transit agency that owns the property on which the sign has been installed is assigned responsibility. For signs installed on property not owned by a transit agency, the transit agency providing the most service (passenger boardings) in the area of the sign has been assigned responsibility.
4. Facilitate the permitting of signs by waiving all fees that a transit agency would usually charge for sign installation on its property or leased operating areas.
5. As transit agencies plan new facilities or prepare for major remodels of existing facilities, transit agencies will consult with MTC early in the planning process to ensure effective information is provided to transit users and consistency with the Standards is achieved. MTC will determine if a project requires application of the Standards. If yes, the responsible transit agency will implement the appropriate signage throughout the transit facility in accordance with the Standards.

**MTC will:**

1. In consultation with Transit Connectivity TAC, develop, document and periodically update regional sign Standards.
2. Comply with cost and task responsibilities detailed in Appendix B-2, Attachment 1.



3. Solicit feedback from transit agencies on significant changes to regional policy affecting the 24 hubs through the Transit Connectivity Technical Advisory Committee.
4. As resources permit, provide technical assistance to transit agencies wishing to extend the regional sign Standard to non-regional hubs.
5. Explore opportunities to extend constancy of wayfinding information across modes throughout the region, including through technological and other innovative means.

### Appendix B-2, Attachment 1: Hub Signage Program Cost/Task Responsibilities

Hub Signage Operations & Maintenance (O & M)	Task	Cost Responsibility			Task Responsibility		
		Region	Operator	Region	Operator	Operator	
<b>A. Physical O &amp; M by Sign Type</b>							
1. Directional/Wayfinding Signs (incl. hub identification signs)	a. Annual Operations and Maintenance (O&M) <sup>1</sup>		X			X	
	b. Lifecycle Replacement <sup>2</sup>		X			X	
	c. Ownership <sup>3</sup>		X			X	
2. Wayfinding Kiosks	a. Annual Operations and Maintenance (O&M) <sup>1</sup>		X			X	
	b. Lifecycle Replacement <sup>2</sup>		X			X	
	c. Ownership <sup>3</sup>		X			X	
3. Real-Time Transit Signs	a. Annual Operations and Maintenance (O&M) <sup>1</sup>		X			X	
	b. Lifecycle Replacement <sup>2</sup>	X				X	
	c. Ownership <sup>3</sup>		X			X	
4. Transit Information Displays	a. Annual Operations and Maintenance (O&M) <sup>1</sup>		X			X	
	b. Lifecycle Replacement		X			X	
	c. Ownership <sup>3</sup>		X			X	
<b>B. Information Content O &amp; M by Sign Type</b>							
1. Directional/Wayfinding Signs (incl. hub identification signs)	d. Static Information Content		X			X	
	d. Printed information content <sup>4</sup>	X			X		
2. Wayfinding Kiosks	d. Printed information content <sup>4</sup>	X			X		
	d. Electronic information content	X			X		

<sup>1</sup> Including electricity, cleaning, graffiti removal, and repairs.  
<sup>2</sup> Including planning, procurement, coordination, and installation.  
<sup>3</sup> Insurance, liability, and warranty claims.  
<sup>4</sup> Including quarterly cleaning of physical sign case.

## **Appendix B-3 Clipper® Implementation Requirements**

This Appendix defines the Commission's expectations of the transit agencies to ensure a successful operation of the Clipper® (formerly TransLink®) system in three sections:

- I. Participation Requirements
- II. Regional Clipper® Communications and Marketing Activities
- III. Fare Media Transition Schedules by Specific Operators

Section I describes general Clipper® implementation requirements for participating operators.

Section II defines expectations for communications and marketing: a program area critical to smooth implementation of a full transition to Clipper® that can only be addressed through a collaborative, regional approach.

Section III establishes the dates by which the transit agencies that are currently operating Clipper® will transition their existing prepaid fare media to Clipper®-only availability.

### **I. Participation Requirements**

The Clipper® fare payment system was procured by MTC and has been implemented, operated and maintained under the Design Build Operate Maintain contract between MTC and Cubic Transportation Systems, Inc. for the Clipper® fare payment system (the current Clipper® Contract). The Clipper® Contract was assigned to Cubic Transportation Systems, Inc. (the current Clipper® Contractor), on July 2, 2009 and has an operating term extending through November 2, 2019. In this role as counterparty to the Clipper® Contract, MTC is sometimes referred to in this Appendix B-3 as the "Contracting Agency." Transit agencies operating Clipper® as their fare payment system are required to enter into the Memorandum of Understanding (MOU) among MTC and the transit agencies operating Clipper®.

The following describes general Clipper® implementation requirements for participating operators. An operator's failure to meet one or more of these requirements may result in non-compliance with Resolution 3866.

1. Implement and operate the Clipper® fare payment system in accordance with the Clipper® Operating Rules, as adopted and amended from time to time in accordance with the MOU. The current Clipper® Operating Rules (updated in June 2012) are incorporated herein by this reference. The Clipper® Operating Rules establish operating parameters and procedures for the consistent and efficient operation of Clipper® throughout the region and are available on MTC's website at <http://www.mtc.ca.gov/planning/tcip/>.
2. Pay its share of costs according to the MOU, including the cost allocation formula set forth in Appendix B to the MOU.
3. Abide by the revenue sharing formula in Appendix B to the MOU.

4. Make its facilities and staff available for implementation and operation of Clipper<sup>®</sup>. Any Operator and the Contracting Agency may agree to an Operator-Specific Implementation Plan, setting forth specific requirements regarding implementation and operation of Clipper<sup>®</sup> for such Operator.
5. Make determinations regarding the placement of Clipper<sup>®</sup> equipment on the Operator's facilities and equipment; perform necessary site preparation; attend Clipper<sup>®</sup> Contractor training on the use of the Clipper<sup>®</sup> equipment; and provide training to employees using the equipment.
6. Implement, operate and promote Clipper<sup>®</sup> as the primary fare payment system for each Operator. Clipper<sup>®</sup>'s primary market is frequent transit riders (i.e., commuters and transit passholders). Operators shall not establish other fare payment systems or fare policies that could deter or discourage these patrons' preference to use Clipper<sup>®</sup>. Operators shall set fares so that fares paid with Clipper<sup>®</sup> are equivalent or lower than fares paid either with cash or other forms of payment.

No new non-Clipper<sup>®</sup> prepaid fare product, other than for promotional, special event or limited-audience—e.g., tourist—fares, shall be created by any transit operator without consulting with and receiving prior approval from MTC.

Nothing in this provision is intended to discourage operators from providing leadership on new technologies or innovations that would offer improvement to fare collection operations or the customer experience. The expectation is that these new initiatives should leverage the attributes and assets of Clipper<sup>®</sup>, not compete with Clipper<sup>®</sup> or undermine customers' preference to use Clipper<sup>®</sup>.

7. Perform first-line maintenance upon Clipper<sup>®</sup> equipment located on their facilities or vehicles, promptly notify the Clipper<sup>®</sup> Contractor when second-line maintenance of Clipper<sup>®</sup> equipment is needed, promptly notify the Contracting Agency and the Clipper<sup>®</sup> Contractor of any issues affecting daily financial reconciliation or accuracy of system reports, issue all types (including, but not limited to, cards configured as senior or youth) of Clipper<sup>®</sup> cards and add value to existing Clipper<sup>®</sup> cards from all Ticket Office Terminals located at their business facilities, and provide at least the same level of front-line customer service to their patrons using Clipper<sup>®</sup> as to patrons using other forms of fare payment.
8. Sufficiently train and educate agency personnel who have Clipper<sup>®</sup>-related responsibilities so those personnel are able to carry out the requirements placed upon operators in this Resolution.
9. Assist MTC, as necessary, to develop a program for Transit Capital Priorities (TCP) funds for the purpose of procuring and installing end-of-lifecycle Clipper<sup>®</sup> equipment and to submit and administer grants for programmed TCP funds on a "pass-through" basis.

10. Take financial responsibility for replacement of equipment damaged in-service due to vandalism or any other cause not covered by the Clipper® Contract warranty.<sup>1</sup>

## II. Regional Clipper® Communications and Marketing Activities

1. Effective Date. For operators currently operating the Clipper® system, these Clipper® marketing and communications requirements are effective immediately. For operators not yet operating Clipper®, the requirements are effective two months after MTC's approval of the Clipper® system as Revenue Ready for that operator.
2. General Requirements. Operators shall present Clipper® to customers, employees and media as a fully operational fare payment option. This includes, but is not limited to, identification of Clipper® as a fare payment option in brochures, websites, advertisements, schedules/timetables, email newsletters, internal memos, bulletins and training manuals, and any other materials that describe an operator's fare payment options. Operators shall present Clipper® as an option so that Clipper® has equal or greater prominence than the presentation of other payment options. Each operator shall incorporate and/or modify the presentation of Clipper® in existing brochures, websites, schedules/timetables, etc. whenever the operator next updates the content of these items.

In all cases, operators' marketing and communications about Clipper®, whether in brochures, websites, advertisements or other forms, shall adhere to Clipper® brand guidelines developed by MTC with input from transit operators. The Clipper® Brand Guidelines are available at <https://www.clippercard.com/ClipperWeb/toolbox.do>.

3. Equipment Identification. If not already identified as such, operators shall identify Clipper®-compatible fare payment and Clipper®-compatible vending equipment with a decal or other visual identifier to indicate the equipment's Clipper® compatibility.
4. Operator Training. Operators shall ensure appropriate Clipper®-related training for transit operator staff including, but not limited to, vehicle operators, station agents, conductors, customer service personnel, proof of payment officers, ticket sales staff and any other personnel responsible for interacting with customers concerning payment options.
5. Marketing Coordination. Operators shall participate in the development and implementation of a Clipper® marketing and communications initiative that will begin approximately June 1, 2010. This includes, but is not limited to:
  - Staff participation in the development and implementation of the initiative;
  - Dissemination of Clipper® brochures and/or other information materials on vehicles and/or in stations in a manner consistent with the operator's dissemination of other similar operational information; and
  - Providing information about Clipper® utilizing space available on vehicles and/or in stations that is already used by the operator for dissemination of operational information (space available includes, but is not limited to, car cards, posters, and electronic displays).

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<sup>1</sup> During the term of the existing Clipper® Contract, MTC shall procure replacement equipment on an operator's behalf, and operators shall pay for the full cost of the equipment including all installation costs and materials.

6. **Funding.** Funding for the initial phases of the communications and marketing program shall come from the marketing funds already in the Clipper® capital budget and previously assigned to individual operators.

### **III. Fare Media**

The tables below set forth *the fare media* that the designated operator shall convert to Clipper®-only availability and *the date* by which the operator shall no longer accept such fare media in its existing form. In general, MTC has emphasized with each operator a transition of those fare products which currently represent a significant portion of that operator's boardings.

An operator will be excused from compliance with a transition date requirement for particular fare media, if the Clipper® Contractor has not met at least 80% of the cardholder support service level standards set forth in Section B.1.12 of the Clipper® Contract for the two calendar months ending one month before the scheduled transition date. The operator's transition date requirement for the affected fare media will be reset to one month after the Clipper® Contractor has met at least 80% of the Clipper® Contract's cardholder support service level standards for two consecutive calendar months.

**AC Transit will transition its existing fare media by the following dates:**

<b>Fare Media</b>	<b>Date for Ending Acceptance of Listed Prepaid Fare Media</b>	<b>Comments</b>
EasyPass	Transition complete	
31-Day Transbay Pass – Adult	Transition complete	
Bear Pass (U.C. Berkeley Employee Pass)	Transition complete	
10-Ride Ticket – Youth	Transition complete	
10-Ride Ticket – Adult	Transition complete	
31-Day Local Pass – Youth	Transition complete	
31-Day Local Pass – Adult	Transition complete	
10-Ride Ticket – Senior/Disabled	Transition complete	Product in paper form was effectively eliminated upon transition of Youth 10-Ride Ticket to Clipper®-only.

**BART will transition its existing fare media by the following dates:**

<b>Fare Media</b>	<b>Date for Ending Sales and/or Acceptance of Listed Prepaid Fare Media</b>	<b>Comments</b>
EZ Rider card as payment for transit	Transition complete	
High Value Discount (HVD) adult magnetic stripe ticket (blue)	12/31/2011	<ul style="list-style-type: none"> <li>• Prior to 12/31/11, BART must discontinue sales of HVD tickets except as noted below; however, BART may continue accepting HVD tickets for fare payment after 12/31/2011.</li> <li>• BART may continue sales of HVD tickets for a limited period of time at seven My Transit Plus locations currently operating in BART stations. This exception shall remain in effect until 60 days after: <ul style="list-style-type: none"> <li>(i) The Clipper® equivalent of HVD tickets becomes available through WageWorks and Edenred USA (parent company of Commuter Check); and</li> <li>(ii) The Clipper® Contractor completes the requirements in Section 2.3 of Clipper® Contract Change Order 122.</li> </ul> </li> </ul>
Senior magnetic stripe ticket (green)	12/31/2011	<ul style="list-style-type: none"> <li>• Prior to 12/31/11, BART must discontinue sales of green tickets except as noted below; BART may continue accepting green tickets for fare payment after 12/31/2011.</li> <li>• BART may continue sales of green tickets at a limited number of existing sales locations. The number of locations and the length of time sales can continue is subject to mutual agreement by MTC and BART after public comment.</li> </ul>
(table continues on following page)		



<b>Fare Media</b>	<b>Date for Ending Sales and/or Acceptance of Listed Prepaid Fare Media</b>	<b>Comments</b>
Youth and disabled magnetic stripe ticket (red)	12/31/2011	<ul style="list-style-type: none"> <li>• Prior to 12/31/11, BART must discontinue sales of red tickets except as noted below; BART may continue accepting red tickets for fare payment after 12/31/2011.</li> <li>• BART may continue sales of red tickets at a limited number of existing sales locations. The number of locations and the length of time sales can continue is subject to mutual agreement by MTC and BART after public comment.</li> </ul>
Student magnetic stripe ticket (orange)	Requirement waived	Product not available on Clipper®. Recommend that BART align its definition of youth/student discount with all other operators in region and eliminate this fare product.

**Caltrain will transition its existing fare media by the following dates:**

<b>Fare Media</b>	<b>Date for Ending Acceptance of Listed Prepaid Fare Media</b>	<b>Comments</b>
Full Fare Monthly Pass	Transition complete	
8-ride Ticket	Transition complete	
Caltrain + Muni Monthly Pass	Transition complete	
Eligible Discount Monthly Pass	Transition complete	
8-ride Eligible Discount Ticket	Transition complete	

**Golden Gate Transit and Ferry will transition its existing fare media by the following dates:**

<b>Fare Media</b>	<b>Date for Ending Acceptance of Listed Prepaid Fare Media</b>	<b>Comments</b>
\$25 Value Card	Transition complete	
\$50 Value Card	Transition complete	
\$75 Value Card	Transition complete	

**San Francisco MTA will transition its existing fare media by the following dates:**

<b>Fare Media</b>	<b>Date for Ending Acceptance of Listed Prepaid Fare Media</b>	<b>Comments</b>
<b>Monthly Passes</b>		
Adult BART/Muni Monthly Pass	Transition complete	
Adult Muni Monthly Pass	Transition complete	
Senior Muni Monthly Pass	Transition complete	
RTC/Disabled Monthly Pass	Transition complete	
Youth Monthly Pass	Transition complete	
<b>Visitor/Cable Car</b>		
1 Day Passport	Requirement waived	Product not currently available on Clipper® limited-use (LU) tickets. However, LUs are preferred implementation option.
3 Day Passport	Requirement waived	Product not currently available on Clipper® limited-use (LU) tickets. However, LUs are preferred implementation option.
7 Day Passport	Requirement waived	Product not currently available on Clipper® limited-use (LU) tickets. However, LUs are preferred implementation option.
<b>Ticket Books/Tokens</b>		
Adult Single Ride Ticket Book	Transition complete	
<b>Inter-Agency Transfers</b>		
BART Two-Way Transfer	Transition complete	
BART/Daly City Two-Way Transfer	Transition complete	
Golden Gate Ferry Two-Way Transfer	Transition complete	
<b>Transfers</b>		
Bus Transfers	Requirement waived	MTC and SFMTA are considering alternative strategies that could have a

Fare Media	Date for Ending Acceptance of Listed Prepaid Fare Media	Comments
		similar market share impact, including a fare differential favoring Clipper®
Metro/Subway Transfers	Transition complete	
ADA Transfers	Transition complete	

**SamTrans will transition these existing fare media by the following dates:**

Fare Media	Date for Ending Acceptance of Listed Prepaid Fare Media	Comments
Local Monthly Pass	Transition complete	SamTrans may continue to distribute paper form of this fare product through the county's social services agencies.
Local SF Monthly Pass	Transition complete	
Express Monthly Pass	Transition complete	
Eligible Discount Monthly Pass—senior/disabled	Transition complete	SamTrans may continue to distribute paper form of this fare product through the county's social services agencies.
Youth Monthly Pass	Transition complete	<ul style="list-style-type: none"> <li>• SamTrans may continue to distribute paper form of this fare product through the county's social services agencies.</li> <li>• "Discount Youth Pass" may continue to be available in paper form through schools for eligible students only.</li> </ul>

**VTA will transition these existing fare media by the following dates:**

<b>Fare Media</b>	<b>Date for Ending Acceptance of Listed Prepaid Fare Media</b>	<b>Comments</b>
Monthly Pass	Transition complete	Paper monthly passes will only be sold to social service agencies and providers, school districts, and nonprofit organizations which distribute the passes free or at a discount.
Monthly Express Pass	Transition complete	Paper monthly express passes will only be sold to social service agencies and providers, school districts, and nonprofit organizations which distribute the passes free or at a discount.
Day Pass Tokens	Transition complete	Day pass tokens will only be sold to social service agencies and providers, school districts, and nonprofit organizations which distribute the passes free or at a discount.

### *Other Operators*

The following are general Clipper® implementation and fare media transition requirements for operators not yet operating Clipper®. Following MTC's approval of the Clipper® system as Revenue Ready for a given operator, MTC will work with the operator to identify more specific fare media transition plans. Unless otherwise approved by MTC, an operator shall (i) begin accepting Clipper® for fare payment by customers no more than two months following MTC's approval of the Clipper® system as Revenue Ready for the operator, and (ii) end acceptance of prepaid non-Clipper® fare media no more than one year following MTC's approval of the Clipper® system as Revenue Ready for the operator.

All of the below-listed operators (the "Phase 3 Operators") are exempt from subsection (ii) of the immediately preceding paragraph for the shorter of (a) the term of the MOU, as it may be extended hereafter, and (b) the term of the existing Clipper® Contract as it may be extended hereafter. For the duration of such exemption, the Phase 3 Operators may continue to accept prepaid non-Clipper® fare media, including passes, tickets and transfers; provided that such Operators continue to comply with Section I.6 and all other applicable provisions of this Appendix B-3.

### Phase 3 Operators

Central Contra Costa Transit Authority (County Connection)  
City of Fairfield, as the operator of Fairfield and Suisun Transit (FAST)  
City of Petaluma, as the operator of Petaluma Transit  
City of Santa Rosa, as the operator of Santa Rosa CityBus  
City of Vacaville, as the operator of Vacaville City Coach  
Eastern Contra Costa Transit Authority (Tri Delta Transit)  
Livermore/Amador Valley Transit Authority (LAVTA Wheels)  
Marin County Transit District (Marin Transit)  
Napa County Transportation and Planning Agency (VINE Transit)  
Solano County Transit (SolTrans)  
Sonoma County Transit  
Union City Transit  
Water Emergency Transportation Authority (San Francisco Bay Ferry)  
Western Contra Costa Transit Authority (WestCAT)

## **Appendix B-4 Maintenance of Existing Coordinated Services**

The Commission's previously adopted Transit Coordination Implementation Plan (Resolution No. 3055) included a number of coordination programs that were not modified by the Transit Connectivity Plan. Of these, the Commission expects the transit operators to continue to support the following:

1. Regional Transit Connection (RTC) Discount Card Program – Provides identification cards to qualified elderly and disabled individuals for reduced fares on transit. Transit operators and MTC maintain memorandums of understanding about roles and responsibilities for program implementation. The RTC Discount Card is being incorporated into the Clipper® program
2. ADA Paratransit Eligibility Program – Consists of a regional application, a regional eligibility database administered by a transit agency on behalf of the region and universal acceptance across transit systems of all eligibility determinations. Transit operators have flexibility to tailor the application process to screen applicants to facilitate eligibility determinations.
3. Interagency ADA Paratransit Services – Establishes policies to promote a consistent approach to interagency paratransit passenger transfers (see Appendix A-4, Attachment 1).
4. Regional Transportation Emergency Management Plan – The Regional Transportation Emergency Management Plan (formerly know as the Trans Response Plan) is a framework to coordinate transit services during regional emergencies. Transit operators are required to participate in regional exercises to test the implementation of the plan. Transit agencies certify compliance through their annual State Transit Assistance (STA) funding claims process, and also address emergency coordination planning through their Short Range Transit Plans.
5. Regional Links/Express Bus/Feeder Bus Services – Regional Links include bus service across the Bay Bridge, Dumbarton Bridge, the San Mateo Bridge and the Richmond/San Rafael Bridge that has been incorporated into the Express Bus Services program funded with Regional Measure 2 (RM2), and will be monitored per RM2 requirements. Express Bus Services also include Owl Service which operates along the BART rail lines at night when BART is closed. Express feeder bus services to/from BART stations during peak periods are maintained through direct allocation of BART's STA funds to transit agencies as specified in the annual Fund Estimate. If STA is unavailable, BART's General Fund up to \$2.5 million is available to support these services per existing agreement. If additional funding is needed, it will be subject to discussion on an annual basis.



## **Appendix B-4, Attachment 1 Requirements for Interagency ADA Paratransit Services**

*Note: Transit operators developed guidelines for interagency ADA paratransit services. MTC adapted these guidelines for the purpose of defining coordination requirements.*

Consistent with the Americans with Disabilities Act (ADA) requirement to provide paratransit services that are complementary to fixed-route transit services, Bay Area transit operators have identified a transfer-oriented network of interagency paratransit services. Interagency paratransit trips may require a transfer between connecting paratransit providers at a location specified by the transit operator. The following regional requirements are intended to improve connections between paratransit services for both passengers and paratransit providers. The requirements establish regional protocol for how the system will operate as well as specify the responsibilities of paratransit providers to assure an efficient, user-friendly system.

1. All public transit agencies in the San Francisco Bay Area will honor the regional ADA Eligibility Process [as approved by transit agencies] when certifying an individual for ADA paratransit services.
2. Eligibility for an individual requesting interagency paratransit services will be verified through the ADA Paratransit Regional Eligibility Database.
3. Transit operators will develop and make available customer information on how to access and use interagency paratransit services. This information will be made readily available in accessible formats.
4. Interagency paratransit trips will usually require a transfer between connecting paratransit providers at a location specified by the transit operator. Transit operators will transfer passengers at designated transfer locations that, to the extent possible, are also used as fixed-route transfer sites. For operational efficiency or customer service quality, use of other transfer sites is not precluded. Operators will seek to establish transfer locations that are clean, safe, sheltered and well-lit with accessible telephones and restrooms nearby. Established interagency paratransit transfer locations on transit properties will be clearly marked with a consistent sign designed and adopted at the regional level.
5. For operational efficiency or customer service reasons, transit operators may:
  - transfer passengers to a connecting paratransit provider at a transfer location, including having the passenger wait without assistance until the connecting provider arrives; or
  - provide through-trip service into an adjoining transit agency's service area (not requiring a transfer); or
  - provide transfer assistance to passengers at transfer points (waiting with the passenger until connecting provider arrives); and

- coordinate their schedules and dispatch procedures with connecting provider(s) on the day of service.
6. Coordinating Bay Area interagency paratransit reservations shall be the responsibility of paratransit providers. Subject to availability of rides, a single transit coordinator will be responsible to schedule an interagency paratransit trip (including round-trip service). For trips requiring coordination between only two transit operators, the operator in whose jurisdiction the trip originates will usually perform the function of trip coordinator to schedule the entire trip and to serve as a point of contact for passenger inquiries. For trips involving three or more paratransit providers, a regional trip coordinator may perform these functions.
  7. Transit operators shall accept reservations for interagency paratransit trips according to their local advance reservation policies. When coordinating a trip, the shorter advance reservation period of the connecting agencies will apply. In some cases, the scheduling operator will be unable to determine the availability of a requested interagency paratransit trip until the shortest advance reservation period is open. If, due to differences in advance reservation periods, trip availability cannot be determined at the time the trip is requested, the scheduling operator will inform the passenger of when to call to complete the trip reservation process. In the meantime, the scheduling operator may book available legs of the requested trip according to local advance reservation policies.
  8. Transit operators will charge a fare consistent with each individual operator's fare payment policy. All fares will be communicated to the passenger by the operator scheduling the first leg of the interagency paratransit trip at the time the ride is confirmed. Operators and MTC will work toward a regional fare payment method and/or regional fare policy for paratransit services.

## **Appendix B-5 Cooperative Demographic and Travel Pattern Transit Rider Survey Program Requirements**

This Appendix defines the Commission's expectations of the transit agencies to ensure efficient collection of passenger demographic and travel pattern<sup>2</sup> information.

The Commission and the transit agencies have a common interest in understanding the demographics and travel patterns of transit riders. Between 2012 and March 2015, Commission staff have carried out transit surveys in partnership with 15 separate transit agencies as part of the Cooperative Demographic and Travel Pattern Transit Rider Survey Program ("Survey Program" henceforth). Collecting this information together is more cost effective than collecting it separately. The resulting consolidated data facilitates across-agency comparisons and analyses.

The key roles and responsibilities of MTC and the transit agencies on the Survey Program are as follows:

### **Transit agencies will:**

1. Participate in the Survey Program when collecting information on transit passenger demographics AND travel patterns together.
2. Contribute to the cost of the agency-specific survey performed as part of the Survey Program. Federally-funded operators not listed below will pay no cost to survey service they provide; the following operators will pay 20 percent of the cost to survey service they provide:
  - Alameda-Contra Costa Transit District;
  - Bay Area Rapid Transit District;
  - Caltrain;
  - Golden Gate Bridge, Highway and Transportation District;
  - San Francisco Municipal Transportation Agency;
  - San Mateo County Transit District; and,
  - Santa Clara Valley Transportation Authority.
3. Contribute a limited number of agency-specific survey questions.
4. Contribute advice and suggestions to the survey procedures including, but not limited to, development of sampling plans, frequency and timing of demographic and travel pattern surveying, instrument design, and recruitment strategies.
5. Share ownership of all work products including raw and processed data.

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<sup>2</sup> Defined here as: (a) the precise location of the trip origin, first transit boarding, last transit alighting, and trip destination; (b) the means of travel between the trip origin and first transit boarding and between the last transit alighting and trip destination; and, (c) the sequence of transit routes used between the first transit boarding and the last transit alighting.

**MTC will:**

1. Procure consultant resources to carry out the Survey Program.
2. Oversee consultant performance to ensure delivery of high quality products.
3. Contribute to the cost of the Survey Program. MTC will pay 80 percent of the cost to survey service provided by the seven agencies identified in item 2 of the “transit agencies will” list above; MTC will pay 100 percent of the cost to survey service provided by federally-funded transit providers not identified in the above list.
4. Develop a standard set of survey questions (including response options) and update these questions, as needed, in consultation with the transit agencies.
5. Develop and update a set of survey procedures including, but not limited to, development of sampling plans, instrument design, and passenger recruitment strategies.
6. Deliver survey results, including raw data, procedure documentation, and summary reports, to transit agencies in a timely manner.
7. Maintain a database of regional transit rider demographics and travel patterns.
8. Convene a working group to discuss the surveying effort (including the survey procedures) and the timing of surveys relative to capital projects, federal requirements, financial resources, customer service and other agency-led survey efforts, and schedule mark-ups (a.k.a., sign-ups, bid-dates). The group will meet no less than once a year and will develop and maintain a set of Survey Program standard operating procedures that will define operator-specific question allowances, data distribution procedures (including any necessary privacy safeguards), and other details.
9. Share ownership of all work products including raw and processed data.

# **APPENDIX A – 13**

## ***Regional Policies: Long-Range Planning / Plan Bay Area***

**Project Review Criteria and Procedures  
MTC Resolution No. 3115**



Date: October 28, 1998  
W.I.: 61.1.10  
Referred By: WPC

ABSTRACT

Resolution No. 3115

This resolution adopts the criteria and procedures to be employed by the MTC in the review and approval of projects and related grant applications pursuant to §§ 66518 and 66520 of the Government Code, and § 21655.6 of the Vehicle Code, and federal Intergovernmental Review requirements, and fulfill MTC's responsibilities under the memoranda of understanding with the Association of Bay Area Governments and the California Department of Transportation as authorized pursuant to MTC Resolution No. 1569.

This resolution supersedes MTC Resolution No. 1570.

Date: October 28, 1998  
W.I.: 61.1.10  
Referred By: WPC

Re: Project Review Criteria and Procedures

METROPOLITAN TRANSPORTATION COMMISSION  
RESOLUTION NO. 3115

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code § 66500 et seq.; and

WHEREAS, Government Code § 66518 provides that the California Transportation Commission, when allocating funds for construction projects on the state highway system within the region, shall determine that the projects conform to the MTC's Regional Transportation Plan and its schedule of priorities; and

WHEREAS, Government Code § 66520 provides that any application to the state or federal government, for any grant of money, whether an outright or matching grant, by any city, city and county, county, or transportation district within the San Francisco Bay Area shall, if it contains a transportation element, first be submitted to MTC for review as to its compatibility with the Regional Transportation Plan (RTP), and the schedule of priorities included therein; and

WHEREAS, Vehicle Code § 21655.6 requires that the Department of Transportation (Caltrans) obtain the approval of the regional transportation planning agency prior to establishing the exclusive or preferential use of highway lanes for high-occupancy vehicles; and

WHEREAS, certain transportation projects and/or programs defined in federal regulations (49 CFR 17) are subject to Intergovernmental Review under procedures implementing Executive Order 12372; and

WHEREAS, a Memorandum of Understanding (MOU) among the Association of Bay Area Governments (ABAG), the California Department of Transportation (Caltrans), and the MTC defines their respective roles and responsibilities in the Intergovernmental Review process (MTC Resolution No. 1569); and

WHEREAS, by Resolution No. 1570 the MTC adopted criteria used to determine the "Regional vs. Local" nature of projects to be reviewed, and instituted a project classification listing to indicate the application of those criteria in selecting projects for review; and

WHEREAS, the MTC desires to establish criteria and procedures for project review and application approval appropriate to the type of transportation projects and/or programs which are the subject of such action; now, therefore, be it

RESOLVED, that the MTC finds that the criteria and procedures for project review and application approval described in Attachment A to this resolution, attached hereto and incorporated herein as though set forth at length, permit the efficient and proper discharge of its responsibilities under Sections 66518 and 66520 of the Government Code and § 21655.5 of the Vehicle Code; and, be it further

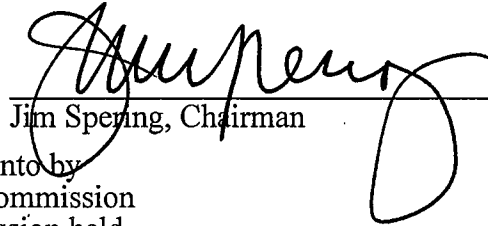
RESOLVED, that the MTC finds that those criteria and procedures satisfy Intergovernmental Review requirements and fulfill its responsibilities under the MOU; and, be it further

RESOLVED, that the MTC adopts the criteria and procedures for project review and application approval shown in Attachment A as those to be employed for such actions henceforth; and, be it further

RESOLVED, that the MTC directs staff, with the next annual cycle, to revise the project review procedures described in the Regional Transportation Plan to conform to those contained in Attachment A; and, be it further

RESOLVED, that Resolution No. 1570 is hereby superseded.

METROPOLITAN TRANSPORTATION COMMISSION



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Jim Sperry, Chairman

The above resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in Oakland, California on October 28, 1998.



Date: October 28, 1998  
W.I.: 61.1.10  
Referred by: WPC

Attachment A  
Resolution No. 3115  
Page 1 of 2

## **MTC Project Review and Application Approval Criteria and Procedures**

### **I. PROJECT REVIEW — COMMISSION REVIEW AND APPLICATION APPROVAL**

Any projects or program contained in the Annual/biennial Element of the Transportation Improvement Program (TIP) which fall under any of the criteria for major transportation projects listed below shall require Project Review by MTC to determine consistency with the Regional Transportation Plan and as a condition for implementation.

This shall also apply to any project or program amended into the Annual/biennial element of the TIP subsequent to its adoption.

#### **Criteria**

1. The authorizing or permitting exclusive or preferential use of highway lanes for high-occupancy vehicles, with the exception of HOV bypass lanes, by the State Department of Transportation;
2. The construction of mixed-flow highway lanes or of auxiliary lanes which do not terminate at the first subsequent interchange on the State highway system.
3. Interchange or local arterial improvements which have the potential to affect main-line operations on the State Highway System;
4. Transit projects that involve the construction of rail extensions, new stations, or parking facilities that exceed 500 parking spaces;
5. Transportation projects that have special circumstances or issues (i.e. design, environmental, financial) that warrant a review by the Commission.

#### **Procedure:**

All projects or programs contained in the Annual/Biennial Element of the current Transportation Improvement Program (TIP) falling under any one of the above criteria must be submitted to MTC by the project sponsor for project review and application approval, pursuant to Sections 66518 or 66520 of the California Government Code.

Upon receipt of an application, staff reviews the project or program documentation and, if appropriate, advises the applicant of any deficiencies or other problems likely to delay application approval. When the project sponsor's documentation and applicable environmental analysis is found to be satisfactory, staff prepares a Staff Evaluation of the project and a

Date: October 28, 1998  
W.I.: 61.1.10  
Referred by: WPC

Attachment A  
Resolution No. 3115  
Page 2 of 2

resolution that determines that the project conforms with the RTP, and supports the grant application for the amounts contained in the Annual/Biennial Element. The Staff Evaluation and resolution are presented to the Grant Review & Allocations Committee for review and, if found satisfactory, referral to the Commission for approval. The project sponsor can access TIP funding only after Commission approval of the application.

## II. ADMINISTRATIVE APPROVAL

Any project or program contained in the annual/biennial element of the Transportation Improvement Program (TIP) not falling under any of the criteria for major transportation projects listed above shall be considered consistent with the Regional Transportation Plan and the schedule of priorities included therein, and will require no further review or approval action by MTC as a condition for implementation.

### Procedure

In adopting the federal Transportation Improvement Program (TIP), the Annual/Biennial projects or programs eligible projects will be identified for administrative approval. Each entry in the TIP tabulation will include the name of the implementing agency, the project description (as shown in the TIP), and the total estimated cost in the Annual/Biennial Element. Unless a project is revised, no further review by MTC will be necessary after the approval of the TIP.

## III. REVIEW OF LOCALLY FUNDED ROAD PROJECTS

Generally, locally funded road projects are not normally subject to project review and may be administratively approved. However, if these road projects significantly impact the State highway system, Project Review will be required to determine consistency with the Regional Transportation Plan.

Additionally, locally funded road projects that have regional significance will be listed in the TIP. *Regionally significant* projects must be included in the TIP to ensure adequacy of the federal air quality conformity analysis. *Regionally significant projects* mean capacity increasing projects that normally include principal arterial highways or fixed guideway transit facilities or that offer an alternative to regional highway travel.

Other related actions, such as an amendment of the Transportation Improvement Program, may be necessary in addition to the process described above.

# APPENDIX A – 14

## *Regional Policies: Long-Range Planning / Plan Bay Area*

**MTC's Regional Safety/Vision Zero Policy  
MTC Resolution No. 4400**



Date: June 24, 2020  
W.I.: 1233  
Referred by: Planning

ABSTRACT  
Resolution No. 4400

This resolution sets forth MTC's Regional Safety/Vision Zero Policy to support achievement of safety targets adopted by MTC.

Further discussion of these actions is contained in the MTC Executive Director's Memorandum to the Planning Committee dated June 12, 2020.

Date: June 24, 2020  
W.I.: 1233  
Referred by: Planning

Re: Regional Safety/Vision Zero Policy

METROPOLITAN TRANSPORTATION COMMISSION  
RESOLUTION NO. 4400

WHEREAS, pursuant to Government Code § 66500 et seq., the Metropolitan Transportation Commission (“MTC”) is the regional transportation planning agency for the San Francisco Bay Area; and

WHEREAS, MTC is the designated Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area region, and safety has been a goal included in MTC’s Regional Transportation Plans for twenty years; and

WHEREAS the Moving Ahead for Progress in the 21st Century (MAP-21) Act and the Fixing America’s Surface Transportation (FAST) Act require metropolitan planning organizations to frequently set short range performance targets related to safety; and MTC has adopted aspirational regional safety targets as shown in Attachment A; and

WHEREAS, short-range federally-required targets will be incorporated into planning and programming processes in the coming years in compliance with the final Metropolitan Planning rule as adopted by the Federal Highway Administration and Federal Transit Administration on May 27, 2016;

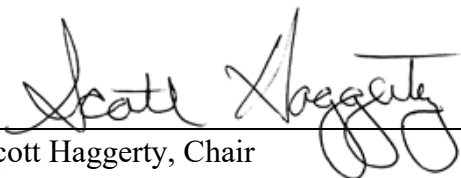
WHEREAS, 23 U.S. Code §450 requires the Regional Transportation plan to include a system performance report, including progress achieved by the MPO in meeting safety performance targets, and requires the Transportation Improvement Program (TIP), once implemented is designed to make progress toward achieving the safety performance target.

WHEREAS, “Vision Zero (VZ)” is defined as a strategy to eliminate traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. Effective VZ strategies must be data-driven, and must consider equity and community concerns in all stages; and:

RESOLVED, that MTC hereby adopts a Regional Safety/VZ policy to support achievement of safety targets adopted by MTC, as stated in Attachment A; and:

RESOLVED, that MTC establishes “Proposed Principles and Actions for a Regional Vision Zero Policy” to guide staff in working towards supporting reduction of fatalities and serious injuries across the region, as detailed in Attachment A.

METROPOLITAN TRANSPORTATION COMMISSION

  
\_\_\_\_\_  
Scott Haggerty, Chair

The above resolution was approved by the Metropolitan Transportation Commission at a regular meeting of the Commission held in San Francisco, California, and at other remote locations, on June 24, 2020.

Date: June 24, 2020  
W.I.: 1233  
Referred by: Planning

Attachment A  
Resolution No. 4400  
Page 1 of 2

**REGIONAL SAFETY/VISION ZERO POLICY STATEMENT:**

Working together with our partner agencies, encourage and support equitable and data-driven actions towards eliminating traffic fatalities and serious injuries for the Bay Area region by 2030.

**REGIONAL SAFETY TARGETS:**

MTC's current safety targets for the region are based on a Toward Zero Deaths framework, basing targets on a linear reduction to zero fatalities and serious injuries in the region by the year 2030.

**PROPOSED PRINCIPLES AND ACTIONS FOR A REGIONAL VISION ZERO POLICY:**

**Provide Regional Leadership to Promote Safety**

1. MTC will engage and incentivize leadership across local jurisdictions in prioritizing safety and work towards aligning funding investments with safety goals.

**Apply a Data Driven Approach**

2. MTC's safety policies shall be driven and informed by data to allow available funds to be used strategically. Regional safety data will be used for safety target-setting, and monitoring of progress towards regional safety goals.
3. MTC will serve as a regional safety data bank so that cities - especially those with more limited resources - can benefit from an integrated safety data repository and a consistent and reliable source of safety data for traffic safety analysis, evaluation and applying for safety funding.

**Promote Equity in Regional Safety Policies**

4. MTC will advance equity through safety policies noting that communities of concern are the most at risk of suffering from traffic fatalities and serious injuries.
5. MTC will emphasize the importance of protecting all roadway users, including vulnerable users such as pedestrians, bicyclists, and users of new mobility.

**Support Beneficial Safety Policies and Legislation**

6. MTC will encourage safety policies and support safety legislation that targets evidence based solutions to safety problems.

**Educate & Engage**

7. Within budgetary constraints, MTC will conduct public outreach and provide technical assistance - reliable safety data, analytical toolkits, technical expertise - for local jurisdictions across the region, especially those that lack expertise or resources to implement a successful safety program.
8. MTC will engage key regional stakeholders in safety policy development and implementation, including local jurisdictions, counties, police departments, emergency response and others, to collaborate on safety best practices.



# APPENDIX A – 15

## *Regional Policies: Long-Range Planning / Plan Bay Area*

**MTC's Regional Complete Streets Policy  
MTC Resolution No. 4493**



Date: March, 2022

W.I.: 1125

Referred by: PLNG

## ABSTRACT

MTC Resolution No. 4493

This Resolution sets forth MTC's regional policy for provision of Complete Streets, which are transportation facilities that provide safe mobility and improved connectivity to community destinations for all road users, and especially for people biking, walking, rolling and taking transit. The policy applies to transportation project planning, design, funding, construction, reconstruction, and maintenance activities, and supersedes Resolution 3765.

Further discussion of the policy for provision of Complete Streets is contain in the Joint MTC Planning with the ABAG Administration Committee summary sheet dated March 11, 2022.

Date: March 23, 2022

W.I.: 1125

Referred by: PLNG

Re: Adoption of revised Complete Streets (CS) Policy and update on the regional Active Transportation (AT) Network.

METROPOLITAN TRANSPORTATION COMMISSION

RESOLUTION NO. 4493

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code Section 66500 et seq.; and

WHEREAS, MTC adopted Resolution No. 3765 in 2006, which states that agencies applying for regional discretionary funds shall consider bicycle and pedestrian facilities during project planning, design, funding and construction; and

WHEREAS, Resolution No. 3765 established the Routine Accommodation checklist and the role of Congestion Management Agencies (CMAs) and Bicycle/Pedestrian Advisory Committees (BPACs) in reviewing projects for compliance; and

WHEREAS, many law and adopted policies, including the California Global Warming Solutions Act of 2006, the Sustainable Communities and Climate Protection Act of 2008 (SB 375), and Plan BayArea 2050 requires significant increases in travel by public transit, bicycling, and walking to meet emissions, VMT and other metrics, and

WHEREAS, in 2015, MTC approved Resolution No. 4402, which required that jurisdictions demonstrate their Complete Streets compliance to be eligible for One Bay Area Grant Program (OBAG), Cycle 2 grant funding; and all 109 local Bay Area jurisdictions are required to demonstrate compliance through resolutions, general plan compliance or ordinance; and

WHEREAS, the State of California continues to elevate the importance of Complete Streets since by enacting the California Complete Streets Act of 2008 and Caltrans Director's Policy 37 (2021), and in state budget priorities and other policies and plans such as the Climate Action Plan for Transportation Infrastructure; and

WHEREAS, California law governing gas tax revenue (CA Streets and Highways Code Section 2030(f): Road Maintenance and Rehabilitation) was adopted to encourage integration of Complete Streets by Caltrans and cities and counties receiving funds; and

WHEREAS, federal legislation currently requires that bicycle and pedestrian needs must be given due consideration under Federal Surface Transportation law (23 U.S.C. 217(g)(1)), and this should include, at a minimum, a presumption that bicyclists, pedestrians, and persons with disabilities will be accommodated in the design of new and improved transportation facilities. In the planning, design, and operation of transportation facilities, bicyclists, pedestrians, and persons with disabilities should be included as a matter of routine, and the decision to not accommodate them should be the exception rather than the rule; and

WHEREAS, in 2020, MTC Resolution 4400 established the Regional Safety/ Vision Zero (VZ) Policy to encourage and support actions towards eliminating traffic fatalities and serious injuries in the Bay Area by 2030; and

WHEREAS, “Vision Zero (VZ)” is defined as a strategy to eliminate traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. Effective VZ strategies must be data-driven, and must consider equity and community concerns in all stages; and

WHEREAS, in 2021, MTC unanimously adopted Plan Bay Area 2050, which contains a strategy to develop a Complete Streets Network to help meet regional mode shift, safety, equity, health, resilience and climate goals; and

WHEREAS, recognizing that coordinated development of pedestrian and bicycle infrastructure offers cost savings in the long term and opportunities to create safe and convenient bicycle and pedestrian travel; and

WHEREAS, integrating safety and accessibility into all stages of transportation infrastructure, from planning and construction, and onwards in operations and maintenance, including access to transit facilities improves access to and from transit; now, therefore, be it

RESOLVED, that MTC adopts the 2022 Complete Streets Policy, developed, as detailed in Attachment; A, attached hereto and incorporated herein as though set forth at length.

METROPOLITAN TRANSPORTATION COMMISSION

A handwritten signature in black ink, consisting of a large, stylized 'A' followed by a long horizontal line extending to the right.

---

Alfredo Pedroza, Chair

The above resolution was entered into by the Metropolitan Transportation Commission at a duly called and noticed meeting held in San Francisco, California and at other remote locations, on March 23, 2022

Attachment A

Date: March 23, 2022

W.I.: 1125

Referred by: PLNG

Attachment A

MTC Resolution No. 4493

## **COMPLETE STREETS POLICY**

### **GOAL**

The goal of MTC's Complete Streets (CS) Policy is to ensure people biking, walking, rolling and taking transit are safely accommodated within the transportation network. This policy works to advance regional Plan Bay Area policies including mode shift, safety, equity, VMT and greenhouse gas emission reductions, as well as support local compliance with applicable CS-related laws, policies and standards. This is primarily accomplished by requiring a Complete Streets checklist from projects seeking discretionary funding or funding endorsements from MTC. MTC regional discretionary funds include, but are not limited to, federal, state, and regionally administered programs such as Surface Transportation Block Grant Program (STBGP) funding, Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding, Transportation Alternatives (TA) set-aside/Active Transportation Program (ATP) funding, regional bridge tolls and Regional Transportation Improvement Program (RTIP) funding.

### **DEFINITION**

Complete Streets are planned, designed, constructed, reconstructed, operated, and maintained to be safe and comfortable for everyone, regardless of age, ability, ethnicity, race, sex, income, disability or chosen transportation mode. Complete Streets provide safe mobility and improved connectivity to community destinations for all users, and especially for people walking, rolling, biking and riding transit, while maximizing the use of the existing public right-of-way by prioritizing space-efficient forms of mobility (walking, cycling, shared mobility and public transit) over space intensive modes (single occupancy auto travel).

Plan Bay Area 2050 Strategy *T8* calls for development of a Complete Streets Network, enhancing streets to promote walking, biking and other micro-mobility options through sidewalk improvements, car-free slow streets, and 10,000 miles of bike lanes or multi-use paths. MTC's Active Transportation Plan (AT Plan) defines an Active Transportation Network (AT Network), made up of regionally significant segments of local active transportation networks and regional trails, based on traffic safety, user comfort, equity and connectivity to transit, Priority Development Areas, Equity Priority Communities, and Mobility Hubs. To acknowledge and allow for context-sensitive implementation at the local level, jurisdictions can determine how best to advance AT Network implementation, such as choice of roadway(s), trail alignment, and facility type within AT Network corridors.

## **DESIGN PRINCIPLES & STANDARDS**

Projects on the AT Network shall incorporate design principles based on designing for “All Ages and Abilities<sup>1</sup>,” contextual guidance provided by the National Association of City Transportation Officials (NACTO), and consistent with state and national best practices. A facility that serves “all ages and abilities” is one that effectively serves the mobility needs of children, older adults, and people with disabilities and in doing so, works for everyone else. The all ages and abilities approach also strives to serve all users, regardless of age, ability, ethnicity, race, sex, income, or disability, by embodying national and international best practices related to traffic calming, speed reduction, and roadway design to increase user safety and comfort. This approach also includes the use of traffic calming elements or facilities separated from motor vehicle traffic, both of which can offer a greater feeling of safety and appeal to a wider spectrum of the public. Using the “All Ages and Abilities” design principles on the AT Network, projects should optimize comfort and safety, acknowledge context sensitivity, prioritize safety and regional connectivity, and encourage access to transit. Design best practices for safe street crossings, pedestrian and Americans with Disabilities Act (ADA) accessibility at transit stops, and

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<sup>1</sup> Designing for All Ages & Abilities: [https://nacto.org/wp-content/uploads/2017/12/NACTO\\_Designing-for-All-Ages-Abilities.pdf](https://nacto.org/wp-content/uploads/2017/12/NACTO_Designing-for-All-Ages-Abilities.pdf)

bicycle/micromobility<sup>2</sup> facilities on the AT Network should be incorporated throughout the entirety of the project. The Proposed Public Rights-of-Way Accessibility Guidelines (PROWAG)<sup>3</sup> by the U.S. Access Board should also be referenced during design.

## **SAFETY**

Safety shall be prioritized for all modes, especially the safety of vulnerable road users, that includes people biking, walking and rolling. The safety of vulnerable roadway users should not be compromised to achieve improved level of service for people driving personal automobiles. Projects are encouraged to utilize MTC's Vision Zero safety analyses, High-Injury Network (HIN) and Bay Area Vision Zero tools, as completed, and to include traffic calming or speed management features as needed to reduce drivers' vehicle speed through physical design, and encourage safe vehicle speeds along roadways, particularly on local, state and MTC identified HINs.

## **EQUITY**

Projects enhancing active transportation in Equity Priority Communities (EPC) and/or implementing recommendations from Community-Based Transportation Plans shall be given priority consideration in applicable regional discretionary funding programs. Projects located in EPCs should document the meaningful community engagement that has occurred within the community to advance the project.

## **RESILIENCE**

To the extent practicable, local agencies should integrate green infrastructure into planned public road right-of-way improvements to manage flooding of transportation facilities, stormwater/urban runoff, protect watershed health, improve water quality, and foster climate resilience.

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<sup>2</sup> Micromobility encompasses small fully or partially human-powered vehicles (both personal and shared-use fleets) such as bikes, e-bikes and e-scooters, as well as specialized vehicle types such as cargo bikes, mobility-assistance devices, wheelchairs, accessible bikes and scooters.

<sup>3</sup> "(Proposed) Public Rights-of-Way *Accessibility Guidelines*." U.S. Access Board, <https://www.access-board.gov/prowag/>



## **FUNDING**

Projects funded all or in part with regional discretionary funding or receiving MTC endorsements shall adhere to this policy. All projects must implement CS as recommended in recently adopted local or countywide plans, such as bicycle, pedestrian, active transportation, Vision Zero or other systemic safety plan, Community Based Transportation Plans, or transit plan. If a project is on the regional Active Transportation Network, it should incorporate design principles based on “All Ages and Abilities,” contextual guidance issued by NACTO, as well as PROWAG issued by the U.S Access Board. Projects not located in the AT Network or included in a local plan should utilize federal, state, and local guidelines to determine appropriate CS accommodations.

Projects funded all or in part with regional discretionary funding or receiving MTC endorsements for state or federal funding programs shall not degrade or remove existing bicycle or pedestrian access, including bicycle parking or storage, within the project. Bicycle or pedestrian enhancements associated with new roadway or transit construction projects shall be included in project funding submittals. Bicycle and pedestrian enhancements shall be completed within a timeframe consistent with other mode enhancements.

## **COORDINATION**

When designing a project that serves a destination point, including but not limited to a school, recreation facility, shopping center, hospital, office complex, or transit facility, the project shall facilitate safe and convenient bicycle and pedestrian access to the destination in coordination with the property owner. A project is considered to “serve” a destination if that destination directly abuts the project limits. Bicycle parking or storage is also strongly encouraged to be included in this access planning and implementation.

## **IMPLEMENTATION**

The CS Policy shall be implemented by requiring submittal of a Complete Streets Checklist as projects request MTC discretionary funding or endorsement. The CS Checklist helps to ensure that CS elements have been sufficiently incorporated and that coordination with appropriate stakeholders has occurred. All projects in the public right-of-way and seeking \$250,000 or more in regional discretionary funding or endorsement must complete a Complete Streets Checklist. Project sponsors shall coordinate with their respective County Transportation Agency (CTA) and its Bicycle and Pedestrian Advisory Committee (BPAC) (or equivalent) to complete and review the CS Checklist. Checklists must be reviewed by the county BPAC (or equivalent) prior to submittal to MTC. If a project includes a transit stop/station or is located along a transit route, the checklist must be signed by the transit agency(ies) to confirm transit agency coordination and acknowledgement of the project.

After the Complete Streets Checklist is completed, submitted online and reviewed, it will be made available to the public through MTC website and possibly the CTA websites. Project sponsors shall retain maintenance, operations and (where they control the Public Right-of-Way) ultimate control over the property or facilities related to or resulting from projects funded by MTC subject to the CS Policy.

## **CONSTRUCTION, OPERATIONS and MAINTENANCE**

Active transportation access and safety shall be addressed throughout the entire life cycle of a project, including planning, design, construction, operations and maintenance. This includes providing accommodations for people using all modes of transportation to continue to use roadways safely and efficiently during any construction or repair work that infringes on the public right-of-way and/or sidewalk. The AT Network will be included in MTC's StreetSaver software to aid planning and cost estimation to prioritize maintenance on bikeways and trails. Implementing agencies will also be able to incorporate local active transportation assets into StreetSaver Plus.

## **EXCEPTIONS**

The CS policy shall apply to all phases of project development except under one or more of the following conditions:

1. Bicyclists and pedestrians are prohibited by law from using the roadway, in which case a greater effort shall be made to accommodate those specified users elsewhere, including parallel or intersecting routes; or
2. The costs of providing accommodation are excessively disproportionate to the need or probable use. Excessively disproportionate is defined by FHWA<sup>4</sup> as bicycle and pedestrian facilities together exceeding twenty percent of the cost of the larger transportation project. If the cost of preferred accommodation is considered excessively disproportionate, project sponsors shall consider alternatives that represent a feasible share of the total project cost but still provide for safe accommodation of vulnerable road users.
3. There is an alternate plan to implement Complete Streets elements of a project, either during a subsequent implementation phase of the project or within a close parallel route.
4. Conditions exist in which policy requirements may not be able to be met, such as fire and safety specifications, spatial conflicts on the roadway with transit or environmental concerns, defined as abutting conservation land or severe topological constraints.

To receive an exception, project sponsors must provide documentation in the Complete Streets Checklist detailing how the project meets one or more of the exception conditions above.

Exceptions must be documented and signed by the agency's Director of Public Works, Transportation Department (or equivalent), or their designee, and not the Project Manager. A Complete Streets Checklist seeking an exception follows the same BPAC review process as stated above.

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<sup>4</sup> "Accommodating Bicycle and Pedestrian Travel: A Recommended Approach," FHWA, [https://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/guidance/design.cfm](https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design.cfm)

### **TRACKING AND EVALUATION**

MTC, in coordination with CTAs, will develop project evaluation metrics to routinely track progress toward closing gaps and completing projects on the AT Network and in the AT Plan generally, as well as meeting Vision Zero and equity goals. MTC staff will produce a report every 4 years, in coordination with CTAs, to summarize funded projects, provide key performance indicators, and make recommended changes to the CS Policy, if any.

### **TECHNICAL ASSISTANCE**

MTC will provide tools to project sponsors and implementing agencies, such as Complete Streets design principles and standards, to provide guidance for determining appropriate Complete Streets treatments based on roadway conditions, completing the Complete Streets Checklist, and other topics as resources allow.

# APPENDIX A – 16

## *Regional Policies: Long-Range Planning / Plan Bay Area*

### **Bay Area Regional Broadband Communications Strategic Investment Plan**



# BAY AREA REGIONAL BROADBAND COMMUNICATIONS STRATEGIC INVESTMENT PLAN



**FINAL PLAN**  
**OCTOBER 23, 2019**



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**BAY AREA REGIONAL BROADBAND  
COMMUNICATIONS STRATEGIC INVESTMENT PLAN  
FINAL PLAN**

<b>Document Control Log</b>			
<b>Version No.</b>	<b>Author(s)</b>	<b>Submittal Date</b>	<b>Description/Disposition</b>
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3.0	K. Akwabi J. Arroyo D. Shtykalo T. Guo	10/23/19	Final

# BAY AREA REGIONAL BROADBAND COMMUNICATIONS STRATEGIC INVESTMENT PLAN FINAL PLAN

## Glossary of Terms

**BAIFA** – Bay Area Infrastructure Financing Authority

**CMS** – Changeable Message Sign

**C/CAG** – City/County Association of Governments of San Mateo County

**FCC** – Federal Communications Commission

**HDPE** – High-Density Polyethylene

**HOV** – High-Occupancy Vehicle

**CCTV** – Closed-Circuit Television Cameras

**ITS** – Intelligent Transportation Systems

**Mbps** – Megabits per Second

**RCN** – Regional Communications Network (as defined in Section 1.5)

**SMART** – Sonoma Marin Area Rail Transit

**SMFO** – Single-mode Fiber Optic Cable

**STA** – Solano Transportation Authority

**SV ITS** – Silicon Valley Intelligent Transportation Systems

**TAM** – Transportation Authority of Marin

**TOS** – Traffic Operations Systems

**TMC** – Transportation Management Center

**TMS** – Transportation Management Systems

**VTA** – Santa Clara Valley Transportation Authority



**BAY AREA REGIONAL BROADBAND  
COMMUNICATIONS STRATEGIC INVESTMENT PLAN  
FINAL PLAN**

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## 1. INTRODUCTION AND BACKGROUND

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The Bay Area Regional Communications Strategic Investment Plan provides a framework to enable MTC, Caltrans, and other regional and local stakeholders to develop a regional communications network. The Plan proposes 40 projects, prioritizes them based on their benefits and costs, describes traditional and creative funding sources, and outlines best practices for sharing communications infrastructure. Vision, goals, and objectives developed by project stakeholders guided the Plan's development.

All reference to sharing in the context of a proposed project refers to sharing communications infrastructure and not sharing data. Network security will not be discussed in this document because networks are secured on a design level.

### 1.1 Project Background

In 2003, Caltrans District 4 and MTC collaborated on the development of a Traffic Operations System (TOS) Implementation Plan. This document presented an assessment of existing, planned, and programmed regional field device coverage on the 500-mile freeway network. Using a Systems Engineering approach to define overall system architecture and functional requirements of the TOS network, a strategy was outlined for expanding and implementing a communications infrastructure to support the TOS elements. Each segment of the freeway network was prioritized based on bandwidth needs, gap closures, cost-benefit considerations, and other needs at the time.

In 2009, the document was updated and titled Bay Area Regional Communications Plan. The focus was on identifying strategies to upgrade or enhance the communications network to expand and accommodate the Caltrans' video system, as well as other field devices. The document captured an analysis of bandwidth needs for each corridor and a cost analysis for using agency-owned or leased communications. Projects and corridors were prioritized based on cost benefits (e.g., elimination of monthly recurring leased costs), functionality provided by each alternative, and corridors of regional significance.

In 2013, the Bay Area Regional Communications Plan was updated to factor in additional programs (Express Lanes, Integrated Corridor Management, Freeway Performance Initiative), and to consider new priorities from local and regional stakeholders throughout the Bay Area. This Plan introduced a "Regional Communication Fiber Ring" around the San Francisco Bay Area, aimed to reduce lease-line recurring costs, upgrade existing infrastructure and share data among agencies.

The Bay Area Regional Communications Plan is now being updated to create a Bay Area Regional Broadband Communications Strategic Investment Plan. The Plan promotes sharing of infrastructure and lays a roadmap that will result in a regional communications network. This network will enable transportation data and information sharing and facilitate the implementation of technology-based congestion management strategies focused on enhancing the livability and economic vitality of communities through the nine-county Bay Area. It will give agencies the ability to support managed lanes, Integrated Corridor Management, Smart Cities, and other emerging, advanced technologies.

### 1.2 Roles and Responsibilities

The Plan lays out the purpose and need for the regional communications network - a network of regional fiber and infrastructure assets owned and maintained by multiple agencies utilized by disparate systems, but allows for sharing of physical and logical assets. MTC has been leading the development and maintenance of the Plan. Plan implementation will be the responsibility of all agencies that intend to participate in the network. Participating agencies may use this document as a guide to identify needs for additional communications infrastructure in their jurisdiction. Participation is not mandated.

# BAY AREA REGIONAL BROADBAND COMMUNICATIONS STRATEGIC INVESTMENT PLAN FINAL PLAN

## 1.3 Project Vision Statement, Goals, and Objectives

The vision statement of the Bay Area Regional Broadband Communications Strategic Investment Plan is:

*To provide the technical and policy framework to develop a fast, reliable, redundant, and cost-effective regional communications network that will enable the sharing of data, infrastructure, and maintenance costs among project partners; support coordinated and interoperable transportation systems across multiple jurisdictions; and facilitate technology-based strategies focused on enhancing safety, mobility, livability and economic vitality of communities throughout the nine-county San Francisco Bay Area.*

Below are the goals and objectives for the Bay Area Regional Broadband Communications Strategic Investment Plan as developed by stakeholders.

- **Goal 1:** Identify projects to establish a high-bandwidth, reliable, and redundant regional communications network through the nine-county San Francisco Bay Area.
  - Objective 1-1: Identify projects that complete a redundant regional communications backbone along routes surrounding the San Francisco Bay.
  - Objective 1-2: Identify projects that connect the regional communications network to multiple Internet points-of-presence (POPs) throughout the region to support broadband connectivity to participating agencies.
  - Objective 1-3: Identify projects that complete the connection between regional communications network and express lane operators throughout the nine-county San Francisco Bay Area.
- **Goal 2:** Develop policies and strategies that encourage agencies to connect their local networks to the regional communications network.
  - Objective 2-1: Develop policy and Partnership MOU for use of and access to the network.
  - Objective 2-2: Develop strategy for shared funding (capital and O&M).
  - Objective 2-3: Develop requirements for regional communications network infrastructure.
- **Goal 3:** Facilitate development of best practices for procuring, implementing, and maintaining communications network infrastructure.
  - Objective 3-1: Develop initial procurement strategies for procurement of regional communications network equipment including shared procurement options and regionally negotiated pricing and warranties.
  - Objective 3-2: Develop best practices for implementation and maintenance of various communications media for use by partner agencies.
- **Goal 4:** Encourage the sharing of existing agency-owned infrastructure to provide secure and reliable communications for transportation agencies in the region.
  - Objective 4-1: Identify projects and opportunities to use existing communications infrastructure to complete regional communications network objectives.
  - Objective 4-2: Identify projects that complete connections between key transportation agency facilities and the proposed regional communications network

It is suggested that the Plan is updated in three years to track progress on the Goals and Objectives.

## 1.4 Benefits and Use Cases

This Plan highlights benefits of a regional communications network at both a regional and local level. A shared regional communications network would result in long-term cost savings by leveraging investments in existing infrastructure and eliminating monthly recurring leased line costs. Other benefits

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include but are not limited to: decreased reliance on a single communications system owned by one entity, increased coverage and capacity, and enhanced redundancy.

Potential use cases of the regional communications network for local agencies include but are not limited to: synchronized traffic signals across jurisdictions to enable better traffic flow, shared video feeds to monitor real time traffic conditions and make congestion mitigation decisions and having regional control of traffic systems to respond and adjust signal timing in the event of an emergency or natural disaster.

Collection of data would occur on an agency's communications network and sharing data would occur through the regional communications network. Owning agencies will have full autonomy over what data is shared.

## 2. EXISTING AND PLANNED COMMUNICATION INFRASTRUCTURE AND CAPACITY

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This section presents an inventory of existing and planned fiber communications infrastructure. Currently there is no communications infrastructure dedicated to regional data transfer, which presents an opportunity to create a regional communications network utilizing existing and planned communications infrastructure. To leverage existing and planned investments and reduce program costs, some projects proposed in this Plan suggest sharing communications infrastructure.

Existing and planned infrastructure data is presented in this section by sub-region. For the purposes of this project, the nine-county Bay Area has been divided into four sub-regions:

- Peninsula (San Francisco and San Mateo Counties)
- South Bay (Santa Clara County)
- East Bay (Alameda and Contra Costa Counties)
- Solano-North Bay (Solano, Sonoma, Napa, and Marin Counties)

### 2.1 Existing Infrastructure/Projects

The following is a summary discussion of existing regional communications infrastructure and corresponding projects of regional significance. Existing projects are either already built or are under construction and expected to be completed in the next 2-3 years. Figure 1 provides an overview summary of existing regional fiber communications infrastructure (conduit with fiber). Figure 2 provides an overview of existing regional conduit infrastructure (conduit with and without fiber). Appendix A includes a tabulated version of the existing infrastructure data along highways.

#### 2.1.1 Peninsula

Existing regional communications infrastructure within the Peninsula sub-region consists of approximately 20 miles of conduit and fiber along El Camino Real (SR 82) between San Bruno and Palo Alto, and several miles of fiber along US 101 in Palo Alto. The El Camino Real network consists of a 96-strand SMFO cable installed in a multi-conduit duct bank. There is also a segment of 72-strand SMFO cable that ties the El Camino Real segment to signals along SR 84/Marsh Road via US 101.

The existing communications infrastructure described above serves the C/CAG US 101 Smart Corridor network. The objective of this network is to allow partner agencies in San Mateo County access to real-time traffic data along the corridor for local day-to-day traffic management, as well as regional traffic management during major incidents along US 101.



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There is also fiber communications infrastructure owned by the San Mateo County installed on local streets in the cities of Daly City, South San Francisco, San Mateo, Belmont, San Carlos, Redwood City, Menlo Park, and Palo Alto.

## 2.1.2 South Bay

Existing regional communications infrastructure within the South Bay sub-region consists of fiber cable and conduit on portions of US 101 and El Camino Real installed by VTA and Caltrans. As part of the I-880 HOV Widening Project, communications conduits were installed on I-880 between SR 237 and US 101. Communications conduits were also installed as part of the Stevens Creek Boulevard interchange project in San Jose.

In addition, many local principal arterials, and almost all the expressways have fiber communications infrastructure installed. The local fiber installations are primarily owned and maintained by the City of San Jose and City of Santa Clara for city-owned traffic signal communications. The County of Santa Clara's infrastructure is used for similar purposes along the expressways.

A large portion of the existing fiber communications network in the South Bay was installed by the Silicon Valley – ITS (SV-ITS) program as a traffic management strategy. This program is a regional resource to allow communications between the Cities of San Jose, Fremont, Milpitas, Cupertino, Campbell, Santa Clara, the Town of Los Gatos, Santa Clara County, and Caltrans.

## 2.1.3 East Bay

Existing regional communications infrastructure within the East Bay sub-region consists of Caltrans fiber cable and conduit along I-580, I-680, and I-880, in addition to some local fiber in the Cities of Dublin, Pleasanton, Livermore, Hayward, San Leandro, Oakland, Berkeley, Emeryville, Union City, and Fremont.

The I-680 corridor includes a 144-strand SMFO cable installed in a 1 to 4-3 inch conduit duct bank installed between the I-580/I-680 interchange in Dublin, and the Benicia Bridge Toll Plaza in Martinez, approximately 27 miles. The I-680 Sunol Express Lanes project currently operates wireless communications on its southbound lanes (SR 84 to SR 262) but the northbound I-680 Sunol express lane under construction will convert that to fiber for both directions.

The I-880 communications infrastructure includes a 288-strand SMFO cable installed in a 3-3-inch or 4-1.5 inch multi-conduit duct bank. The fiber infrastructure is installed between Hegenberger Road in Oakland, and Dixon Landing Road in Milpitas, approximately 26 miles.

The I-680 Contra Costa and I-880 corridors include existing regional express lane operations. The fiber communication network is maintained by BAIFA on both existing corridors. However, the conduit infrastructure is owned by Caltrans, and is installed in Caltrans' right-of-way. Caltrans also owns 72 strands of the fiber cable along both corridors.

The I-580 corridor includes regional express lane operations. The I-580 infrastructure runs between the I-580/I-680 interchange in Dublin, and Greenville Road in Livermore, approximately 12 miles. It includes one 1.5-inch conduit with a 72-strand SMFO cable owned by Alameda County Transportation Commission (Alameda CTC), one 1.5-inch conduit with a 72-strand SMFO cable owned by Caltrans, two 1.5-inch empty conduits and one empty 3-inch conduit with pull tape for use by Caltrans. The express lanes and fiber communication network are maintained by Alameda CTC. The conduit infrastructure is owned by Caltrans.

There are several local streets with fiber communications infrastructure throughout Dublin, Livermore, and Pleasanton which were installed as part of the I-580 Smart Corridor Project. The City of Dublin owns 140-

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strand SMFO fiber which is installed along Dublin Boulevard between San Ramon Road in Pleasanton and Fallon Rd in Dublin which runs parallel to I-580 and intersects with I-680.

There is also City-owned fiber communications infrastructure installed throughout Hayward, San Leandro, Oakland, and Fremont. Fiber communications infrastructure was installed in Oakland along San Pablo Avenue from 14<sup>th</sup> St to MacArthur Boulevard as part of the I-80 Integrated Corridor Management project. AC transit projects such as Bus Rapid Transit (BRT) also helped to build out fiber communications infrastructure along local streets in the East Bay.

## 2.1.4 Solano-North Bay

There is currently empty conduit infrastructure in Marin County in two stretches along US 101. Along US 101 through the City of San Rafael there is nearly four miles of two 1.25" empty conduits. Through the City of Novato there are four 1.5" empty conduits for nearly three miles along US 101.

## 2.1.5 Regional Communications Infrastructure

Throughout the nine-county Bay Area there are 17 BayLoop Microwave sites owned and operated by the Bay Area Regional Interoperable Communications Systems Authority (BayRICS). These microwave sites make up a high-capacity network originally created to support public safety services. This is an existing communications network with locations throughout the Bay Area that is led by an inter-agency Joint Powers Authority.

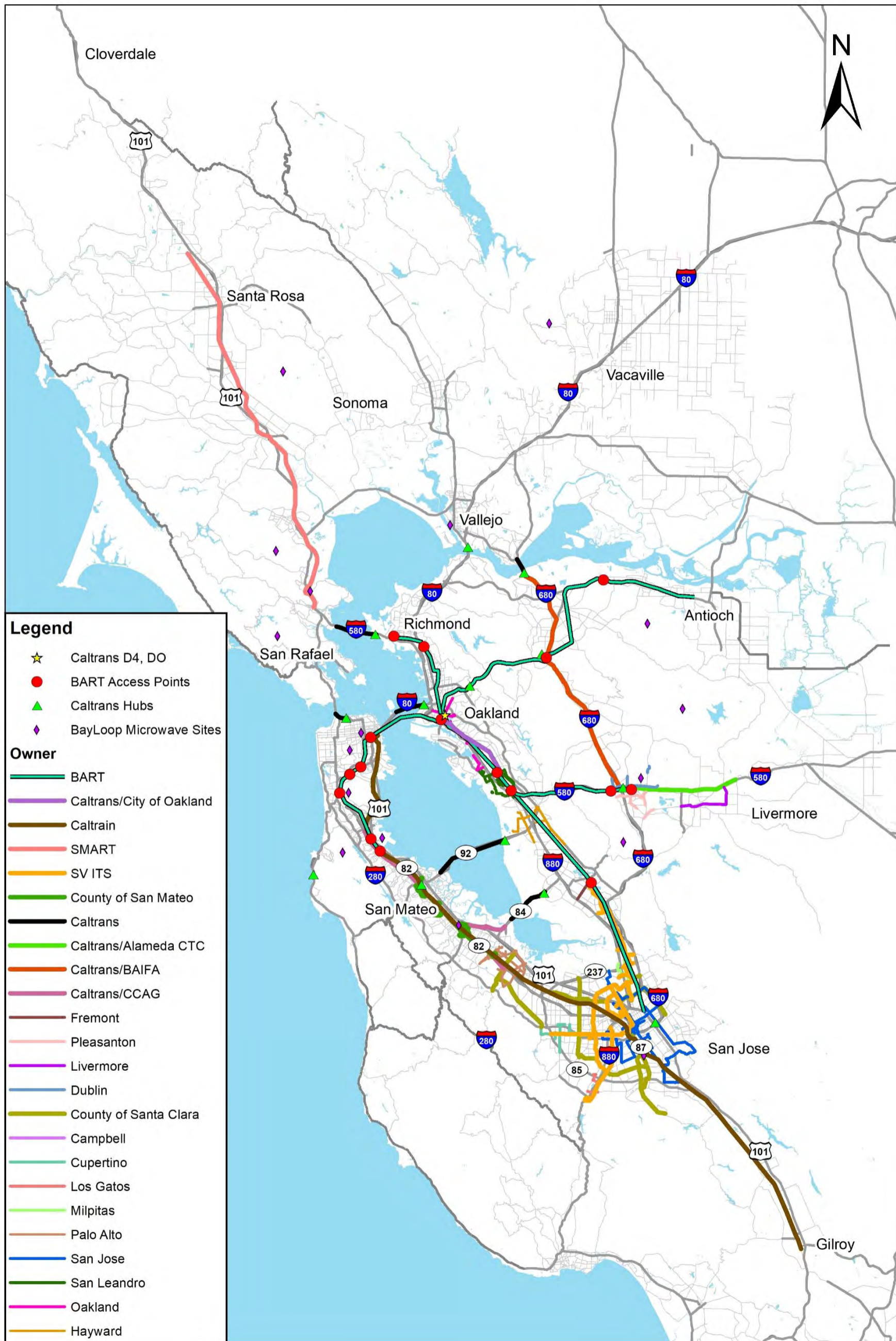
BART has installed fiber communications infrastructure along their right-of-way throughout the Bay Area. Caltrans has 16 access points to BART fiber strands. BAIFA has 6 access points to BART fiber strands. The City of San Jose, City of San Francisco, City of Oakland, and the City of Dublin also have connections to BART fiber communications infrastructure.

Caltrain has a Positive Train Control Project that aims to electrify the Caltrain transit line. Caltrain right-of-way/infrastructure is currently the most available alignment for shared infrastructure, but other systems like the possible High Speed Rail alignment may be additional sources as the opportunities arise in the future.

Sonoma Marin Area Rail Transit (SMART) and Sonic, a private broadband provider, have a public-private partnership in place to share capital cost of fiber communications infrastructure installation along SMART's rail line. Sonic has non-exclusive conduit access and installed new fiber cable. Some of the fiber strands are dedicated to SMART which are used by local agencies near its right-of-way. Currently the SMART line is existing between the Sonoma County Airport and San Rafael.



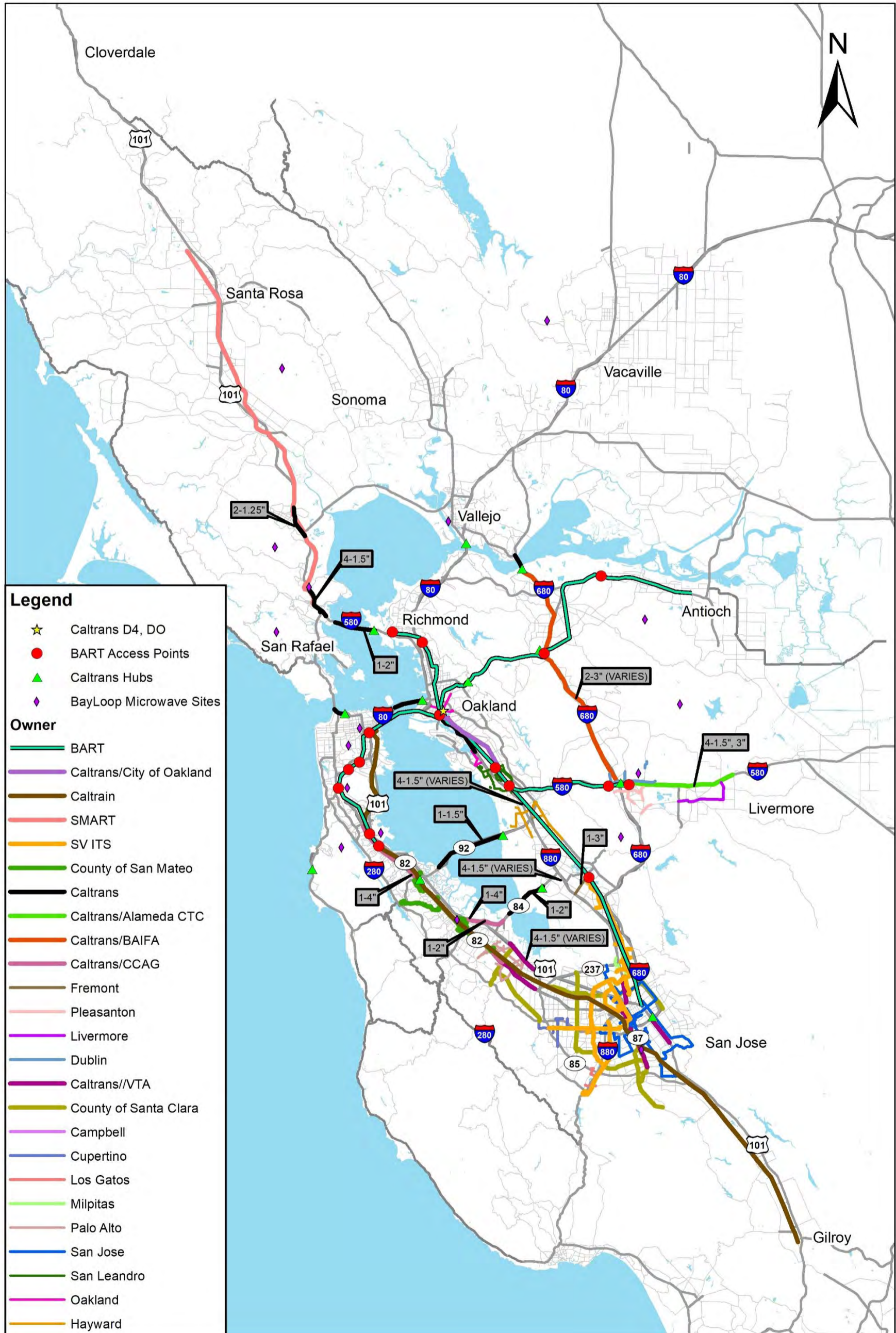
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*Figure 1: Existing Regional Fiber Communications Infrastructure*



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*Figure 2: Existing Regional Conduit Infrastructure*



## **2.2 Planned Infrastructure/Projects**

The following is a summary of planned regional communications infrastructure and corresponding projects of regional significance that may be implemented within the next five years. Most of the planned infrastructure is not currently funded. Figure 3 provides an overview summary of planned regional communications infrastructure. Appendix A includes a tabulated version of the planned infrastructure data.

### **2.2.1 Peninsula**

There are three planned regional communications infrastructure projects on the peninsula. All projects entail installation of fiber. One project is planned along US 101 between Embarcadero Road in Palo Alto and Grand Avenue in South San Francisco. The other project will be along Airport Boulevard and Gateway Boulevard in South San Francisco. The third project will be along various routes parallel to I-280 in South San Francisco and Daly City. All projects will be administered by C/CAG in partnership with Caltrans. The US 101 communications infrastructure will facilitate new regional express lane implementation and separate communications to Caltrans' freeway TMS elements. The fiber infrastructure in South San Francisco and Daly City will enable the implementation of Smart Corridor projects.

### **2.2.2 South Bay**

Four near-term freeway projects in the South Bay could provide a possible opportunity to build out portions of the regional communications network. The four projects are being administered by VTA as part of the express lanes on SR 237, SR 85 and US 101. There are two projects along US 101. Fiber communications to support Caltrans' freeway TOS elements along these corridors are being coordinated between VTA and Caltrans.

### **2.2.3 East Bay**

There are several planned regional communications infrastructure expansions in the East Bay. The I-880 Integrated Corridor Management (ICM) Central Segment, is being administered by MTC and extends the existing I-880 ICM Project from Davis Street to Lewelling Boulevard in San Leandro to Whipple Road. Most signals along the corridors have fiber or copper interconnect currently and the project plans to fill the gaps in existing communications infrastructure. Communications infrastructure installed by the project will be owned and maintained by the City of San Leandro. The remainder of the Central Segment, from Lewelling Boulevard in San Leandro to Whipple Road in Union City, will be completed in phases as funding becomes available.

As previously mentioned, the I-680 Sunol Express Lanes project is expanding to the northbound lanes along the existing project limits. With this expansion, the project intends to add one 72-strand SMFO cable along I-680 from SR 262 to SR 84 in a 4-inch conduit with three 1-inch diameter high density polyethylene (HDPE) innerducts, two of which will be left empty to be used in the future. There is an additional project planned to complete the I-680 Sunol Express Lanes between SR 84 and Alcosta Boulevard in San Ramon.

CCTA is working on a series of projects they have combined under one large 7-step initiative called "Innovate 680." The first step in the Innovate 680 project is to close the existing HOV gap and complete the express lanes network along I-680 in Contra Costa County. Steps 2-7 include various strategies to address bottlenecks in the corridor, improve transit service, update existing ITS equipment, and ultimately

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prepare the corridor for the future. This infrastructure will supplement the existing infrastructure along the corridor.

There are also several planned projects on local routes. The City of Oakland MacArthur Smart Corridor will be an innovative incident management corridor parallel to I-580. The City intends to install fiber along MacArthur Boulevard from I-580 in San Leandro to City Hall in downtown Oakland. The anticipated project completion is 2021. The City of Oakland is also planning to install fiber communications along Telegraph Ave and Grand Ave in the near future. The San Pablo Avenue Corridor Project is an ICM project implemented by Alameda CTC. It is relieving congestion on I-80 by improving operations along San Pablo Avenue from Oakland to San Pablo.

## 2.2.4 Solano-North Bay

There is a planned express lanes project that has fiber communications infrastructure in Solano County administered by the Solano Transportation Authority. The planned project is along I-80 between the I-80/I-680 junction in Fairfield, and the I-80/I-505 interchange in Vacaville, approximately 17 miles. This project is anticipated to include installation of fiber conduit and cable from Manual Campos Parkway in Fairfield to Leisure Town Road in Vacaville.

The Napa Valley Transportation Authority, Sonoma County Transportation Authority, Transportation Authority of Marin, and Solano Transportation Authority are planning to build a managed lane along SR 37 between SR 121 and the West span of the Napa River as part of the State Route 37 Resilient Corridor Program. A contraflow lane and shoulder running lane are being considered as managed lane options.

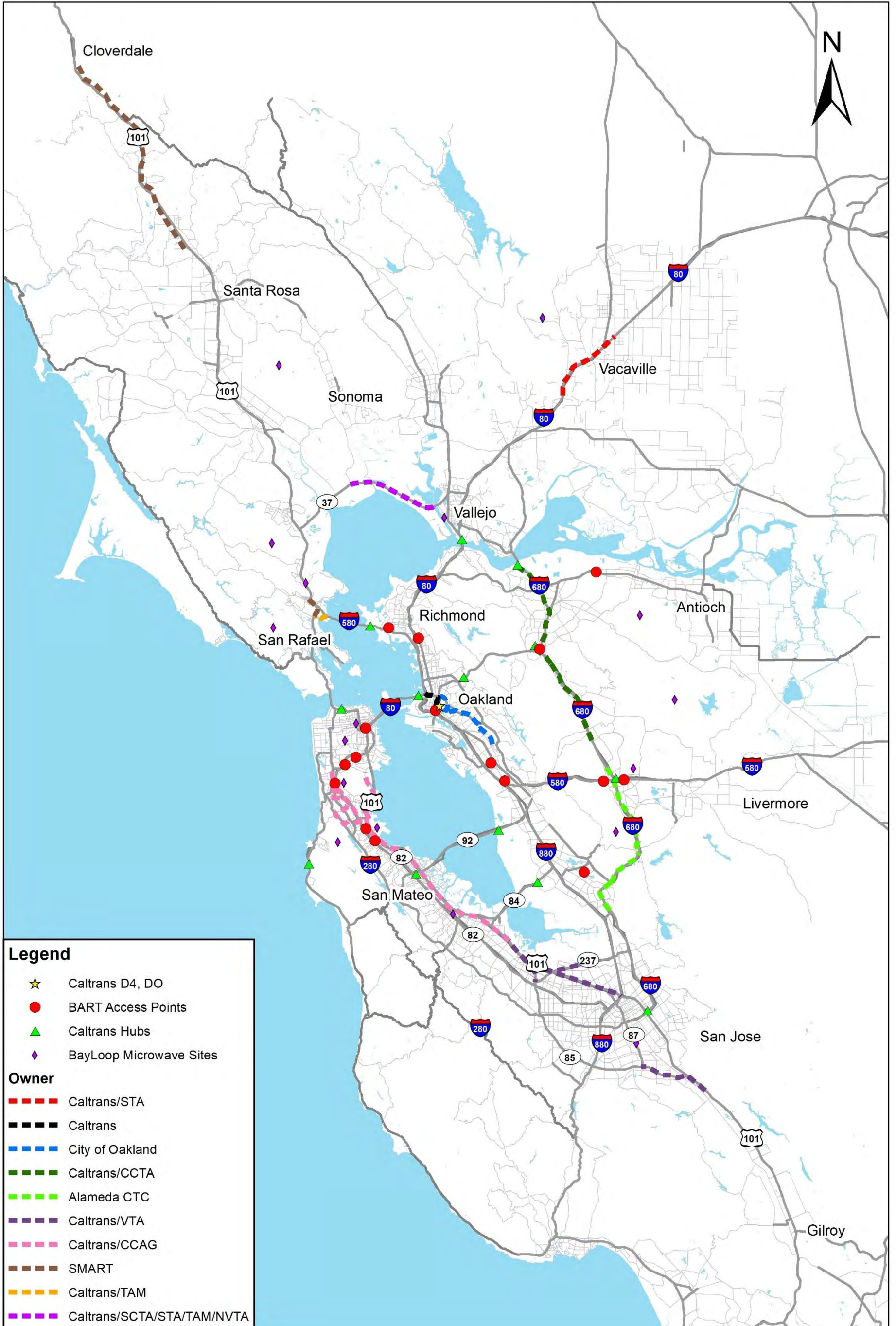
The Transportation Authority of Marin has identified several projects to be considered for Regional Measure 3 funding. The US 101/I-580 Direct Connector Project is planned to include installation of fiber communications infrastructure along Sir Francis Drake Blvd between the two highways.

## 2.2.5 Regional Communications Infrastructure

Sonoma Marin Area Rail Transit (SMART) is planning to extend its rail line and fiber communications infrastructure from Sonoma County Airport to Cloverdale and from San Rafael to the Larkspur Ferry Terminal.



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*Figure 3: Planned Regional Fiber Communications Infrastructure*

## 3. REGIONAL COMMUNICATIONS NETWORK PROJECTS AND PRIORITIZATION

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Based on the Plan objectives, the following project types were proposed: completing the regional communications backbone around the Bay, and connecting Points-of-Presence (POPs), express lanes, and transportation centers to the regional communications network. A resulting list of projects are recommended to develop the regional communications network.

Currently there are no communications dedicated for regional data. There are opportunities to create a regional communications network utilizing existing and planned communications infrastructure. To leverage existing and planned investments, some proposed projects suggest sharing communications infrastructure. It is assumed that the regional communications network will be used to connect various types of devices in the future, but project cost estimates contained in this document do not include lateral connections to devices.

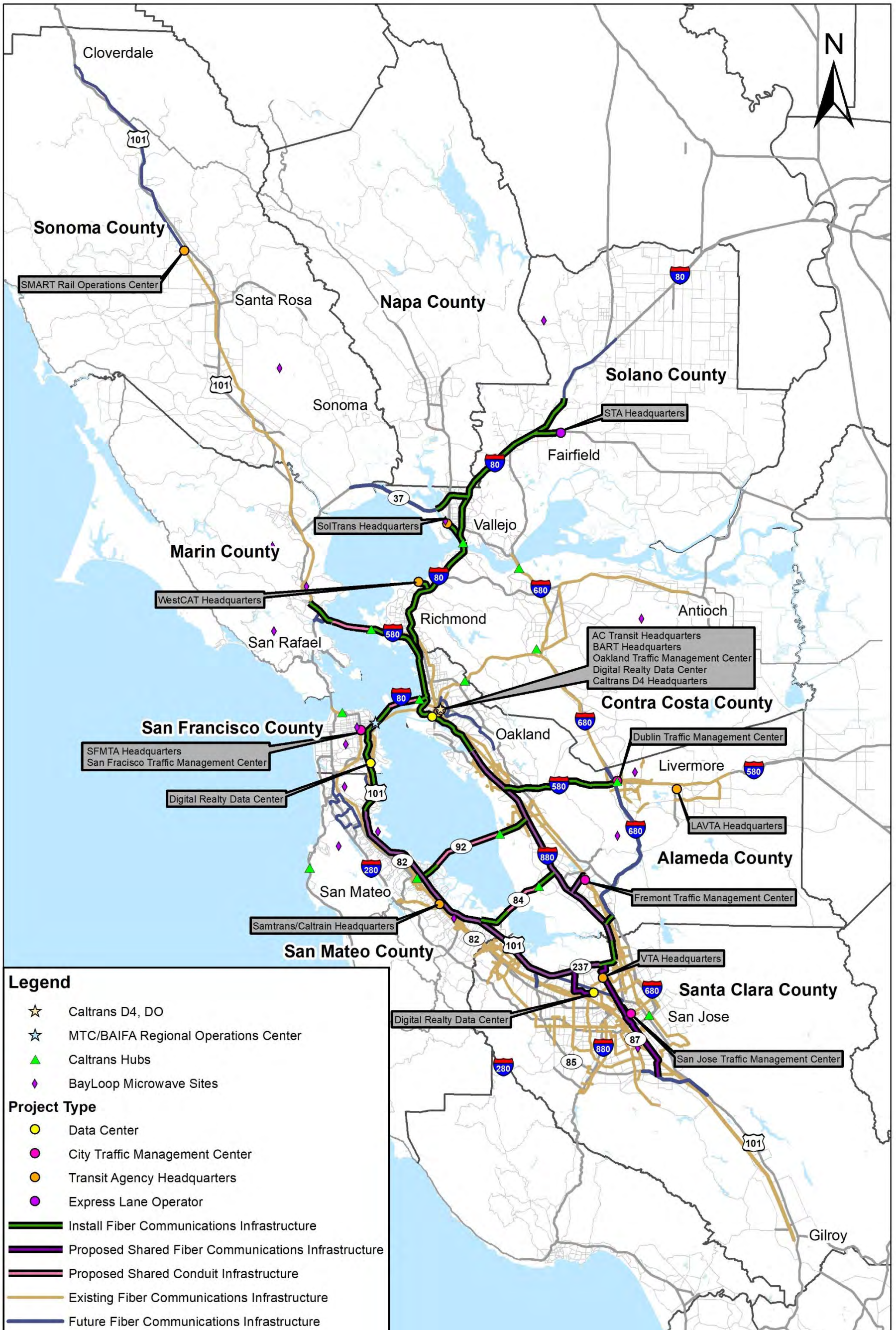
To align with Caltrans' vision of having four communications conduits along their right-of-way, any project that proposes fiber communications infrastructure along a freeway assumes the installation of 4-4" conduit.

### 3.1 Project Selection

Figure 4 shows the proposed full build out of the regional communications network throughout the nine-county Bay Area. In addition to connections to public agency facilities, the proposed projects include connections to Digital Realty, a data center with various locations throughout the Bay Area. Digital Realty locations serve as POPs. The 40 projects included in Figure 4 were selected based on their ability to meet the goals and objectives set forth by the Plan. Sharing conduit infrastructure with Caltrans is proposed along the San Mateo and Dumbarton bridges. While this is the most cost-effective alternative, it will ultimately be determined by appropriate stakeholders if this is feasible based on current conduit capacity and future Caltrans needs.

These proposed projects are not automatically linked to a form of funding and are subject to change based on stakeholder input, funding constraints, and other priorities. They are meant to be a starting point to facilitate implementation of the regional communications network and are not binding to any agency that is called out in a proposed project title. The team developed a comprehensive communications technology selection methodology to assess and evaluate the viability of various communications technologies. Based on the characteristics of proposed projects (availability of existing infrastructure, device density, location relative to an existing ITS Technology Corridor, and others), various communications mediums were evaluated to determine which would be the most appropriate technology to build out the regional communications network. The assessment yielded fiber optic communication as the most effective option of all those that were evaluated. As a result, fiber communications is the assumed preferred alternative for all future projects discussed in this document.



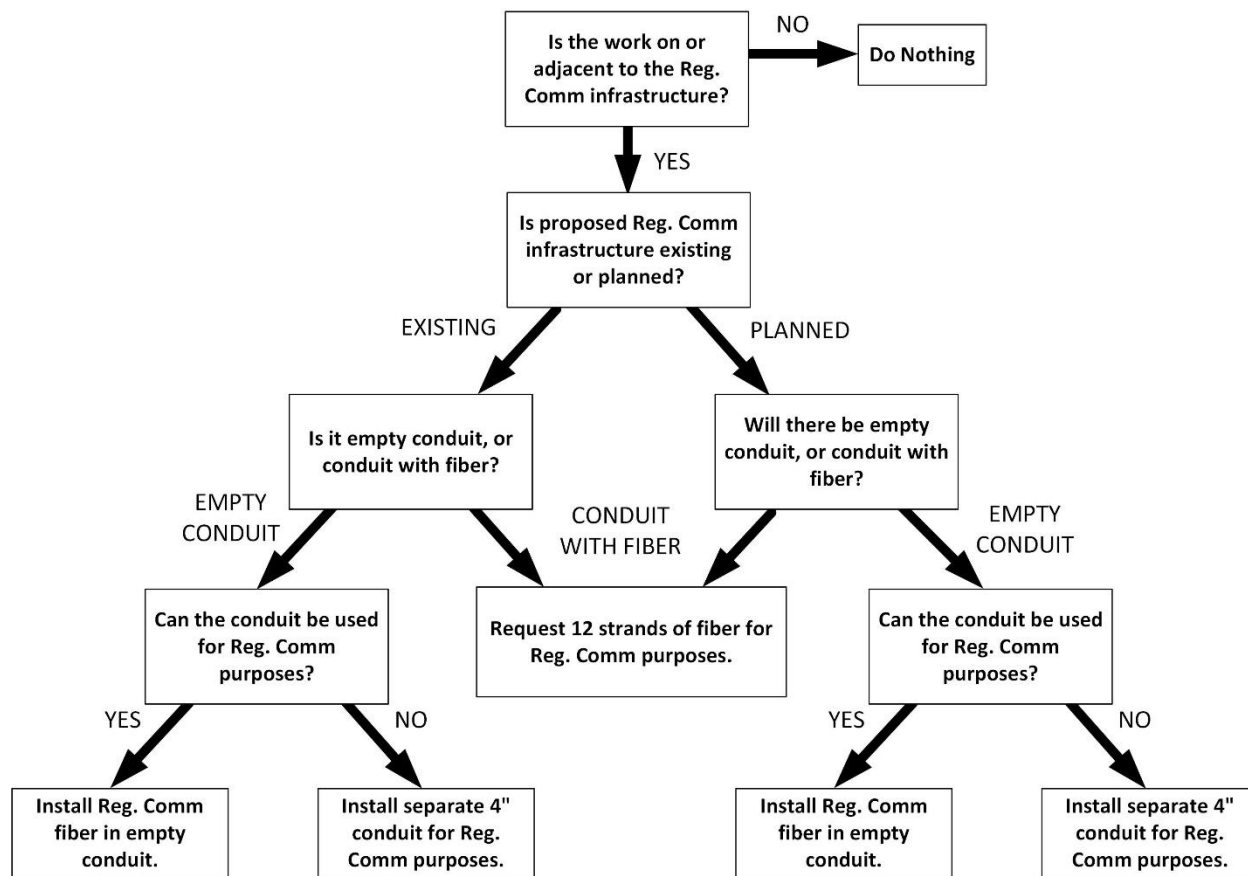


*Figure 4: Proposed Regional Communications Network Build Out*



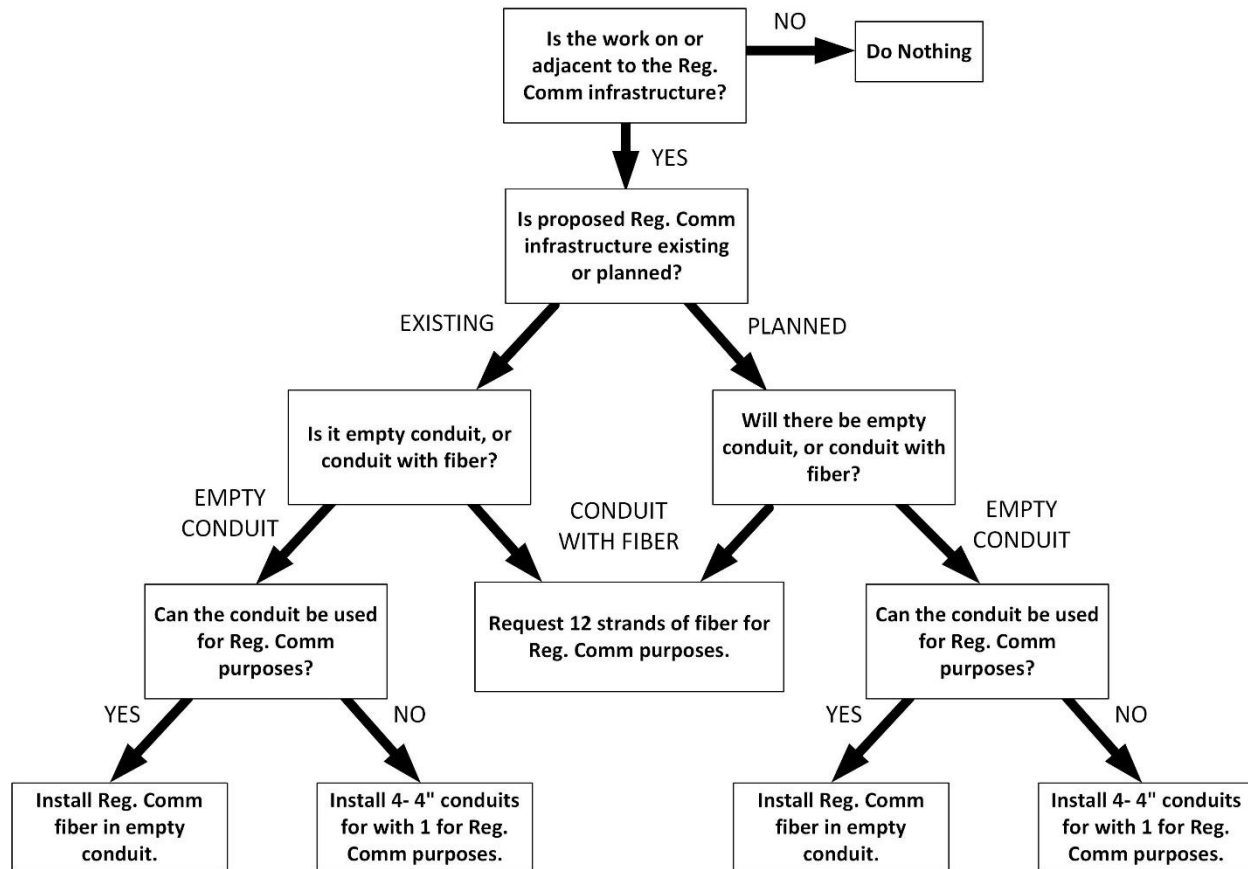
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Existing infrastructure dedicated to the regional communications network does not currently exist. Support from project sponsors is required to help build this network out. The proposed projects within this Plan consider planned and existing infrastructure that can be leveraged to help build out the regional communications network. To help project sponsors incorporate a communications infrastructure element to the project development phase of future projects, and to expand the regional communications network, a decision tree was developed and shown in Figures 5 and 6 below. Figure 5 applies to development along local roads while Figure 6 applies to development along Caltrans right-of-way. The decision trees presented below may be modified in the future to facilitate expansion of the regional communications network.



**Figure 5: Decision Tree for Integrating Regional Communications during Project Development Along Local Roads**

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**Figure 6: Decision Tree for Integrating Regional Communications during Project Development Along Caltrans Right-of-Way**



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## 3.2 Project Phasing

The proposed projects are grouped into four phases. Phase 1 and 2 projects complete the regional fiber backbone around the San Francisco Bay. The key difference between Phase 1 and Phase 2 projects is Phase 1 projects leverage existing infrastructure, potential resulting in lower construction costs as well as comparatively easier implementation. Phases 3 and 4 build out the rest of the regional communications network through installation of new infrastructure. The key difference between Phases 3 and 4 is the jurisdiction under which the projects are built/implemented. Phase 3 builds out the regional communications network along the state highway system. Phase 4 builds out the regional communications network along local roads. Table 1 summarizes the four proposed project phases necessary to deploy the regional communications network. Section 4 of this Plan includes a more detailed breakdown of the estimated costs.

**Table 1: Project Phases**

Phase	Description	# of Projects	Total Estimated Cost
1	Share infrastructure to complete the regional communications backbone	5	\$8,970,000
2	Install infrastructure to complete the regional communications backbone	6	\$34,432,000
3	Install and share infrastructure to build out the regional communications network along highways	9	\$73,531,000
4	Install and share infrastructure to build out the regional communications network along local roads	20	\$31,940,000
<b>TOTAL</b>		40	\$148,873,000

It is possible the projects in different phases may run concurrently depending on project sponsors and availability of funding. Figure 7 provides a visual representation of where the phased projects are located.

The proposed projects were prioritized within each phase based on availability of planned or existing communications infrastructure along the project limits, ease of construction, planning level project cost estimates, availability of potential funding sources, congestion along the project limits, and required level of coordination with partner agencies. The six key criteria used to prioritize proposed projects were defined based on stakeholder input. Each criterion was given a weighting factor based on its level of importance. The higher the percentage, the more critical the criterion. The total weight is 100%. A breakdown of the percentage assigned to each criterion is presented below:

- Availability of existing/planned infrastructure – 30%
- Ease of construction – 20%
- Project cost – 20%
- Congestion – 15%
- Availability of Potential Funding Sources – 10%
- Level of coordination with partner agencies required – 5%

Table 2 shows the projects grouped by phase and listed in descending rank within each phase based on the prioritization criterion listed above. The table also shows which objective the proposed project satisfies. For the purposes of the table, “RCN” refers to the proposed regional communications network. It is assumed that “connecting” to the regional communications network requires a physical fiber cable splice.

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*Table 2: Project Phasing*

Phase	Project Rank	Project	Project Type	Recommended Technology	Total Cost (Over 25 Years)	Obj. 1-1: Regional Communications Backbone	Obj. 1-2: Connect POPs to RCN	Obj. 1-3: Connect Express Lanes to RCN	Obj. 4-2: Connect Transportation Agencies to RCN
1	1-1	Dedicate fiber strands installed as part of the planned SR 237 Express Lane project for regional communications purposes (VTA)	Share Infrastructure	N/A	\$ 427,000	✓			
1	1-2	Dedicate fiber strands installed as part of the planned US 101 Express Lane Project for regional communications purposes (VTA/Caltrans)	Share Infrastructure	N/A	\$ 1,469,000	✓			
1	1-3	Dedicate fiber strands installed as part of the planned San Mateo 101 Managed Lane Project for regional communications purposes (C/CAG/Caltrans)	Share Infrastructure	N/A	\$ 2,859,000	✓			
1	1-4	Dedicate existing fiber strands along I-880 from Hegenberger Road to Dixon Landing Road (BAIFA/Caltrans)	Share Infrastructure	N/A	\$ 3,206,000	✓			
1	1-5	Make existing conduit infrastructure available for regional communications purposes along I-80 from Yerba Buena Island to Bay Bridge Toll Plaza (Caltrans)	Share Infrastructure	N/A	\$ 1,009,000	✓			
2	2-1	Install communications infrastructure along US 101 from Grand Avenue, South San Francisco to I-80	Install Infrastructure	Fiber Communications	\$ 9,841,000	✓			
2	2-2	Install communications infrastructure along I-80 and I-880 from the Bay Bridge Toll Plaza to Hegenberger Road	Install Infrastructure	Fiber Communications	\$ 12,301,000	✓			
2	2-3	Install communications infrastructure along I-880 from Dixon Landing Road to SR 237	Install Infrastructure	Fiber Communications	\$ 2,460,000	✓			
2	2-4	Install communications infrastructure along SR 237 from I-880 to North 1st Street	Install Infrastructure	Fiber Communications	\$ 2,460,000	✓			
2	2-5	Install communications infrastructure to connect Sunol express lanes to nearest regional communications network connection point (I-880/SR 262 interchange) along SR 262 from I-680 to I-880	Install Infrastructure	Fiber Communications	\$ 1,215,000	✓			
2	2-6	Install communications infrastructure along I-80 from US 101 to Yerba Buena Island	Install Infrastructure	Fiber Communications	\$ 6,155,000	✓			
3	3-1	Make existing conduit infrastructure available for regional communications purposes along Richmond Bridge (Caltrans)	Share Infrastructure	N/A	\$ 1,009,000				✓
3	3-2	Install communications infrastructure along I-80 from the Carquinez bridge to I-580	Install Infrastructure	Fiber Communications	\$ 18,591,000			✓	✓

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Phase	Project Rank	Project	Project Type	Recommended Technology	Total Cost (Over 25 Years)	Obj. 1-1: Regional Communications Backbone	Obj. 1-2: Connect POPs to RCN	Obj. 1-3: Connect Express Lanes to RCN	Obj. 4-2: Connect Transportation Agencies to RCN
3	3-3	Install communications infrastructure to nearest regional communications network connection point (I-880/I-238 interchange) along I-580 from I-680 to I-238 and along I-238 from I-580 to the I-880	Express lanes	Fiber Communications	\$ 12,395,000			✓	
3	3-4	Install communications infrastructure along US 101 from 3rd St to Richmond Bridge	Install Infrastructure	Fiber Communications	\$ 3,690,000				✓
3	3-5	Create redundant loop for the regional communications network across the San Mateo Bridge	Share Infrastructure/ Install Fiber	N/A	\$ 6,904,000	✓			
3	3-6	Install communications infrastructure along US 101 from Richmond Bridge to I-80	Install Infrastructure	Fiber Communications	\$ 8,612,000				✓
3	3-7	Create redundant loop for the regional communications network across the Dumbarton Bridge	Share Infrastructure/ Install Fiber	N/A	\$ 4,057,000	✓			
3	3-8	Install communications infrastructure to connect STA I-80 express lanes to nearest regional communications network connection point (Carquinez Bridge) along I-80 from SR 12 to Carquinez Bridge	Express lanes	Fiber Communications	\$ 15,492,000			✓	
3	3-9	Install communications infrastructure along the Carquinez Bridge	Install Infrastructure	Fiber Communications	\$ 2,781,000			✓	✓
4	4-1	Dedicate existing fiber strands for regional communications purposes to connect City of Dublin TMC to nearest regional fiber network connection point (I-580, San Ramon Road interchange) (City of Dublin)	Connect to TMC	Fiber Communications	\$ 427,000				✓
4	4-2	Dedicate existing fiber strands for regional communications purposes to connect SR 85 express lanes to nearest regional fiber network connection point (I-880, Zanker Road interchange) (City of San Jose)	Express lanes	Fiber Communications	\$ 1,817,000			✓	
4	4-3	Dedicate planned fiber strands for regional communications purposes to connect Caltrans D4 office to regional communications network connection (I-80, Bay Bridge Toll Plaza) (Caltrans)	Connect to TMC	N/A	\$ 659,000				✓

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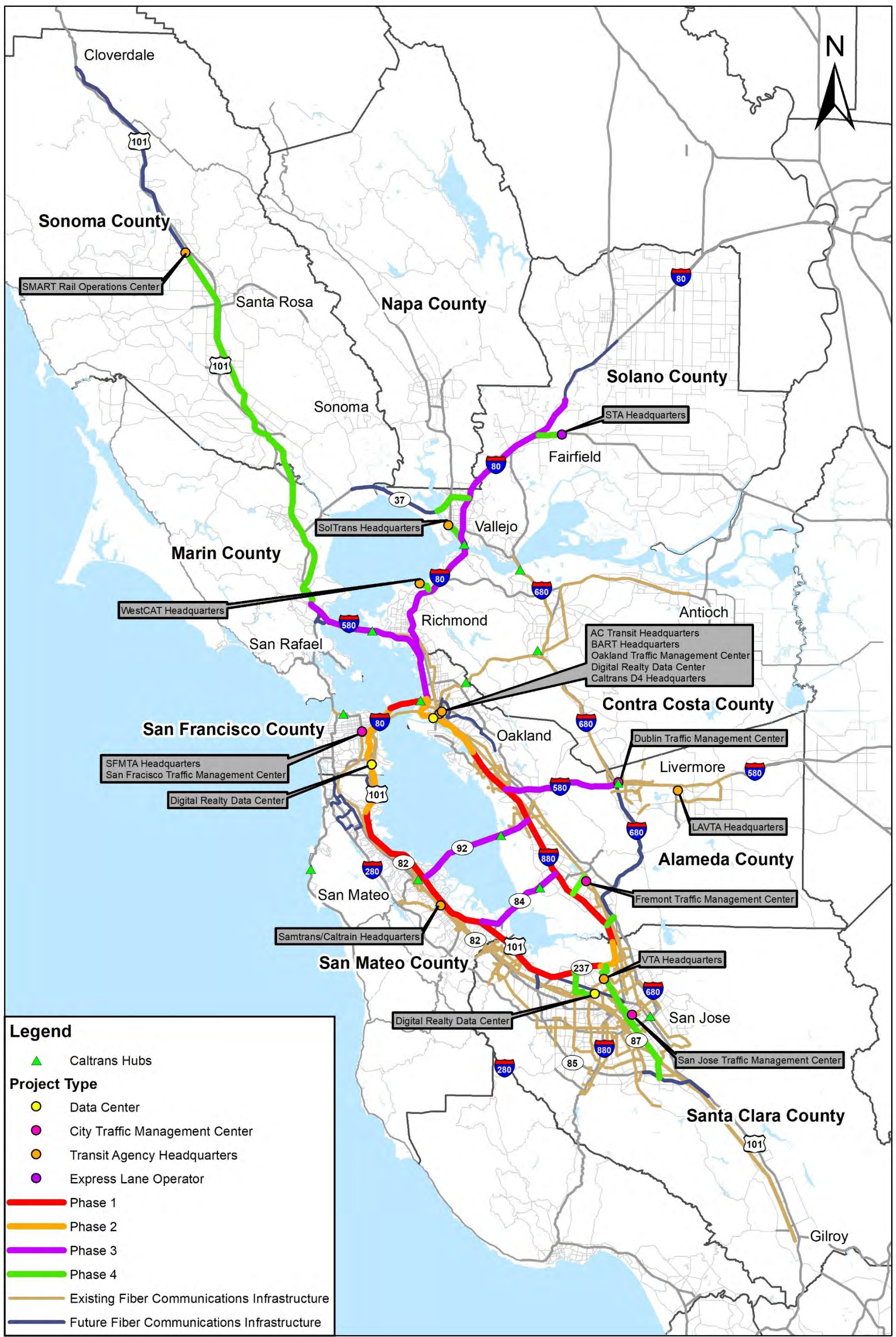
Phase	Project Rank	Project	Project Type	Recommended Technology	Total Cost (Over 25 Years)	Obj. 1-1: Regional Communications Backbone	Obj. 1-2: Connect POPs to RCN	Obj. 1-3: Connect Express Lanes to RCN	Obj. 4-2: Connect Transportation Agencies to RCN
4	4-4	Dedicate existing fiber strands for regional communications purposes to connect SMART Rail Operations Center (Santa Rosa) to nearest regional fiber network connection point (I-80/I-680 interchange) (SMART)	Connect to Transit Center	N/A	\$ 5,754,000				✓
4	4-5	Dedicate existing fiber strands for regional communications purposes to connect City of Fremont TMC to nearest regional communications network connection point (I-880, Mowry Avenue interchange) (City of Fremont)	Connect to TMC	N/A	\$ 427,000				✓
4	4-6	Dedicate existing fiber strands for regional communications purposes to connect Digital Realty data center (San Jose) to nearest regional communications network point (SR 237, Lawrence Expressway interchange) (County of Santa Clara)	Connect to Data Center	N/A	\$ 659,000		✓		
4	4-7	Dedicate existing fiber strands for regional communications purposes to connect VTA headquarters (San Jose) to nearest regional communications network point (SR 237, Zanker Road interchange) (City of San Jose)	Connect to Transit Center	N/A	\$ 1,006,000				✓
4	4-8	Dedicate existing fiber strands for regional communications purposes to connect City of San Jose TMC to nearest regional communications network connection point (SR 237, Zanker Road interchange) (City of San Jose)	Connect to TMC	N/A	\$ 1,006,000				✓
4	4-9	Connect Digital Realty data center (Oakland) to nearest regional communications network connection point (I-880, Webster Street interchange)	Connect to Data Center	Fiber Communications	\$ 694,000		✓		
4	4-10	Connect Digital Realty data center (San Francisco) to nearest regional communications network connection point (US 101, 3rd Street interchange)	Connect to Data Center	Fiber Communications	\$ 694,000		✓		
4	4-11	Connect City of Oakland TMC to nearest regional communications network connection point (I-880, Broadway interchange)	Connect to TMC	Fiber Communications	\$ 694,000				✓
4	4-12	Connect AC Transit headquarters (Oakland) to nearest regional communications network connection point (I-880, Broadway interchange)	Connect to Transit Center	Fiber Communications	\$ 810,000				✓

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Phase	Project Rank	Project	Project Type	Recommended Technology	Total Cost (Over 25 Years)	Obj. 1-1: Regional Communications Backbone	Obj. 1-2: Connect POPs to RCN	Obj. 1-3: Connect Express Lanes to RCN	Obj. 4-2: Connect Transportation Agencies to RCN
4	4-13	Connect Samtrans/Caltrain headquarters (San Carlos) to nearest regional communications network connection point (US 101, Holly Street interchange)	Connect to Transit Center	Fiber Communications	\$ 925,000				✓
4	4-14	Connect LAVTA headquarters (Livermore) to nearest regional communications network connection point (I-580, Isabel Avenue interchange)	Connect to Transit Center	Fiber Communications	\$ 1,041,000				✓
4	4-15	Connect City of San Francisco TMC to nearest regional communications network connection point (US 101/I-80 interchange)	Connect to TMC	Fiber Communications	\$ 1,156,000				✓
4	4-16	Connect SFMTA headquarters (San Francisco) to nearest regional communications network connection point (US 101/I-80 interchange)	Connect to Transit Center	Fiber Communications	\$ 1,156,000				✓
4	4-17	Connect BART headquarters (Oakland) to nearest regional communications network connection point (I-880, Broadway interchange)	Connect to Transit Center	Fiber Communications	\$ 1,156,000				✓
4	4-18	Connect WestCAT headquarters (Pinole) to nearest regional communications network connection point (I-80, Appian Way interchange)	Connect to Transit Center	Fiber Communications	\$ 2,314,000				✓
4	4-19	Install communications infrastructure to connect SR 37 managed lanes to nearest regional communications network connection point (I-80) along SR 37 from Railroad Avenue to I-80	Express lanes	Fiber Communications	\$ 6,075,000			✓	
4	4-20	Connect SolTrans headquarters (Vallejo) to nearest regional communications network connection point (I-80, Carquinez Bridge)	Connect to Transit Center	Fiber Communications	\$ 3,470,000				✓
<b>TOTAL</b>					<b>\$ 148,873,000</b>				



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*Figure 7: Proposed Project Phasing*



## 4. COST COMPARISON AND BENEFITS

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This section discusses the comparison of costs and benefits among fiber optic installation, agency-owned high-bandwidth and low-bandwidth wireless, and leased communications. Planning level cost estimates were developed for the proposed projects. Preliminary project cost estimates are inclusive of capital construction, right-of-way, hub equipment, traffic control, miscellaneous construction, systems integration, and recurring operation and maintenance costs over 25 years. The Cost Benefit Effectiveness Assessment includes supplementary calculations and a more detailed explanation of the unit costs.

Key assumptions for each of the mentioned elements included:

- Preliminary engineering costs are 30% of capital equipment construction costs.
- Preliminary engineering costs are 50% of capital equipment construction costs for projects crossing a major regional bridge.
- Right-of-way costs for projects on the freeway are assumed to be 0.5% of capital equipment construction costs.
- Hub equipment costs are \$15,000/mile for all projects along the backbone.
- Traffic control costs are 50% of capital equipment construction costs.
- Miscellaneous construction costs (such as lane closure and water control) are 20% of capital equipment construction costs.
- System integration costs are 2% of capital equipment construction costs.

Although the proposed project costs assume that excavation will be completed solely for the regional communications network infrastructure installation, there are many opportunities to share costs with other departments, agencies, and private companies. It is crucial to the success of the regional communications network for different agencies and departments to coordinate and leverage their investments. Smart Dig policies provide an opportunity to mainstream fiber infrastructure deployment and could be used to develop and expand the regional communications network. These policies focus on minimizing excavation of trenches in construction projects. Some of the ways this can be accomplished is by notifying interested parties about when a project is set to excavate a trench or by adding infrastructure for interested parties through a proposed project. The Utah Department of Transportation estimated a 15.5% per mile cost savings when conduit and fiber were installed during a road project rather than being installed independent of a road project.<sup>1</sup>

### 4.1 Benefits of the Regional Communications Network

The benefits and advantages that participating agencies will gain from a regional communications network, over their existing operations and for the next decade and beyond, are numerous and include:

- A truly regional communications system that provides coverage and capacity throughout the jurisdictions of all member agencies;
- Coverage and capacity that will meet or exceed operational requirements for members and provide improvement over existing capabilities;
- Decreased reliance on a single communications system owned by a single entity;
- Enhanced redundancy for communications through the design of the regional communications backbone;
- Reuse of infrastructure assets that leverages the investments members have made in existing sites and equipment;

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<sup>1</sup> California State Transportation Agency, "Dig Once – Policies and Best Practices."

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- Cost savings realized through leased communications cost reduction and shared costs of the regional communications network;
- Reduced duplication of costs for regional and local communications;
- Expanded opportunity for interoperability and shared control of systems (only where desired by local agencies) that can provide enhanced operational capabilities during major incidents, regional emergencies, and after hours;
- A network designed in a modular, scalable manner that allows for the addition of members as needed, necessary, and appropriate.

## 4.2 Potential Future Use Cases for the Regional Communications Network

Although the focus of the project is to develop a regional communications network, there are also opportunities for local agencies to benefit from the network. It is important to note that most of the case uses listed below are currently not implemented in the Bay Area outside of state-owned and maintained routes and equipment. The regional communications network would present an opportunity for agencies use the network to implement some of these strategies. Some potential use cases include:

- Sharing fiber assets to close gaps or add redundancy to an individual agency's network;
- Sharing transit related information such as route alignments and schedules along major corridors to coordinate demand and regional transit stops;
- Accessing traffic management data, such as CCTV camera feeds, along a corridor that crosses multiple jurisdictions;
- Interoperability of transportation system operations for shared control, back-up control, integrated corridor management, and/or after-hours control as desired (only where desired by participating agencies);
- More consistent and reliable communications during major incidents, emergencies, and natural disasters to facilitate the movement of traffic through the region, across jurisdictional boundaries;
- Local agency access to a regional performance metrics for arterial performance to track congestion management;
- Opportunity to integrate local transportation management strategies with regional strategies such as coordinated traffic signal timing between adjacent agencies.

The following sections have more specific explanations of four potential use cases for the regional communications network and highlight a successful example of a regional network that is in operation.

### 4.2.1 Traffic Signal Synchronization

Synchronization, or coordination, along a signalized corridor is an effective congestion mitigation technique. Most agencies are only responsible for coordinating signals within their jurisdiction. Many key corridors in this region pass through multiple jurisdictions, and in many situations, so does congestion along those corridors.

If agencies are able to use the regional communications network to connect adjacent transportation management centers (TMCs), they are better equipped to coordinate signal timing across jurisdictional boundaries. Agencies will be able to access real-time signal updates such as signal status (online/offline) and timing. They can update their signal timing based on the timing of adjacent agencies and troubleshoot congestion based on signal status. The regional communications network provides the infrastructure necessary to connect TMCs.

#### *Example – Phoenix Metropolitan Area*

This use case is currently being implemented in the Phoenix Metropolitan Area. Adjacent agencies are able to leverage their fiber communications network to share signal timing and synchronize traffic signals across jurisdictional boundaries. This tool is used mostly during special events.



#### 4.2.2 Video Sharing

Traffic monitoring cameras are used by agencies to review and verify real-time traffic conditions that inform congestion mitigation decisions. Most agencies only have access to CCTV camera feeds for traffic signals in their own jurisdiction.

If infrastructure connects the TMCs of two adjacent agencies, they are able to share CCTV camera feeds. Connected agencies can make more informed decisions by accessing camera feeds along the critical corridor regardless of which agency owns/operates the camera. This is especially important during emergencies. For example, if there is a collision near an agency's jurisdictional boundary but not in their jurisdiction, they are still able to visually verify real-time traffic conditions. As a result, the agency can react efficiently by retiming their signals or updating a changeable message sign to help drivers understand real-time conditions and make better decisions.

The regional communications network could provide the infrastructure necessary to connect the two TMCs and share CCTV camera feeds near an agency's jurisdictional boundary.

##### *Example – Phoenix Metropolitan Area*

This use case is currently being implemented in the Phoenix Metropolitan Area. Adjacent agencies are able to leverage their fiber communications network to share video feeds. During special events, an agency might control signal timing and synchronize traffic signals across jurisdictional boundaries. Video sharing is used to confirm that updated traffic signal timing is relieving congestion.

#### 4.2.3 Regional Control of Traffic Management Systems

There are many corridors throughout the Bay Area whose limits fall within multiple jurisdictions. When these corridors are not part of a State route, signal maintenance and timing are controlled by separate local agencies along the corridor. In the event of an emergency, the local agencies maintaining and operating each of the traffic signal systems would have to implement timing changes to help mitigate additional congestion. Local agencies may not have the staff needed to manage these conditions. The regional communications network could provide the infrastructure necessary to connect multiple TMCs and allow regional agencies to take control of the local agency's traffic systems when necessary.

If infrastructure connects the TMCs of agencies, the local agency can hand over controls of their traffic system to a regional agency. This connection would be especially important if there is a major incident on a freeway and vehicles are being diverted onto a corridor in a local agency's jurisdiction because the regional agency is more likely to have the resources to respond to incidents and can manage the emergency at a regional level if necessary.

Also, if a local TMC needs to be evacuated due to a natural disaster, a regional agency would be able to take control of the local traffic system. Communications infrastructure between the regional and local agency would allow the regional agency to make updates to the traffic management systems, such as updating changeable message signs and traffic signal timing, to appropriately respond to the emergencies, special events and major incidents.

##### *Example – San Mateo County*

This use case is currently being implemented in San Mateo County. Caltrans is able to take control of traffic signals along local routes which connect SR 82 and 101 to appropriately respond to the emergencies, special events and major incidents.

#### 4.2.4 Connected and Autonomous Vehicles (CV/AV)

In addition to current technology that can be leveraged by agencies after the deployment of the regional communications network, there are also potential use cases that might arise with future technologies. CV/AV infrastructure captures location data from vehicles which are compiled at an agency's TMC. Location data includes position, speed, and other useful metrics that can be used by public agencies to

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understand traffic conditions. Hypothetically, this data transfer between vehicles and infrastructure would make traffic flow safer and more efficient.

With a regional communications network connecting the agency TMCs, agencies are able to share a CV/AV data processing system which lowers the financial barrier into investing and leveraging this technology. This potential use case can support “Smart City” initiatives throughout the region and allow agencies to be more flexible when adopting similar emerging technologies.

### 4.3 Communications Technology Alternatives

This section compares the proposed fiber communications infrastructure to other communications infrastructure alternatives. Costs, advantages, and disadvantages of fiber are compared to agency-owned high-bandwidth and low-bandwidth wireless, and leased communications. For each alternative, details are provided such as ease of scalability, type of supported equipment, and unit costs.

Table 3 highlights the advantages and disadvantages of the technology alternatives.

**Table 3: Advantages and Disadvantages of Various Communications Technology Alternatives**

Technology Name	Advantages	Disadvantages	Equipment Supported
<b>Fiber</b>	<ul style="list-style-type: none"> <li>• Fastest data transmission rates and lowest latency</li> <li>• Reliable connection</li> <li>• Low recurring operations and maintenance costs</li> <li>• Reduces access points which increases security</li> <li>• Capacity only limited by end equipment - therefore most useful medium for hub-to-hub connections</li> </ul>	<ul style="list-style-type: none"> <li>• High installation costs</li> </ul>	<ul style="list-style-type: none"> <li>• CCTV cameras</li> <li>• CMS</li> <li>• Vehicle Detectors</li> <li>• Connected vehicles</li> <li>• Center-to-field and peer-to-peer traffic signal system</li> <li>• Vehicle detectors</li> <li>• License plate reader</li> <li>• Tolling systems</li> </ul>
<b>Low-Bandwidth Wireless Communications</b>	<ul style="list-style-type: none"> <li>• Provides long distance data transmission (10-20 miles)</li> <li>• Less prone to interference from weather or topology than High-Bandwidth Wireless Communications</li> <li>• Lower transmission latency</li> </ul>	<ul style="list-style-type: none"> <li>• Low throughput speeds (<math>\leq 50</math> Mbps)</li> <li>• Prone to disruption by weather or other wireless users</li> <li>• Requires additional poles and equipment to be installed (if not previously installed)</li> <li>• Cannot accommodate all equipment types</li> </ul>	<ul style="list-style-type: none"> <li>• CMS</li> <li>• Vehicle Detectors</li> <li>• Connected vehicles</li> <li>• Peer-to-peer traffic signal system</li> <li>• Vehicle detectors</li> <li>• License plate reader</li> <li>• Tolling systems</li> </ul>

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Technology Name	Advantages	Disadvantages	Equipment Supported
<b>High-Bandwidth Wireless Communications</b>	<ul style="list-style-type: none"> <li>Higher throughput speeds (<math>\leq 300</math> Mbps)</li> <li>Does not require a physical connection between end equipment</li> </ul>	<ul style="list-style-type: none"> <li>Prone to interference due to weather and/or other wireless signals</li> <li>Limited to short distances (<math>\leq 10</math> miles)</li> <li>Requires additional poles and equipment to be installed (if not previously installed)</li> </ul>	<ul style="list-style-type: none"> <li>CCTV cameras</li> <li>CMS</li> <li>Vehicle Detectors</li> <li>Connected vehicles</li> <li>Center-to-field and peer-to-peer traffic signal system</li> <li>Vehicle detectors</li> <li>License plate reader</li> <li>Tolling systems</li> </ul>
<b>Leased Communications</b>	<ul style="list-style-type: none"> <li>Low recurring operations and maintenance costs</li> <li>No or low capital costs</li> </ul>	<ul style="list-style-type: none"> <li>High recurring leasing costs</li> <li>Wireless service connection may be unreliable during special events or extreme weather conditions</li> <li>Wireless service can be affected by large call/data volumes</li> <li>Expensive to scale because of third party rates</li> <li>Current wireless services unable to support high bandwidth applications and cloud computing</li> </ul>	<ul style="list-style-type: none"> <li>CCTV cameras</li> <li>CMS</li> <li>Vehicle Detectors</li> <li>Connected vehicles</li> <li>Center-to-field and peer-to-peer traffic signal system</li> <li>License plate reader</li> <li>Tolling systems</li> </ul>

To be able to compare the unit costs – it is assumed that each communications infrastructure alternative is deployed along a freeway and could potentially support 5 cabinets and 6 devices per mile (2 ramp meters, 2 vehicle detecting systems, 1 changeable message sign, and 1 CCTV camera). The costs presented in Table 4 are meant to provide a scale of comparison for the typical costs of communications infrastructure. It is important to note that the comparison below assumes that all of the different communications mediums are deployed on a freeway route. Another assumption is that the facilities have no unique conditions such as being along a bridge, in a mountainous terrain, etc. Additionally, this calculation does not reflect device density and bandwidth requirements to connect different types of devices. These values are meant to highlight only the cost differences of each technology, but when it comes to actual field deployment many more factors need to be considered. These factors were included when selecting the most appropriate technology to deploy each of the 40 proposed projects.

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Table 4 compares the unit costs of the four technology alternatives. The period of analysis is listed at 25 years to reflect the average age of a typical sharing agreement.

**Table 4: Communications Technology Alternatives Cost Comparison**

	Capital Cost (Per Mile)	Recurring Cost (Per Mile, Over 25 Years)	Total Unit Cost (Per Mile, Over 25 Years)
<b>Fiber</b>	\$ 922,000	\$ 141,000	\$ 1,063,000
<b>LBWC</b>	\$ 579,000	\$ 261,000	\$ 840,000
<b>HBWC</b>	\$ 902,000	\$ 261,000	\$ 1,163,000
<b>Leased</b>	\$ 15,500	\$ 342,000	\$ 357,500

Fiber infrastructure has the highest installation costs because it usually requires trenching in order to install. Smart Dig or Dig Once policies provide an opportunity to mainstream fiber infrastructure deployment and could be used to develop and expand the regional communications network. The FCC contends that the cost per mile for fiber deployment increases roughly 42% when it is not jointly deployed.<sup>2</sup> This translates to a \$273,000 per mile cost savings for fiber communications infrastructure deployment.

High-bandwidth wireless is an agency-owned infrastructure alternative that has a lower capital cost than fiber communications. Because this alternative typically involves more above-ground equipment than fiber infrastructure and is more susceptible to interference from its environment (weather, knockdowns), it has a higher maintenance cost.

Leased communications have the lowest capital cost because it is able to leverage existing communications infrastructure owned by a third party. This is an advantage for smaller agencies who do not have the budget to invest in a large construction project. Because of the monthly recurring cellular service costs associated with leasing communications, this alternative has the highest annual cost.

#### 4.4 Return on Investment

Currently, many agencies are choosing to lease communications from private companies instead of installing their own fiber communications network. This is due to the large capital investment necessary to install conduit infrastructure. Looking at future growth and technology trends – data capacity needs will increase as more devices are added to corridors to improve congestion and safety. As data capacity needs increase, the annual cost of leasing communications increases and installing fiber could potentially become a cost-effective alternative. This section outlines a return on investment calculation proving that fiber communications can meet future data needs in a cost-efficient manner.

The return on investment calculation compares the cost of leased wireless and fiber communications infrastructure along a typical 1-mile corridor within an urban area. Bandwidth demands of typical technologies currently deployed along freeways were compared to future bandwidth needs necessary to

<sup>2</sup> Federal Communications Commission, “Connecting America: The National Broadband Plan,” 2009.

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accommodate emerging technologies such as connected/autonomous vehicles and vehicle occupancy detectors.

For existing conditions, the ROI calculation assumed connecting to 6 devices per mile. These devices include:

- 2 Ramp Meters
- 2 Vehicle Detector Stations
- 1 Changeable Message Sign
- 1 CCTV Camera

For future conditions, the ROI calculation assumed connecting to 21 devices per mile. These devices include the 6 devices mentioned in the existing conditions, as well as:

- Express Lanes equipment:
  - 2 electronic toll signs
  - 2 toll readers
  - 4 license plate reader cameras
- CV/AV equipment:
  - 2 DSRC radios
- HOV Enforcement equipment:
  - 2 Vehicle Occupancy Detection cameras
  - 2 near-infrared flashes
  - 1 laser trigger

The return on investment for fiber communications infrastructure installation drops from 30 years to 15 years when comparing existing to future bandwidth demands. In other words, even though leased wireless may require a lower capital investment compared to fiber, over time, the overall recurring costs of wireless exceed the total cost of fiber communications. Furthermore, the typical lifespan of fiber communications is estimated to be around 25 years. After recuperating costs at 15 years, agencies can potentially use the fiber for the ten years with minimal maintenance costs. Making a higher capital investment initially will result in cost savings over time without much impact to the bandwidth capacity of the overall network. The ROI calculation is summarized in Table 5.

**Table 5: Return on Investment for Installing Fiber Compared to Leasing Communications**

Scenario	Number of Years
<b>Existing Conditions</b>	30
<b>Future Conditions</b>	15

While end equipment is constantly getting updated, a built out fiber network will likely still be necessary to provide reliable communications in decades to come.

The return on investment is based on what is currently commercially available. There are currently downward trends in leased line costs per device and there are promising technologies, such as 5G, on the near horizon. These technologies could give us a reasonable alternative to fiber that could possibly be significantly cheaper or comparable in cost. It is important to note that even though some of these new technologies (including 5G) are on the horizon and could reduce costs, they still rely on fiber communications infrastructure to operate.



## 5 FUNDING OPTIONS

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The following section presents potential funding sources for projects being identified in the Regional Strategic Investment Plan. The funding types identified for the proposed projects include: public funding and innovative funding sources such as public-private partnerships (P3s).

### 5.1 Public Funding Sources

Public funding is the primary method for funding transportation projects across the country. Potential public funding sources for proposed projects include federal, regional, state, and local funding programs. With voter approval, Counties may use a variety of local revenue streams to fund fiber communications infrastructure projects. These potential local funding sources include, but are not limited to, sales taxes, property taxes, and public transit fares. Additionally, other public funding sources related to economic development benefits or safety/emergency initiatives can be applicable to communications-type projects.

Table 6 summarizes the federal, state, and regional funding programs that could potentially be used to build out the regional communications network. Many of the listed public funding sources have common themes of strict application requirements. For instance, there is no direct connection between increased communications infrastructure improving safety or other such elements of transportation networks. In order to apply many of the funding sources discussed above, creative approaches have to be explored to attain the funding needed to carry out projects proposed under the Regional Communications Strategic Infrastructure Investment Plan. These approaches may include: combining communications infrastructure projects with other transportation improvement projects that may result in stronger applications. Examples of these types of projects include: Express Lanes systems, Integrated Corridor Management Projects, etc. To obtain additional funding for communications projects, research has been conducted into finding sources that might fund projects more creatively. This research resulted in the addition of a funding source related to cybersecurity and protection against terrorist attacks. These unique funding sources can really be used to complement the other traditional transportation funding sources to implement projects.

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*Table 6: Public Funding Programs*

Program	Important Dates	Projects Funded	Max Funds/ Match Limits	Additional Info
<b>Federal Funding Programs</b>				
<b>Surface Transportation Block Grant Program (STBG)</b>	Yearly application deadline	<ul style="list-style-type: none"> <li>Operational improvements for traffic monitoring, management, and control facilities</li> <li>Projects for congestion pricing, including electronic toll collection and travel demand management</li> </ul>	<ul style="list-style-type: none"> <li>Allocates \$11-12 billion a year of funding</li> <li>Federal share can vary from 80-100%</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">STBG Information Page</a></li> </ul>
<b>Better Utilizing Investments to Leverage Development (BUILD) Grants</b>	Yearly application deadline around Mid-July	<ul style="list-style-type: none"> <li>Public transportation</li> <li>Highway projects</li> <li>Freight rail projects</li> <li>Port infrastructure improvements</li> </ul>	<ul style="list-style-type: none"> <li>Max Grant: \$25 million</li> <li>May exceed 80% in rural areas</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">BUILD Application</a></li> </ul>
<b>Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD)</b>	Yearly application deadline around Mid-June	<ul style="list-style-type: none"> <li>Traveler information systems</li> <li>Transportation management technologies</li> <li>ITS integration with energy distribution and charging systems</li> <li>Advanced mobility technologies</li> </ul>	<ul style="list-style-type: none"> <li>Projects can receive 12% of total available funds (\$12 million in Federal share of up to 50% of the cost of the project)</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">ATCMTD Information</a></li> <li><a href="#">ATCMT Deployment Initiative Application</a></li> </ul>
<b>Infrastructure for Rebuilding America (INFRA)</b>	Application on a rolling basis	<ul style="list-style-type: none"> <li>Highway</li> <li>Rail</li> <li>Port</li> </ul>	<ul style="list-style-type: none"> <li>Can provide credit assistance amounting to 60% of project costs,</li> <li>Minimum grant is \$5 million</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">INFRA Program Overview</a></li> <li><a href="#">INFRA Application Information</a></li> </ul>
<b>State Funding Programs</b>				
<b>Senate Bill 1 (SB-1)</b>	Varies per program	<ul style="list-style-type: none"> <li>Managed lanes</li> <li>Express lanes</li> <li>AC Transit BRT Expansion</li> <li>BART Station Expansion</li> </ul>	<ul style="list-style-type: none"> <li>Solutions for Congested Corridors Program (SCCP): \$250 million in SB1 funds; no match requirement</li> <li>Trade Corridor Enhancement Program (TCEP): \$300 million in SB1 funds; requires 30% match</li> <li>State Highway Operation and Protection Program (SHOPP): \$1.5 billion in available funds; N/A match requirement</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">SB 1 Information Page</a></li> <li><a href="#">SCCP Information Page</a></li> <li><a href="#">TCEP Information Page</a></li> <li><a href="#">ATP Information Page</a></li> <li><a href="#">SHOPP Information Page</a></li> </ul>
<b>California State Transportation Improvement Program (STIP)</b>	Submittal on December 15th of Odd Numbered Years	<ul style="list-style-type: none"> <li>Transit and Rail Projects</li> <li>Managed lanes project</li> <li>HOT lanes</li> </ul>	<ul style="list-style-type: none"> <li>Up to \$3.28 billion of funding for FY 2019</li> <li>No specified match rate</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">CTC STIP Information Page</a></li> </ul>
<b>California Transportation Commission Active Transportation Program (CTC ATP)</b>	May 2019 Call for projects for Fiscal Years 19/20 – 22/23	<ul style="list-style-type: none"> <li>East Bay Greenway Safe Route to School Programs</li> </ul>	<ul style="list-style-type: none"> <li>\$440 million of available funds, appropriated to each CA region</li> <li>CTC does not require fund matching at state level</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">CTC ATP Information Page</a></li> <li><a href="#">Caltrans ATP Application</a></li> </ul>
<b>California Public Utilities Commission California Advanced Services Fund (CASF)</b>	Accepted on a rolling basis	<ul style="list-style-type: none"> <li>Rural city fiber installation</li> </ul>	<ul style="list-style-type: none"> <li>No specified grant limit nor match limit</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">CASF Application Process</a></li> </ul>

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Program	Important Dates	Projects Funded	Max Funds/ Match Limits	Additional Info
<b>Regional Funding Programs</b>				
<b>Regional Measure 3 (RM3)</b>	Toll increase begins January 1, 2019	<ul style="list-style-type: none"> <li>BART System Improvements</li> <li>Caltrain Extension</li> <li>MUNI Facility Improvements</li> <li>Express Lanes</li> </ul>	<ul style="list-style-type: none"> <li>\$4.45 billion in highway and transit improvements</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">List of RM3 Projects</a></li> <li><a href="#">RM3 Infographic</a></li> </ul>
<b>Bay Area Urban Areas Security Initiative (UASI)</b>	Deadline period during Mid-September through Mid-October  Follows an annual programming cycle	<ul style="list-style-type: none"> <li>Public Information and Warning</li> <li>Information Sharing</li> <li>Cybersecurity</li> <li>Interoperable Communications</li> </ul>	<ul style="list-style-type: none"> <li>Up to \$30 million of available funding for fiscal year 2018</li> <li>Can fund up to 100% of the project cost</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Bay Area UASI Proposal Guide</a></li> </ul>
<b>State Transit Assistance (STA)</b>	Applications must be received by the 1 <sup>st</sup> of the month to be considered for that month's allocation considerations	Transit Improvements	<ul style="list-style-type: none"> <li>Up to \$86 million of available funding for fiscal year 2018</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">STA Allocation Requests and Audits</a></li> </ul>
<b>Service Authority for Freeways and Expressways (SAFE)</b>	N/A	<ul style="list-style-type: none"> <li>Service Patrol tow trucks</li> <li>Roadside Call Boxes</li> <li>Congestion-Relief Projects</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">SAFE Information Page</a></li> </ul>
<b>Innovative Deployment to Enhance Arterials (IDEA) Challenge Grant</b>	Applications due in November 2017 (similar challenge grants may be distributed in the future but none are currently planned)	<ul style="list-style-type: none"> <li>Traffic signal system improvements</li> <li>Transit improvements</li> </ul>	<ul style="list-style-type: none"> <li>\$0.25-3 million</li> <li>Minimum local cash match of 15%</li> <li>Minimum in-kind match of 10%</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">IDEA Information Page</a></li> </ul>



## 5.2 Innovative Funding Sources

In order to maximize available resources to fund the regional communications network, it is important to explore innovative financing opportunities.

### 5.2.1 Loan Programs

There are federal and state funding opportunities outside of traditional grants. The funding sources below are distributed by public entities and can potentially be used to build out the regional communications network.

**Transportation Infrastructure Finance and Innovation Act (TIFIA):** TIFIA is not a grant or traditional funding program but is a credit assistance program awarded to qualified projects of regional or national significance. TIFIA credit assistance is available to ITS projects of at least \$15 million and the credit assistance is limited to 33% of the total eligible project costs. The interest rate for TIFIA projects are typically around 3% for urban projects and would decrease by half for rural projects. Repayment for TIFIA projects can be deferred for 5 years after the project's completion, the loan must be fully repaid after 25 years from the first payment.

**Grant Anticipation Revenue Vehicles (GARVEEs) Bond Program:** This bond program allows the State Treasurer to issue bonds and the CTC to select projects to fund. This program's goal is to accelerate construction of critical projects that will provide congestion relief benefits. Projects such as managed lanes and traffic synchronization improve congestion and potentially include in the installation of fiber communications infrastructure. The bonds have a 12-year maximum term. Applicants must be a transportation planning agency or county transportation commission. Other public agencies may apply jointly with a regional agency.

**Transportation Finance Bank (TFB) Loan Program:** TFB is a loan program implemented by CTC and Caltrans to provide flexible, short-term financing to public entities and public-private partnerships. Highway construction and transit capital projects are eligible, both of which could potentially include communications infrastructure. Loans are available for any phase of a project. The borrower must agree to provide collateral by pledging county shares and submit a financial plan that includes the source and timing of the repayment. The interest rate will be 1% below the three-month Treasury Bill Average Auction rate, except it shall not be lower than 1%.

**State Highway Account (SHA) Loan Program:** This loan program makes short-term loans to public agencies in order to advance the capital improvement phase of STIP eligible projects. STIP projects include managed lanes which could potentially include installation of fiber communications infrastructure. The project must cost more than \$10 million. An independent fiscal consultant will complete a fiscal assessment to determine whether an agency can repay a loan. Interest rates will be set at the rate paid in the State Treasurer's Pooled Money Investment Account when the money is loaned.

### 5.2.2 Public Private Partnerships (P3)

P3s provide alternate funding sources in which a private agency provides funding in exchange for the use of public resources. P3s may be mutually beneficial to both the public and private sector depending on the responsibilities that each party is accountable for. Depending on the funding source, there could be limitations on the use of existing communications infrastructure, such as disallowance of leasing to the private sector. Existing arrangements between public agencies and private entities might need to be considered when entering a new partnership. This section presents a selection of noteworthy successful fiber optic P3s which provide creative solutions for fiber ownership. Most P3 projects follow a procurement process in which an agency issues a request for proposals or request for qualifications and private entities bid to win the contract. Below are examples of successful public-private partnerships.

**Sonoma Marin Area Rail Transit (SMART) and Sonic** – Sonic and SMART used a public private partnership to share the capital cost of conduit infrastructure in SMART's right-of-way. Sonic has non-exclusive conduit access and installed new fiber cable. Some of the fiber strands are dedicated to

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SMART to be used by local agencies near its right-of-way. Sonic provides 24/7/365 emergency maintenance.

**City of San Leandro and Lit San Leandro** – Lit San Leandro has non-exclusive conduit access to the City’s existing conduit. In exchange, Lit San Leandro has installed new fiber cable in the city-owned conduit. Some of Lit San Leandro’s fiber strands are dedicated to the City. Lit San Leandro is responsible for installation, operation, maintenance, security, replacement and repair of the fiber cable. The City of San Leandro is responsible for inspection, maintenance, repair, and security of the conduit and vaults/pull boxes.

**Utah Department of Transportation (UDOT)** – UDOT trades assets with telecommunications companies by allowing companies to use their excess conduit in exchange for access to the company’s conduit where the state does not have broadband infrastructure. Trades occur by the lineal foot of conduit for 30 years with automatic 5-year renewals. UDOT has doubled its conduit infrastructure network through trading. The agency owns 900 miles of conduit and has access to 1000 additional miles of conduit through trades.

**Massachusetts Department of Transportation (MassDOT) and Massachusetts Bay Transportation Authority (MBTA)** – MassDOT and the MBTA are teaming up to provide developers, providers, and carriers with an infrastructure sharing financing program managed by the Office of Real Estate and Asset Development. This financing program provides third parties the opportunity to install fiber or other communications elements within MassDOT or MBTA facilities that have available capacity. In addition, this financing program provides third party users the opportunity to install their own infrastructure within MassDOT or MBTA owned land. The financing program provides annual rates at a per linear foot or per strand multiplier basis that is broken down by facilities located in tunnels, urban, suburban, or exurban areas.

## 6 COMMUNICATIONS INFRASTRUCTURE SHARING

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A shared regional communications network would result in long-term cost savings by leveraging investments made in existing infrastructure and eliminating monthly recurring leased line costs. Other benefits include but are not limited to: decreased reliance on a single communications system owned by one agency, increased coverage and capacity, and enhanced redundancy.

The project team gathered and reviewed 26 sharing agreements from various agencies and to inform the best practices and recommendations outlined in this Section. The agreements addressed sharing of construction costs, existing communications infrastructure sharing, and operations and maintenance sharing. None of the reviewed agreements included any provisions or discussions about what kind of data could be or would be shared within their respective networks. This Section discusses sharing communications infrastructure and not the potential data sharing that could potentially occur over the regional communications network.

### 6.1 Case Study: Phoenix Regional Community Network

The Phoenix Regional Community Network (RCN) is a pertinent example of shared, regional fiber infrastructure. This network is used by regional and local agencies in the Phoenix area to manage congestion. Local agencies own the physical fiber communications infrastructure. The Maricopa Association of Governments (MAG) leases the infrastructure from local agencies for regional communications purposes. In this example, the agencies divide their maintenance efforts into the following two categories:

- Physical infrastructure – fiber, conduit, and pull boxes
- Active electronics – switches and servers

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Because the local agencies own the physical infrastructure they are responsible for its regular maintenance and repair in the event of damage. MAG is responsible for maintaining the active electronics in addition to running an annual test of the fiber to confirm continuity and document bandwidth loss. MAG maintains the active electronics at a total of 19 nodes throughout the Phoenix area. Their annual maintenance budget is \$50,000, which equates to approximately \$2,600 per node.

While the annual maintenance cost of a regional communications network is highly variable and based on network topology, a high-level planning cost estimate can be calculated for the Bay Area. There are 18 nodes in the Bay Area assuming one node at every transit center, transportation management center, and express lane operator connection as proposed in the Plan. Based on the Phoenix Regional Community Network, that would amount to \$46,800 for the annual maintenance budget for active electronics in the Bay Area.

The MAG maintenance budget does not include lifecycle cost of active electronics. It can be assumed active electronics includes one aggregation switch (\$25,000/unit) and three local switches (\$10,000/unit) per node. Assuming each unit has a lifecycle of 5 years, that is an additional cost of \$11,000 per year per node. With 18 nodes in the Bay Area this adds an additional \$198,000 to the annual maintenance cost, summing to a total of \$244,800 annual maintenance budget for active electronics in the Bay Area.

## 6.2 Findings and Best Practices

A number of key elements in the agreements were relatively consistent throughout the review. Key themes included cost allocation, and roles and responsibilities. Other critical elements deal with payment amount and structure, along with general roles and responsibilities of the parties involved. The following is a summary of best practices from the sharing agreements.

### 6.2.1 Usage Fees and Cost Sharing

License and usage fees are collected by the infrastructure-owning entities and levied against entities using the infrastructure. These fees were rarely charged in situations where a public agency owned the infrastructure, and a separate public agency shared/used that infrastructure. The fees were typically applied in scenarios where a private entity used public facilities, or vice versa. Usage Fees should specify who the leasing agency(ies) and the owning agency(ies) are along with the licensing fees. Licensing fees should be specified in terms of a dollar sum, agreement to share equipment, or share ROW. All prorated fees, compounded fees and interest accrued on licensing fees should be explicitly stated. Shared equipment or shared ROW must specify the item's location and/or type. Fiber owners/lessors should specify the cost of exchanged fiber strands per quantity, and/or length of the exchanged fiber strands.

Cost sharing was the more typical approach in scenarios where all the parties to the agreement are public agencies. In these cases, the infrastructure was usually already in place, and the agreements addressed how the agencies would handle the costs of infrastructure maintenance. In some cases, only Agency A was actually responsible for coordinating maintenance activities, while Agency B and Agency C simply paid into a pooled fund to help cover the cost of maintenance incurred by Agency A.

### 6.2.2 Roles and Responsibilities

Roles and responsibilities were consistently described in these agreements. Agreements include language noting each party and its responsibilities. Ownership, maintenance and security responsibilities should be specified and assigned to avoid confusion in future duties. Owners/lessors specify the limitations of access to ROW or infrastructure.

Under the "Mutual Agreements" section, owners/lessors list any agreements that may affect both parties. This section should state the term of the agreement (and include termination and extension language),

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extent of third-party agreements, reserved sections for future amendments, options to default, applicable laws and rules and indemnification.

## 6.2.3 Service Level Definitions

These definitions were not typically included in the agreements reviewed. However, if included, service level definitions should specify the agency responsible for repairs/maintenance during a service outage. Owners should specify their response time for temporary service repairs and time to fully recover the system. Leasing agencies may need to include language to permit access to physical locations during service outages. Service level agreements may include rebates for the leasing agency.

## 6.2.4 Securing Infrastructure

Network data security is a broad and complicated field. Most agencies/entities have their own network security protocols that they are comfortable with given agency resources, the type of data a particular agency transmits over a network, and other agency preferences.

Physical security, dealing with how communications network infrastructure in the field should be secured, was more commonly addressed in these agreements although, this topic was seldom addressed. Physical security requirements should focus on securing conduit, pull boxes, and network equipment cabinets, where appropriate.

## 6.2.5 Governance

Governance structures for shared infrastructure networks were wide-ranging. Most of the scenarios and agreements that were reviewed for this task did not include a formal governance structure. In nearly all cases, the agreements were one-offs used to define a party's responsibility for maintaining and operating communications infrastructure in a narrowly-defined geographic location. The Phoenix-area RCN has a governance structure in which MAG, the local MPO, manages and operates the network built out by the Arizona Department of Transportation. The agencies using the RCN in the Phoenix area are responsible for maintaining and repairing the network infrastructure within their jurisdiction.

## 6.3 Recommendations

Based on the agreements that were reviewed, and best practices gleaned from those agreements, initial recommendations were developed and applied to a potential regional communications network. These initial recommendations are intended to be a basis for further discussion and are not in any way binding to any agency or entity. Several elements, such as payment obligation and governance, need to be addressed on a local level and will be further defined by stakeholders. Prior to the implementation of regional communications network, detailed network design, such as capacity analysis, will be necessary.

### 6.3.1 Boilerplate Sharing Agreement

A boilerplate sharing agreement was created based on research of local and national sharing agreements. The sections and language contained within the boilerplate sharing agreement were developed from a thorough study of the contents of each of the existing agreements that were reviewed. It is recommended that stakeholders use this boilerplate agreement to facilitate their negotiations regarding sharing fiber communications infrastructure.

This document can be found in Appendix B and is a template to be used as a tool to facilitate inter-agency conversations about sharing communications infrastructure. Once applied to a specific project, this sharing agreement will be subject to legal review by all involved stakeholders. Details will be mutually agreed upon by all involved stakeholders on a case-by-case basis.

### 6.3.2 Development of Policies

Given that much of the physical network infrastructure that was proposed in the Implementation Plan has not been constructed, consideration for regional communications infrastructure should be included in



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project development phases such as initial development, scoping, and permitting. To mainstream the deployment of fiber communications on behalf of the regional communications network, we recommend the following two policies:

- **Smart Dig policy:** Agencies are required to install fiber communications infrastructure on behalf of the regional communications project if their limits overlap or are parallel with a project proposed in the final Bay Area Regional Broadband Communications Strategic Investment Plan. The governing body of the regional communications network will pay only incremental costs, such as, additional conduit added. Currently, no governing body has been established. Sample Smart Dig ordinances that have been approved in the City of San Francisco and City of South San Francisco are attached in Appendix C.
- At a minimum, it is recommended that the regional communications network infrastructure includes 12 strands of fiber, 1-4" conduit, and Caltrans No. 6E pull boxes. To align with Caltrans' vision of having four communications conduits along their right-of-way, any project proposed along their right-of-way should install 4-4" conduit and splice vaults. It is current practice to separate Caltrans fiber cables which serve TMS elements from cables that serve other purposes. Conduit should be installed at a minimum depth of 48", with consideration to required utility clearance, to avoid service disruption due to construction activity. Pull boxes and splice vaults should be installed per latest Caltrans specifications. A decision tree of technical recommendations for incorporating communications infrastructure into project design was developed to aide project sponsors (See *Figure 5 and 6*). Actual specifications may be project specific.

In addition to developing policies to support the installation of new regional communications network infrastructure, strategies are recommended to protect existing regional communications network infrastructure against damage due to third-party activities (e.g., damage to the system caused by a contractor doing work adjacent to the regional communications network conduit). Examples of these strategies include:

- Bond requirements to cover fiber damage
- Liquidated damage penalties incurred after damage to infrastructure
- Detailed mapping and inventory of fiber optic infrastructure through a common database with accurate GIS mapping of existing fiber and conduit infrastructure

All proposed projects must adhere to relevant, existing policies. For example, projects in Caltrans right-of-way must adhere to Caltrans' current Broadband Policy.

### 6.3.3 Infrastructure Financing

Many traditional funding sources, such as grants, are rarely focused on projects that solely deploy communications infrastructure. As a way to expand the potential source of funding to complete the construction of network infrastructure, the region may need to consider non-traditional funding sources. Public-private partnerships are a unique opportunity that allow public agencies to leverage private funds for public benefit. There is a high level of interest in the region from private companies looking to access public right-of-way to expand privately-owned fiber communications networks. With proper planning, infrastructure built under these arrangements could account for a significant portion of the ultimate regional network. MassDOT and the MBTA have partnered up in the greater Boston area to create one of these types of agreements, which allows third party agencies to use their land and infrastructure for communications-based projects. Public-private partnerships are not the only recommended funding source for proposed projects, but they do serve as a unique opportunity to leverage private funds for public benefit.

### 6.3.4 Usage Fees and Cost Sharing

The current vision for this network is to be primarily used for the public's benefit. After the capital costs for network building, the most significant costs will be on-going maintenance. In order to keep the regional

communications network in a state of good repair, one proposal is for the participating agencies to combine resources to maintain the network, ensuring network connectivity. An example of an agreement to consider is a pooled fund approach fund approach where each agency pays a comparative amount into a single fund that is used by the lead agency to administer maintenance activities that impact the regional network.

### 6.3.5 Roles and Responsibilities

The roles and responsibilities of each agency will be critical and will be more comprehensively defined once a governance structure has been decided. One of the major roles of this governance structure will be to protect the assets – we recommend the governing body of the regional communications network maintain a physical layer monitoring system that is a current inventory of all facilities and mark them appropriately when there is nearby construction. At this stage of the Bay Area Regional Broadband Communications Strategic Investment Plan the governing body has not been identified. It is also recommended that maintenance permits allow entities to perform maintenance on communications infrastructure outside of right-of-way.

### 6.3.6 Securing Infrastructure

None of the agreements that were reviewed detailed network security requirements. We recommend that network security requirements for a shared network be addressed at the individual agency level and not in the sharing agreement itself. In other words, any network firewalls should exist on the enterprise side of the regional network. This will eliminate the possibility of agencies potentially having two different types of security policies to adhere to. In addition, we recommend that configuration management best practices be implemented to ensure that any changes to network equipment are documented and accessible to all network users.

Physical infrastructure security should also continue to follow current practices based on where the infrastructure is being built. For example, Caltrans' current policy is to bury communications pull boxes. We recommend that any new regional communications network infrastructure being built along Caltrans right-of-way continue to be built under those protocols.

## 7 NEXT STEPS

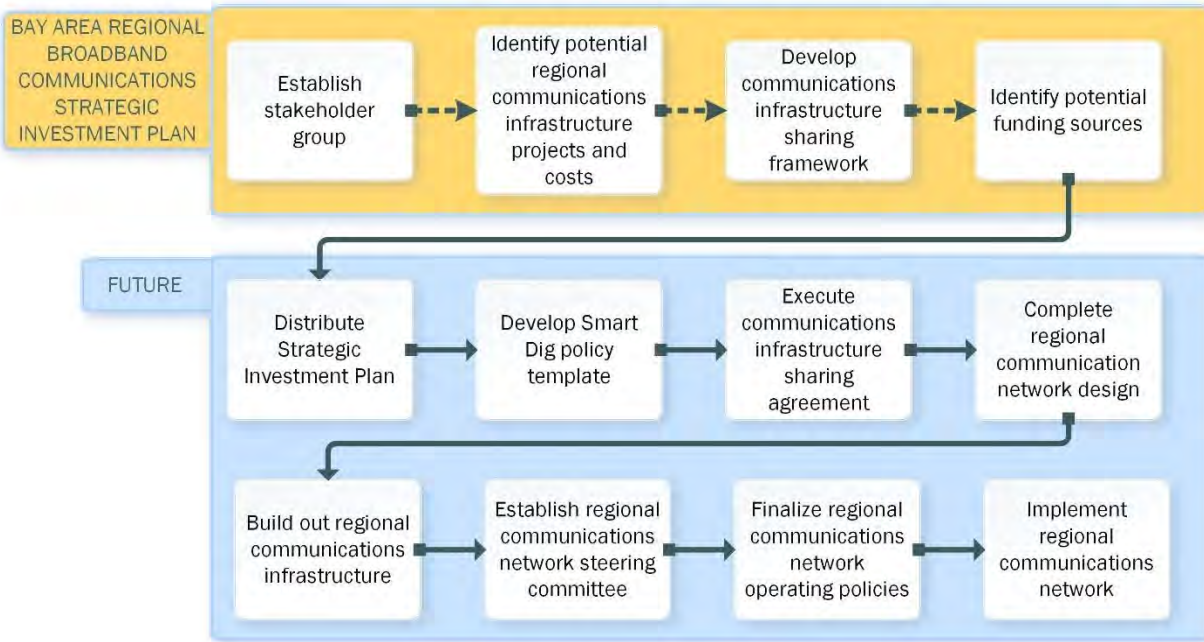
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On a local level, the recommendations made in this document require the support and participation of stakeholders to define. The regional communications network cannot be built out without the continued involvement from stakeholders. Stakeholders are a critical part of the future deployment of this network. To continue to gain momentum on the development and deployment of this network, it is recommended that MTC distributes this document to all public agencies, including those that may not actively involved in its development.

Although MTC and other regional agencies can use this as a framework for strategic investment, local agencies are encouraged to utilize traditional and innovative funding sources to fund proposed projects. Stakeholders are encouraged to integrate communications in all stages of project development. It is crucial to the success of the regional communications network for different agencies and departments to coordinate and leverage their investments.

Figure 8 shows a roadmap for future steps necessary to implement the regional communications network. Some steps have been completed as part of this initiative, but a variety of steps are still required before a network is actually implemented. We anticipate that the plan will be distributed to all stakeholders by the end of 2019.

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**Figure 8: Implementation Road Map**

Per the implementation road map, a tangible next step for the stakeholder group is to develop a Smart Dig policy template that can be used by local agencies. Sample Smart Dig ordinances that have been approved in the City of San Francisco and City of South San Francisco are attached in Appendix C. Once established, it is recommended that a regional communications network steering committee meet annually.

Table 7 outlines the roles and responsibilities of the stakeholder group moving forwards. All agencies can identify opportunities to build out the communications network and promote Smart Dig policies in their jurisdiction. Regional agencies can incorporate communications policies in funding guidelines. MTC will pilot a block grant program.

**Table 7: Stakeholder Roles and Responsibilities**

Role	Responsible Agency
<b>Identify opportunities to build out the communications network</b>	<ul style="list-style-type: none"> <li>• Caltrans</li> <li>• MTC</li> <li>• County Transportation Agencies</li> <li>• Local Cities and Counties</li> </ul>
<b>Promote a Smart Dig policy</b>	<ul style="list-style-type: none"> <li>• Caltrans</li> <li>• MTC</li> <li>• County Transportation Agencies</li> <li>• Local Cities and Counties</li> </ul>
<b>Incorporate communications policies in funding guidelines</b>	<ul style="list-style-type: none"> <li>• Caltrans</li> <li>• MTC</li> <li>• County Transportation Agencies</li> </ul>
<b>Pilot block grant program – “InterConnect Bay Area Challenge Grant”</b>	<ul style="list-style-type: none"> <li>• MTC</li> </ul>

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At the statewide level, Caltrans Headquarters is currently working on a study that is set to revise policies related to communications deployment and best practices with the goal of preparing for the deployment of future emerging technologies. One of the areas of focus for this study is Smart Dig policies. Development of Smart Dig policies will help mainstream fiber communications infrastructure deployment and could be used to develop and expand the regional communications network. It is suggested that agencies develop best practices for procuring communications network infrastructure. An example of how this can be done includes:

- Shared procurement options: Emerging transportation-based technologies can be expensive to deploy. By having a regional communications network, local agencies may have the opportunity to deploy some of these emerging technologies at a lower cost. Depending on the licensing capacity of these emerging technologies, several agencies may be able to deploy equipment using a single license. The regional communications network would allow these agencies to share communications using a single system. This is an opportunity for agencies to deploy new and innovative equipment while saving costs. The shared procurement options also give agencies the possibility of negotiating for prices based on a regional level, which could result in better prices and warranties to help agencies incur more cost savings.

The regional communications network also presents an opportunity for agencies to share resources. Examples of this include sharing of CCTV camera video feeds and control of traffic signal systems during significant events. The sharing of resources is especially of important for those agencies that may be constrained at the staff level and require more support to operate some of their existing systems. To make this sharing of resources a possibility, participating agencies will need to develop MOUs which include provisions about capital spending and operation and maintenance costs. The development of a sound MOU will not only help agencies to manage the sharing of resources, it will also encourage other agencies to participate in the development and deployment of the regional communications network.

The details of day-to-day regional communications network management and funding are to be determined. Detailed design parameters (e.g. infrastructure security, thorough as-built documentation, pull box spacing) will be defined as each project moves into implementation. An overall detailed communications network plan will be necessary to successfully implement the network. This plan will need to include information about the size of fiber installed and the location, as well as, where active electronics will be installed. The regional communications network cannot be built out without completing this detailed network plan. Many proposed projects include agencies sharing infrastructure; for those situations, it is important to develop asset protection and maintenance guidelines to protect investments.



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## 8 APPENDICES

### Appendix A: Existing and Planned Fiber Infrastructure Inventory

**Table 1: Existing Infrastructure Along Highways**

Corridor	Limits		Owner	Purpose
	Beginning	Ending		
I-880	Hegenberger Road, Oakland	Dixon Landing Road, Milpitas	Caltrans/BAIFA	Express Lanes
I-680	Benicia - Martinez Bridge	I-580	Caltrans/BAIFA	Express Lanes
I-580	I-680	Greenville Road, Livermore	Caltrans/ACTC	Express Lanes
I-580	Richmond Bridge – San Rafael	Richmond Bridge - Richmond	Caltrans	
I-80	Bay Bridge - Yerba Buena Island	Bay Bridge Toll Plaza - Oakland	Caltrans	
US 101	SR 84	Marsh Rd, Atherton	Caltrans/CCAG	Smart Corridors
US 101	Halleck St, San Francisco	Golden Gate Bridge – San Francisco	Caltrans	
SR 92	San Mateo Bridge - Foster City	San Mateo Bridge - Hayward	Caltrans	
SR 87	Capitol Expy	I-880	Caltrans	
SR 84	Dumbarton Bridge - Palo Alto	Dumbarton Bridge - Fremont	Caltrans	
SR 84	Dumbarton Bridge, Palo Alto	El Camino Real, Redwood City	Caltrans/CCAG	Smart Corridors
SR 82	San Bruno Ave, San Bruno	Willow Rd, Palo Alto	Caltrans/CCAG	Smart Corridors
SR 82	Elmwood Drive, Saratoga	Southbay Freeway, Sunnyvale	County of Santa Clara	

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**Table 2: Planned Infrastructure Along Highways**

Corridor	Limits		Owner	Purpose
	Beginning	Ending		
I-680	SR 262	SR 84	Alameda CTC	Express Lanes
I-680	SR 84	Alcosta Blvd, San Ramon	Alameda CTC	Express Lanes
I-680	Benicia - Martinez Bridge	Rudgear Rd, Walnut Creek	CCTA	Express Lanes
I-680	Bollinger Canyon Rd, San Ramon	Ygnacio Valley Road, Walnut Creek	CCTA	Bus on Shoulder
I-80	Bay Bridge Toll Plaza	I-580	Caltrans	SFOBB Metering Lights Upgrade
I-80	Manual Campos Parkway, Fairfield	Leisure Town Rd, Vacaville	Caltrans/STA	Express Lanes
US 101	Grand Ave, South San Francisco	Embarcadero Road, Palo Alto	Caltrans	Managed Lanes Project
US 101	Santa Clara County Line	I-880	Caltrans/VTA	Express Lanes
SR 237	N. Mathilda Ave, Sunnyvale	Zanker Rd, San Jose	Caltrans/VTA	Express Lanes
SR 85	US 101	SR 237	Caltrans/VTA	Express Lanes
SR 85	SR 87	US 101	Caltrans/VTA	Express Lanes
SR 37	SR 121	Napa River	NVTA, SCTA, TAM, STA	State Route 37 Resilient Corridor Program

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**Appendix B: Boilerplate Sharing Agreement**

**FIBER INFRASTRUCTURE SHARING AGREEMENT  
BETWEEN THE METROPOLITAN TRANSPORTATION COMMISSION (MTC) AND \_\_\_\_\_**

This Fiber Use Sharing Agreement (“Agreement”), dated for reference purposes as of \_\_\_\_\_, by and between the METROPOLITAN TRANSPORTATION COMMISSION, the regional metropolitan planning organization (MPO) for the San Francisco Bay Area (hereinafter “MTC”), and \_\_\_\_\_ (hereinafter “\_\_\_\_\_”), collectively referred to as the “Parties”.

**(1) Recitals.**

**WHEREAS**, Owner controls, owns or has the right to allow use of fiber optics and communications facilities;

**WHEREAS**, Owner and MTC desire to establish a framework under which they can make their respective communications facilities available to the parties involved in this Agreement;

**NOW, THEREFORE** in consideration of the mutual covenants and benefits stated herein, and in further consideration of the obligations, terms and considerations hereinafter set forth and recited, Owner and MTC agree as follows:

**(2) Definitions.**

(a) “Annex” is defined as an agreement made pursuant to this Agreement that may be subsequently executed and delivered by the Parties.

(b) “Fiber” is defined as strands of single mode optical dark fiber.

(c) “Fiber Access Point” is defined as any appropriate facility designated under an Annex for connection of Owner Fiber to User Fiber.

(d) “Owner” is defined as the Party that owns, controls or has the right to allow use of Owner Facilities.

(e) “Owner Facilities” is defined as telecommunications facilities a Party controls, owns, or has the rights to allow use of that such Party makes available for use by the other Party pursuant to an Annex including but not limited to, towers or other structures for radio transmitting and receiving equipment and other associated equipment, cables, wires, utility connections, communication towers, antennas, equipment, buildings, fencing, conduits, fiber optic cable trays, Fiber Access Points and other accessories, other improvements, and electronic and telecommunications transmissions lines.

(f) “Owner Fiber” is defined as Fiber that is party of Owner Facilities.

(g) “Party” is defined as MTC or Owner as applicable.

(h) “User” is defined as the Party that uses Owner Facilities hereunder.

(i) “User Facilities” is defined as telecommunications facilities a Party owns, controls, or has the right to allow use of. These facilities are connected to or used in connection with such Party’s use of Owner Facilities of the other Party; including, but not limited to, towers or other structures for radio transmitting and receiving equipment and other associated equipment, cables, wires, utility connections, communications, towers, antennas, equipment, buildings, fencing, conduits, fiber optic cable trays, Fiber Access Points and other accessories, other improvements, and electronic and telecommunications transmission lines.

(j) “User Fiber” is defined as Fiber that is part of the User Facilities.

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**(3) Term of License.**

(a) The term of this agreement shall commence as of the date in which this Agreement receives both signatures and shall expire on \_\_\_\_\_. After the expiration or termination of this Agreement, the Parties may not enter into new Annexes.

(b) The term of each Annex under this Agreement shall commence and expire on the dates specified in such Annex.

(c) If the term of any Annex extends beyond the date of the expiration or of the termination of this Agreement, the terms and conditions of this Agreement shall continue to apply to such Annex until its expiration or other termination.

(d) Either Party may, upon written notice to the other Party, abandon use of some or all of Owner Facilities used by it under an Annex.

(e) The User shall have the option, provided it is not then in default under this Agreement, to extend the initial term of this Agreement for one \_\_\_\_\_ period. Wherever the context of this Agreement so requires, the word "Term" shall be deemed to include the initial term and the extended term for which the User has exercised its option.

**(4) Payments and Charges.** Unless otherwise provided in an Annex, no payments or charges will be payable by either Party to the other Party.

**(5) Owner Rights Granted to User.** Unless otherwise explicitly provided in an Annex, the rights granted by Owner to User hereunder include:

(a) User exclusive rights to use Owner Fiber that is identified in an Annex. An Exhibit to the Annex will validate to User that Owner controls, owns or otherwise has the right to grant use of the specified Owner Fiber to User;

(b) User nonexclusive rights to use Owner Facilities that are identified in an Annex. The Annex will validate to User that Owner controls, owns or otherwise has the right to grant use of the specified Owner Facilities.

**(6) Owner Rights Not Granted to User.** Unless otherwise explicitly provided in an Annex, the rights granted by Owner to User hereunder do not include:

(a) Any right or interest in Owner Fiber, the cables containing Owner Fiber, the Fiber Access Points, or any other portion of Owner Facilities, other than the right to use the foregoing in accordance with this Agreement;

(b) Any right or access or entry to Owner's premises, except as provided in Section 7;

(c) Any right to install equipment on Owner's premises.

**(7) Reasonable Access to Owner Facilities.** Owner shall allow user to have reasonable access to Fiber Access Points, applicable Owner Facilities and any User Facilities located on Owner's premises. User shall provide Owner with reasonable advance notice of intent to enter and shall comply with Owner's access procedures as they may exist from time to time Specific access rules may be included in an Annex, if desired by the Parties.

**(8) Fiber Access Points.** Unless otherwise explicitly provided in an Annex, the following terms apply to each Fiber Access Point that is shared with the User;

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(a) User has the right to route an access cable into the Fiber Access Point (using a conduit, if appropriate) for splicing to Owner Fiber in the Fiber Access Point, as shown on drawings to be attached to each Annex. User's access cable or conduit may, if necessary, cross Owner's premises along a route specified by Owner.

(b) User acknowledges that it has sole responsibility for obtaining any third party or governmental easement, license, or other permission that may be necessary to bring an access cable to any Fiber Access Point hereunder.

**(9) Ownership and Use.** As between the Parties, it is agreed that:

(a) Owner Facilities are and shall remain the property or under the control of Owner, or Owner does have and shall maintain a right to allow use of Owner Facilities, and User shall have no right, title, or interest herein or any component thereof, other than the right to use the same in accordance with the provisions of this Agreement;

(b) User Facilities are and shall remain the property or under the control of User, or User shall maintain a right to allow use of User Facilities, and Owner shall have no right, title, or interest therein or any component thereof, except as provided in this Agreement or an Annex.

**(10) Maintenance and Repair of Owner Facilities.**

(a) Owner shall, at Owner's expense, perform all maintenance and repairs necessary to keep Owner Facilities in good condition and repair and in compliance with all applicable federal state, and local laws, rules, and regulations. Owner agrees to retain the services of qualified personnel or contractors to conduct such maintenance and repairs.

(b) User shall, at User's expense, perform all maintenance and repairs necessary to keep the designated User Facilities in good condition and repair and in compliance with all applicable federal, state, and local laws, rules, and regulations. User agrees to retain the services of qualified personnel or contractors to conduct such maintenance and repairs.

(c) In the event of a service interruption caused by physical damage to a communications cable containing any of the Owner Fiber, Owner shall cause such damage to be repaired expeditiously by Owner's contractor. Under normal circumstances, Owner's contractor will be required to commence work to diagnose the interruption within (4) hours after receipt of notice of interruption, subject to obtaining Owner's permission to access the area where work is required. Owner will use commercially reasonable efforts to allow such access. However, where BART is the Owner, much of the Owner Fiber is located within the operating envelope for BART trains; and access to Owner Fiber in such locations may be limited to the hours during which there is no scheduled train service, and such limitation may affect response times.

(d) In the event both Owner's operational facilities and Owner Fiber require maintenance or repair, the restoration of Owner Fiber shall be at all times subordinate to the restoration of Owner's operational facilities. Notwithstanding the foregoing, Owner shall permit repairs to Owner Fiber to proceed, so long as such activities do not interfere with Owner's operation, maintenance, or repair activities.

**(11) Provisioning and Testing of Owner Fiber.** As between the Parties and unless explicitly amended in an annex, it is agreed that:

(a) Owner shall provision and test Owner Fiber and shall provide written test results to User.

(b) The specifications for provisioning and testing Owner Fiber are as follows:

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Testing end-to-end measurement will be conducted for Owner Fiber between designated end points from both directions using an industry-accepted laser sources and power meter. At 1550 nanometers there should be not more than .30 loss per Km.

(c) Owner's obligations under this Section 11 shall be satisfied when Owner Fiber meets the specifications set out in Section 11(b).

**(12) Miscellaneous Provisions.**

(a) Neither Party shall be liable to the other Party hereunder or in connection with the transactions contemplated hereunder, whether in contract or in tort, for indirect, incidental exemplary, punitive, consequential or other special damages (including lost profits), whether or not such damages are foreseeable or unforeseeable.

(b) Neither Party shall be in default hereunder if the performance of any act required of it hereunder is prevented or delayed by reason of events contingencies or causes beyond its reasonable control and without its fault including, but not limited to:

- (i) fire, flood, earthquakes, lightning, unusually severe weather
- (ii) acts of God
- (iii) acts of any governmental authority (outside the control of the applicable party)
- (iv) war, riot, accidents, embargoes, strikes, labor disputes
- (v) shortage of labor, fuel, raw materials, or machinery
- (vi) technical or yield failure, affecting such part or its suppliers or subcontractors

(c) Neither Party may assign this Agreement, or delegate any of its duties hereunder, without the prior written consent of the other Party, which consent shall not be unreasonably withheld. For the purposes of this Section 12 (c), the use of a contractor to perform work required under Sections (5) through (11) or an Annex shall not constitute a delegation of duties.

(d) All notices under this Agreement shall be in writing and shall be deemed validly given if sent by mail or national-recognized courier and shall be effective upon receipt. If any such notice or communication is not received or cannot be delivered due to a change in the address of the receiving party of which notice was not previously given to the sending party or due to a refusal to accept by the receiving party, such notice or other communication shall be effective on the date delivery is attempted.

(e) This Agreement shall be governed by and construed under the laws of the State of California, excluding its choice of law principles.

(f) Nothing contained in this Agreement is intended to create or shall in any event or under any circumstance be construed as creating, a partnership or a joint venture between the Parties.

(g) Nothing in this Agreement is intended to create any rights in any third parties.

(h) If any provision of this Agreement is determined by a proper court to be invalid, illegal or unenforceable, such invalidity, illegality, or unenforceable shall not affect the other provisions of this Agreement and this Agreement shall remain in full force an effect without such invalid, illegal, or unenforceable provision.

(i) If either party institutes any action or proceeding to enforce any of the provisions of this Agreement, then the prevailing party in any such action or proceeding shall be entitled to receive from the losing party the prevailing part's reasonable attorney's fees and disbursements and costs incurred in connection with such action or proceeding.

(j) This Agreement, including any Annex hereto, constitutes the entire agreement and understanding between the Parties with respect to the transactions contemplated hereby, and supersedes all prior



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FINAL PLAN**

agreements and understandings, whether oral or written, between the Parties with respect to the subject matter hereof.

(k) This Agreement may not be amended except by written instrument executed by both Parties.

(l) No waiver of any provision of this Agreement or any breach of this Agreement shall be effective unless such waiver is in writing and signed by the waiving Party. Any such waiver shall not be deemed a waiver of any provision of this Agreement or any other or subsequent breach of this Agreement.

(m) The Annexes executed by the Parties from time to time pursuant to this Agreement are hereby incorporated into this Agreement. This Agreement shall benefit and bind the Parties and their respective permitted successors and assigns. This Agreement may be executed in counterparts, each of which shall be an original, but all of which shall constitute one and the same Agreement.

IN WITNESS WHEREOF, the parties have caused their duly authorized representatives to execute this Agreement

[FIBER OWNER]  
[FIBER OWNER AGENCY]  
ESTABLISHED PURSUANT TO \_\_\_\_\_.

METROPOLITAN TRANSPORTATION  
COMMISSION,  
ESTABLISHED PURSUANT TO \_\_\_\_\_.

By: \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**Appendix C: Sample Smart Dig Ordinances**

*See next page.*



[Public Works Code - Installation of Communications Infrastructure in Excavation Projects]

**Ordinance amending the Public Works Code to require the installation of City-owned communications infrastructure in excavation projects where the City has determined that it is both financially feasible and consistent with the City's long-term goals to develop the City's communications infrastructure.**

NOTE: **Unchanged Code text and uncodified text** are in plain Arial font. **Additions to Codes** are in *single-underline italics Times New Roman font*. **Deletions to Codes** are in ~~italics Times New Roman font~~. **Board amendment additions** are in double-underlined Arial font. **Board amendment deletions** are in ~~Arial font~~. **Asterisks (\* \* \* \*)** indicate the omission of unchanged Code subsections or parts of tables.

Be it ordained by the People of the City and County of San Francisco:

Section 1. The Public Works Code is hereby amended by revising Section 2.4.4, to read as follows:

**SEC. 2.4.4. DEFINITIONS.**

For purposes of this Article, the following terms shall have the following meanings:

(a)—"Agent" shall mean a person or persons authorized to assist an owner in the permitting process or in the performance of an excavation.

(b)—"Applicant" shall mean an owner or duly authorized agent of such owner, who has submitted an application for a permit to excavate.

(c)—"Article" shall mean this Article 2.4 of the Public Works Code.

(d)—"Block" shall mean that part of the public right-of-way that includes the street area from the property line to the parallel property line in width and extending from the property line of an intersecting street to the nearest property line of the next intersecting street in length. For purposes of this definition, an intersection also shall be considered a "block."

1 (e)—"City" shall mean the City and County of San Francisco.

2 "City communications infrastructure" shall mean conduits, pull boxes, and other facilities that  
3 are used by the City to provide communications services.

4 (f)—"Department" shall mean the Department of Public Works.

5 "Department of Technology" shall mean the Department of Technology or any successor City  
6 agency that is responsible for managing City communications infrastructure.

7 "Department of Technology Requirements" shall mean the Department of Technology's  
8 regulations implementing the Department of Technology's participation in excavation projects by  
9 installing City communications infrastructure.

10 (g)—"Deposit" shall mean any bond, cash deposit, or other security provided by the  
11 applicant in accordance with Section 2.4.40 of this Article.

12 (h)—"Director" shall mean the Director of the Department of Public Works or his or  
13 her designee.

14 (i)—"Excavation" shall mean any work in the surface or subsurface of the public  
15 right-of-way, including, but not limited to opening the public right-of-way; installing, servicing,  
16 repairing or modifying any facility(ies) in or under the surface or subsurface of the public right-  
17 of-way, and restoring the surface and subsurface of the public right-of-way.

18 (j)—"Facility" or "facilities" shall include, but not be limited to, any and all cables,  
19 cabinets, ducts, conduits, converters, equipment, drains, handholds, manholes, pipes,  
20 pipelines, splice boxes, surface location markers, tracks, tunnels, utilities, vaults, and other  
21 appurtenances or tangible things owned, leased, operated, or licensed by an owner or person,  
22 that are located or are proposed to be located in the public right-of-way.

23 "Incremental cost" shall mean the cost associated with adding City communications  
24 infrastructure to an excavation project, including the cost of the materials needed by the City and any  
25 additional labor costs.

1           ~~(k)~~—"Large excavation project" shall mean any excavation of more than 1000 square  
2 feet.

3           ~~(l)~~—"Major work" shall mean any reasonably foreseeable excavation that will affect  
4 the public right-of-way for more than 15 consecutive calendar days.

5           ~~(m)~~—"Medium excavation project" shall mean any excavation of more than 100 but no  
6 greater than 1,000 square feet.

7           ~~(n)~~—"Moratorium street" shall mean any block that has been reconstructed, repaved,  
8 or resurfaced by the Department or any other owner or person in the preceding five-year  
9 period.

10          ~~(o)~~—"Municipal excavator" shall mean any agency, board, commission, department,  
11 or subdivision of the City that owns, installs, or maintains a facility or facilities in the public  
12 right-of-way.

13          ~~(p)~~—"Owner" shall mean any person, including the City, who owns any facility or  
14 facilities that are or are proposed to be installed or maintained in the public right-of-way.

15          ~~(q)~~—"Permit" or "permit to excavate" shall mean a permit to perform an excavation as  
16 it has been approved, amended, or renewed by the Department.

17          ~~(r)~~—"Permittee" shall mean the applicant to whom a permit to excavate has been  
18 granted by the Department in accordance with this Article.

19          ~~(s)~~—"Person" shall mean any natural person, corporation, partnership, any municipal  
20 excavator, or any governmental agency, including the State of California or United States of  
21 America.

22          ~~(t)~~—"Public right-of-way" shall mean the area across, along, beneath, in, on, over,  
23 under, upon, and within the dedicated public alleys, boulevards, courts, lanes, roads,  
24 sidewalks, spaces, streets, and ways within the City, as they now exist or hereafter will exist  
25 and which are or will be under the permitting jurisdiction of the Department of Public Works.

1           ~~(u)~~—"Responsible party" shall mean the owner for each excavation involving the  
2 owner's facility or facilities. In addition, it shall mean any person who performs an excavation  
3 or has a duty or right to manage or participate in the management of an excavation and whom  
4 the Director designates as responsible, in whole or in part, for such excavation.

5           ~~(v)~~—"Sidewalk" shall mean the area between the fronting property line and the back  
6 of the nearest curb.

7           ~~(w)~~—"Small excavation project" shall mean any excavation of 100 square feet or less.  
8           "Standard City communications infrastructure specifications" shall mean the type, size, and  
9 quantity of conduits, the size and frequency of pull boxes, and any other facilities that the Department  
10 of Technology determines are necessary to serve the City's communications needs.

11           ~~(x)~~—"Utility excavator" shall mean any owner whose facility or facilities in the public  
12 right-of-way are used to provide electricity, gas, information services, sewer service, steam,  
13 telecommunications, traffic controls, transit service, video, water, or other services to  
14 customers regardless of whether such owner is deemed a public utility by the California Public  
15 Utilities Commission.

16  
17           Section 2. The Public Works Code is hereby amended by revising Section 2.4.13, to  
18 read as follows:

19           **SEC. 2.4.13. TRANSIT, PEDESTRIAN, BICYCLE, ~~AND~~ STORMWATER, AND**  
20 **COMMUNICATIONS INFRASTRUCTURE IMPROVEMENTS AS PART OF PLANNING,**  
21 **CONSTRUCTION, RECONSTRUCTION, AND REPAVING PROJECTS.**

22           (a) Whenever the Department or other Municipal Excavator undertakes a project  
23 involving the planning, construction, reconstruction, or repaving of a public right-of-way, such  
24 project shall include, to the maximum extent practicable and feasible, the following transit,  
25 pedestrian, bicycle, and stormwater, and communications infrastructure improvements:

- 1 (1) Street and pedestrian-scale sidewalk lighting;
- 2 (2) Pedestrian and bicycle safety improvement measures, as established in  
3 any official City adopted bicycle or pedestrian safety plan or other City adopted planning  
4 documents;
- 5 (3) Appropriate access in accordance with the Americans with Disabilities  
6 Act;
- 7 (4) Public transit facilities accommodation, including, but not limited to  
8 designation of the right-of-way as a transit preferential street designation or bus rapid transit  
9 corridor;
- 10 (5) Traffic calming devices;
- 11 (6) Landscaping;
- 12 (7) Low-impact design stormwater facilities consistent with the Stormwater  
13 Design Guidelines;
- 14 (8) Other pedestrian and streetscape elements listed as appropriate to the  
15 relevant street type as identified and defined in the Better Streets Plan; *and*
- 16 (9) Other street and sidewalk improvements consistent with the City's  
17 "Transit First" Policy" (Section ~~16.102~~ 8A.115 of the City Charter) and "Better Streets Policy"  
18 (~~Chapter Section~~ Section 98.1 of the ~~San Francisco~~ Administrative Code); *and*
- 19 (10) Communications infrastructure.

20 (b) The Director, in consultation with the Directors of the San Francisco Municipal  
21 Transportation Agency, Department of Public Health, Planning Department, Department ~~on~~*of*  
22 the Environment, San Francisco Public Utilities Commission, Department of Technology, and  
23 Mayor's Office on Disability shall develop orders, regulations, or amendments to the  
24 Department's Standard Plans and Specifications that address the improvements set forth in  
25 Subsection (a).

1 (c) To the maximum extent practicable and feasible, the Director shall condition all  
2 excavation and street improvement permits on the inclusion of the improvements set forth in  
3 Subsection (a). If such conditions would exceed the Director's regulatory authority, the  
4 Director shall coordinate with other City departments to provide, to the maximum extent  
5 practicable and feasible, said improvements on behalf of the City. As part of the decision on  
6 any permit or authorization pursuant to the Public Works Code, the Director shall take into  
7 account the permit activity's positive and negative impacts on the integration, enhancement,  
8 or preservation of the improvements set forth in Subsection (a).

9  
10 Section 3. The Public Works Code is hereby amended by adding Section 2.4.14, to  
11 read as follows:

12 **SEC. 2.4.14. COORDINATION WITH DEPARTMENT OF TECHNOLOGY.**

13 (a) "Dig Once." To facilitate the Department of Technology's efforts to develop City  
14 communications infrastructure, and limit excavation in the public right-of-way, an applicant for a  
15 permit under Section 2.4.10 for the installation of underground conduits shall comply with the  
16 requirements of this Section 2.4.14.

17 (b) Notice Required.

18 (1) An applicant for a permit to install underground conduits shall notify the  
19 Department of Technology of its application in the manner set forth in the Department of Technology  
20 Requirements at least 14 days before submitting the application to the Department.

21 (2) Notice is only required when the minimum length of the proposed  
22 excavation will be at least 900 linear feet, or such longer distance as the Department of  
23 Technology may establish in the Department of Technology Requirements.

24 (c) Approval of Application.

1                   (1) Where the Department of Technology Will Participate. The Department may  
2 approve an application and issue a permit if the Department finds that all of the following have  
3 occurred:

4                   (A) The applicant has complied with the Department of Technology  
5 Requirements for notice of its application;

6                   (B) The Department of Technology has not notified the applicant and the  
7 Department that the Department of Technology will not participate in the proposed excavation project;  
8 and

9                   (C) The applicant has submitted plans consistent with the standard City  
10 communications infrastructure specifications.

11                   (2) Where the Department of Technology Will Not Participate. The Department  
12 may approve an application and issue a permit if the Department finds that both of the following have  
13 occurred:

14                   (A) The applicant has complied with the Department of Technology  
15 Requirements for notice of its application; and

16                   (B) The Department of Technology has notified the applicant and the  
17 Department that the Department of Technology will not participate in the proposed excavation project.

18                   (d) Denial of Application. The Department shall deny an application for a permit if the  
19 Department determines that the applicant has failed to comply with the Department of Technology  
20 Requirements.

21                   (e) Applicant's Incremental Costs. The Department of Technology shall be responsible for  
22 the applicant's incremental costs when the Department of Technology participates in an excavation  
23 project by installing City communications infrastructure.

24                   (f) Exception. The requirements of this Section 2.4.14 shall not apply to an application for  
25 an emergency permit under Section 2.4.22.

1 Section 4. The Public Works Code is hereby amended by adding Subarticle IX,  
2 Sections 2.4.95, and 2.4.96, and 2.4.97, to read as follows:

3 **SUBARTICLE IX**

4 **OBLIGATIONS OF THE DEPARTMENT OF TECHNOLOGY**

5 **SEC. 2.4.95. INSTALLATION OF CITY COMMUNICATIONS INFRASTRUCTURE.**

6 (a) Need for City Communications Infrastructure. The Department of Technology shall  
7 consider adding City communications infrastructure to any permit issued for an excavation project  
8 under this Article 2.4 to create more efficient delivery of communications services to the public and for  
9 the City's needs.

10 (b) Response to Notice. Upon receipt of a notice issued pursuant to Section 2.4.14 that a  
11 utility or municipal excavator intends to apply for an excavation permit to install underground conduit,  
12 the Department of Technology shall review the application to determine whether it is both financially  
13 feasible and consistent with the City's long-term goals to add City communications infrastructure to the  
14 proposed excavation project.

15 (1) If the determination is affirmative, the Department of Technology does not need  
16 to notify the applicant and the Department that the Department of Technology intends to  
17 participate in the excavation project. The presumption will be that the Department of Technology  
18 will participate in the excavation project by requiring the excavator to installing City  
19 communications infrastructure.

20 (2) If the determination is negative, the Department of Technology shall notify the  
21 applicant and the Department in the time required by within 7 days of issuance of the notice that  
22 the Department of Technology does not intend to participate in the excavation project.

23 **SEC. 2.4.96. DEPARTMENT OF TECHNOLOGY REQUIREMENTS.**

24 (a) Adoption of Requirements. The Department of Technology, in consultation with the  
25 Department, shall by order develop and implement the Department of Technology Requirements. The



1 Department of Technology shall use a process to adopt the Department of Technology Requirements  
2 that ensures that municipal excavators, utility excavators, and the general public have a meaningful  
3 opportunity to comment on the provisions to be contained therein before they are formally adopted by  
4 the Department of Technology.

5 (b) Purpose of Requirements. The Department of Technology Requirements shall specify  
6 the manner in which the Department of Technology will participate in excavation projects by installing  
7 City communications infrastructure that meets the City's needs at a reasonable cost.

8 (c) Minimum Requirements. At a minimum, the Department of Technology Requirements  
9 shall contain the following procedural and substantive requirements for the installation of City  
10 communications infrastructure in excavation projects:

11 (1) The process for the Department of Technology to review planned excavation  
12 projects in a timely manner to determine if City participation is feasible and to verify its participation  
13 by informing the applicant and the Department within 7 days of receiving notice;

14 (2) The criteria to be used by the Department of Technology to decide whether to  
15 decline to participate in excavation projects;

16 (3) The standard technical specifications for City communications infrastructure;

17 (4) The standard methodology for determining the incremental costs associated with  
18 installing City communications infrastructure in excavation projects;

19 (5) The requirements and process for excavators to seek exemptions from using the  
20 City's standard methodology for determining incremental costs when installing standard City  
21 communications infrastructure in excavation projects; and

22 (6) Alternative methodologies for determining the City's incremental costs when  
23 exemptions are granted.

24 **SEC. 2.4.97. REPORTING REQUIREMENTS.**

1           The Department of Technology shall file quarterly reports with the Board of Supervisors  
2 and Mayor containing the following information: (a) the number of excavation permits issued  
3 by the Department for projects meeting the criteria for Department of Technology participation  
4 set forth in Section 2.4.14(b)(2); (b) the locations of the excavations identified in the  
5 excavation projects; (c) the identities of the applicants for the excavation permits; (d) whether  
6 the Department of Technology received any objections to its participation in the excavation  
7 projects from the municipal or utility excavators submitting the applications; (e) whether the  
8 Department of Technology opted to participate in the excavation projects by installing City  
9 communications infrastructure; (f) the City's costs to participate in the excavation projects by  
10 installing City communications infrastructure; and (g) the status of the installation of City  
11 communications infrastructure in the excavation projects.

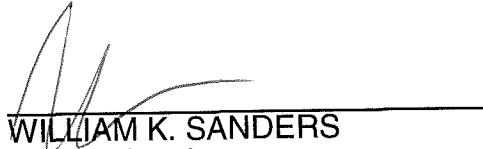
12  
13           Section 5. Effective Date. This ordinance shall become effective 30 days after  
14 enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the  
15 ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board  
16 of Supervisors overrides the Mayor's veto of the ordinance.

17  
18           Section 6. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors  
19 intends to amend only those words, phrases, paragraphs, subsections, sections, articles,  
20 numbers, punctuation marks, charts, diagrams, or any other constituent parts of the Municipal  
21 Code that are explicitly shown in this ordinance as additions, deletions, Board amendment  
22 additions, and Board amendment deletions in accordance with the "Note" that appears under  
23 the official title of the ordinance.

1 Section 7. Department of Technology Implementation. The Department of Technology  
2 shall adopt the order required by Section 2.4.96 of the Public Works Code within 90 days of  
3 the effective date of this ordinance.  
4

5 APPROVED AS TO FORM:  
6 DENNIS J. HERRERA, City Attorney

7  
8 By:

  
9 WILLIAM K. SANDERS  
Deputy City Attorney

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# City and County of San Francisco

## Tails Ordinance

City Hall  
1 Dr. Carlton B. Goodlett Place  
San Francisco, CA 94102-4689

**File Number:** 130412

**Date Passed:** October 28, 2014

Ordinance amending the Public Works Code to require the installation of City-owned communications infrastructure in excavation projects where the City has determined that it is both financially feasible and consistent with the City's long-term goals to develop the City's communications infrastructure.

October 06, 2014 Land Use and Economic Development Committee - AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE

October 06, 2014 Land Use and Economic Development Committee - RECOMMENDED AS AMENDED

October 21, 2014 Board of Supervisors - PASSED, ON FIRST READING

Ayes: 11 - Avalos, Breed, Campos, Chiu, Cohen, Farrell, Kim, Mar, Tang, Wiener and Yee

October 28, 2014 Board of Supervisors - FINALLY PASSED

Ayes: 11 - Avalos, Breed, Campos, Chiu, Cohen, Farrell, Kim, Mar, Tang, Wiener and Yee

File No. 130412

**I hereby certify that the foregoing Ordinance was FINALLY PASSED on 10/28/2014 by the Board of Supervisors of the City and County of San Francisco.**

Angela Calvillo  
Clerk of the Board

Mayor

Date Approved



# City of South San Francisco

P.O. Box 711 (City Hall, 400  
Grand Avenue)  
South San Francisco, CA

## Legislation Text

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**File #:** 18-957  
**Version:** 1

**Agenda Date:** 1/9/2019  
**Item #:** 11a.

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Ordinance amending Section 13.04 of the South San Francisco Municipal Code, adding Section adding Chapter 13.40 of the South San Francisco Municipal Code pertaining to open trench notification and telecommunication infrastructure improvements.

WHEREAS, broadband services provides fast, reliable and high quality links to the Internet, and is a necessity for residents and businesses in the City of South San Francisco (“City”); and

WHEREAS, high quality broadband service supports economic and educational development, and promotes equal access to opportunities and a higher standard of living; and

WHEREAS, broadband service and advanced telecommunications infrastructure is also essential for the City to perform its governmental functions, provide emergency services, and sustain many other municipal operations; and

WHEREAS, the City owns and maintains an extensive system of streets, sidewalks, and other infrastructure in the public right of way; and

WHEREAS, the paving and surfaces of the public right of way infrastructure are significantly reduced each time construction work involving excavation is performed thereupon;

WHEREAS, construction work involving excavations also creates significant traffic congestion and presents numbers safety issues;

WHEREAS, the City is responsible for acting in the public interest and preserve its investment in streets and public infrastructure; and

WHEREAS, the City desires to provide incentives for collaborative projects in the right of way to reduce the present and long-term impact of construction and excavation work on City streets and sidewalks; and

WHEREAS, the City also desires to minimize disruption to traffic and pedestrian access, and to encourage infrastructure development, including broadband and other telecommunications infrastructure; and

WHEREAS, the City maintains a citywide broadband network that supports all aspects of municipal operations, which requires constant upgrades to meet increasing demands; and

WHEREAS, the City desires to proactively develop this its broadband network and resources to support a growing population and economy; and

WHEREAS, the City has the authority to issue discretionary permits and other types of authorizations for construction projects in the public right of way, and to create development standards;

WHEREAS, to effectuate its intents described herein, the City is proposing to amend the South San Francisco Municipal Code to create an “open trench” notification requirement.

NOW, THEREFORE, based on the entirety of the record before it, as described below, the City Council of the City of South San Francisco does hereby ordain as follows:

**SECTION 1.** The City Council of South San Francisco finds that all Recitals are true and correct and are incorporated herein by this reference.

**SECTION 2.** Chapter 13.04 “Excavation and Construction on Public Property Regulated” is hereby amended to read as follows (with text in ~~strikeout~~ indicating deletion and double underline indicating addition). Sections and subsections that are not amended by this Ordinance are not included below, and shall remain in full force and effect.

...

**13.04.010 Encroachment permit required.**

A. It is unlawful for any person, firm, corporation or other association of any description not otherwise under written contract to the city for such purpose to make, or cause to be made, any construction or excavation in, over or under the surface of any public street, lane, sidewalk or other public place for the installation, repair or removal of any pipe, conduit, duct or tunnel, or telecommunications or utility infrastructure or improvements, or for any other purpose, without first obtaining from the department of public services an encroachment permit to make such excavation. The director of public services, before issuing such a permit, shall require:

...

**SECTION 3.** Title 13, “Public Improvements” of the South San Francisco Municipal Code is hereby amended by adding Chapter 13.40, “Open Trench Notification and Telecommunication Infrastructure Improvements,” to read as follows:

**Chapter 13.40**

**OPEN TRENCH NOTIFICATION AND TELECOMMUNICATION INFRASTRUCTURE IMPROVEMENTS**

**13.40.001 Purpose.**

The city council finds and determines that the requirements and conditions in this chapter are necessary for the following reasons:

- (a) To encourage the systematic development of telecommunications infrastructure and in turn maximize the availability of telecommunication and broadband service to residents and businesses within the city.
- (b) To protect and control access to the public right-of-way, and to extend the life of city streets and other civil infrastructure, and reduce the cost of ongoing maintenance by encouraging cooperation between utility

companies, public agencies, and city departments.

(c) To streamline and simply the process of installing and upgrading telecommunications equipment throughout the city, and to encourage the improvement and modernization of the city's telecommunication infrastructure.

### **13.40.002 Definitions.**

As used in this chapter, the following terms shall have the following meanings:

- a) "Applicant" means an individual or entity submitting an encroachment permit application for an excavation project pursuant to section 13.40.003.
- b) "Public right-of-way" or "ROW" shall mean the area across, along, beneath, in, on , over, under, upon, and within the dedicated public alleys, boulevards, courts, lanes, roads, sidewalks, spaces, streets, and ways within the city.
- c) "Conduit" refers to a tube, duct, structure, or other device designed for enclosing telecommunication wires or cables.
- d) "Enhanced Remediation" means any and all standards and/or processes established by the Public Works Director that are intended to serve the purpose of ensuring that excavations performed in an area where an Open Trench Notification process has been completed will include all work necessary to restore the area to its original or enhanced condition prior to the excavation.
- e) "Excavation" refers to any process which breaks up or removes material from the ground through any digging, drilling, boring or other activity for the purpose of installing underground utilities, infrastructure, structures, or other equipment.
- f) "Facilities" and "Infrastructure" refer to wires, cables, conduit, switches, transmission equipment or other equipment for use in transmitting or processing telecommunications services or for providing support or connection to such equipment.
- g) "Open Trench Notification" shall mean the notification process set forth under Section 13.40.004.
- h) "Service providers" refers to any person, company, corporation or other entity providing data, voice, cable, video or other information services by wire, fiber optic cable or other technology.
- i) "Telecommunication" refers to data, voice, video or other information provided by wire, fiber optic cable or other technology.

### **13.40.003 Open Trench Notification Triggered for Excavation Projects.**

(a) The Public Works Director shall determine, upon receipt of an encroachment permit application for an excavation project pursuant to Section 13.04.010 or approval of specifications for a public works project, that if either criteria in subsection (i) or (ii) below are met:

(i) The application or specification involves utility infrastructure construction, road construction or resurfacing, or other work that will result in an excavation that could reasonably include, or prepare for, the installation of broadband conduit, or is part of the Information Technology Strategic Plan.

(ii) It spans 900 feet or three city blocks within the ROW, or involves terrain that is difficult or expensive to traverse (e.g. a bridge), or is an element of a larger project that will require installation or upgrading of utility infrastructure.

(b) If an encroachment permit application for an excavation project or approval of specifications for a public works project satisfies either subsection (i) or (ii) above, the applicant shall be required to comply with the Open Trench Notification as provided in Section 13.40.004.

(c) The Public Works Department shall initiate the Open Trench Notification process by delivering notice and instructions for participation in accordance with the requirements of provided in Section 13.40.004.

#### **13.40.004 Notification Process.**

(a) In compliance with section 13.40.005, all Service Providers and third parties interested in collocating conduits and telecommunication facilities in the project excavation area shall inform the Public Works Department of the interest to participate in the manner set forth in subsection (a) of section 13.40.005 from the date of an Open Trench Notice issued pursuant to subsection (b) of this section.

(b) The Public Works Director, in consultation with the Information Technology Department, shall develop and implement an Open Trench Notification Policy, as may be amended from time to time, that establishes the standards and processes to carry out the intent and requirements of this chapter.

(c) At a minimum, the Open Trench Notification Policy shall include the following:

(i) The procedure by which the Public Works Department will initiate the Open Trench Notification process for each qualified excavation project pursuant to subsection (b) of section 13.40.003.

(ii) The procedure for receiving, processing, and reviewing of notices of intent to participate from interested Service Providers and third parties for collocation of conduits and telecommunication facilities in the project area.

(iii) The timeline for interested Service Providers and third parties to submit notices of intent to participate in collocation work and delivering notices received to the project applicant.

(iv) The criteria for determining whether responses received from interested Services Providers and third parties for collocation work are competent and may be forwarded to the applicant.

(v) The procedure for receiving, processing, and reviewing of any protests regarding negotiations



between the parties for collocation of conduits and telecommunication facilities in the project area.

(vi) The criteria for determining whether the information provided in support of a protest sufficiently demonstrate that further negotiation is appropriate, and the timeline for such further negotiation if warranted.

### **13.40.005 Response to Open Trench Notifications**

(a) Services Providers and third parties interested in participating in the open trench collocation pursuant to section 13.40.004 shall submit a notice of intent to participate to the Public Works Department within 30 days of an Open Trench Notice issuance. The notice of intent shall contain sufficient information to constitute a competent response to be forwarded to the project applicant pursuant to subsection (c)(iv) of section 13.40.004.

(i) Responses to open trench notifications shall be forwarded to the project applicant. The applicant is responsible for negotiating collocation of conduits and/or other telecommunication facilities with any interested third parties for the project location.

(ii) Protests regarding negotiations between the parties for collocation work and any information in support thereof may be submitted to the Public Works Department. The Public Works Department shall be responsible to determine whether the information provided sufficiently demonstrate that further negotiation is warranted.

(b) The Information Technology Department Director shall designate staff to receive notifications of pending excavation projects, broadband-related work, and other encroachment permit applications that are subject to the Open Trench Notification process.

(c) The Information Technology Director shall determine whether to submit a response to the Open Trench Notification for collocating conduits or telecommunication facilities at the project location, by considering the following:

(i) The collocation of city-owned conduit in a given project is consistent with the Information Technology Strategic Plan, or will support the achievement of other city objectives.

(ii) The incremental installation cost is reasonable.

(iii) The cost of maintaining the conduit over time is proportionate to its value to the city.

(iv) Sufficient funds are available within existing budgets, or can be obtained from other sources.

(v) Collocation should be pursued in furtherance of overall city goals and priorities, the collocation makes sense.

(d) If the Information Technology Director submits a response to the Open Trench Notification for collocation work, the Information Technology Director or his designee shall attempt to negotiate an acceptable agreement with the project applicant. If negotiation is successful, the Information Technology Department shall coordinate

the design and construction of the collocation work with the Public Works Department, including whether installation of facilities in addition to conduits would be necessary.

(e) Any conduits or telecommunication facilities collocated pursuant to subsection (b) shall be the property of the City.

(f) The Information and Technology Department shall maintain a geodatabase of communications assets located within or connecting to the city, including but not limited to:

- (i) city-owned conduit and appurtenant facilities;
- (ii) fiber optic cable;
- (iii) towers and tower sites;
- (iv) communications facilities and services belonging to third parties that are used by the city;

(v) real estate, poles, and other city-owned assets leased to third parties for telecommunication purposes.

(vi) Third party network data provided to the City in conjunction with such leases or permitting processes, or as may become available through other means, including but not limited to a future electronic plans submission program, or as collected by other agencies or provided by telecommunications companies.

**13.40.006 Compliance with the Open Trench Notification Process; Enhanced Remediation.**

(a) The Open Trench Notification Process shall be deemed complete if no responses were received from interested parties pursuant to subsection (a) of section 13.40.005, or if the applicant has negotiated collocation of conduits and/or other telecommunication facilities with any interested third parties pursuant to subsection (a) of section 13.40.005.

(b) The Open Trench Notification Process shall also be deemed complete if either party to the collocation negotiation required herein submits a protest to the Public Works Department regarding the negotiation, and the Public Works Department determines that, pursuant to subsection (c) of section 13.40.004 and based on the information provided to it, further negotiation is inappropriate or not warranted.

(c) The Public Works Director shall not approve any project application that is subject to the Open Trench Notification process and requirements of this chapter unless an application has satisfied the Open Trench Notification requirements established herein. A project that has satisfied the requirements of this chapter may be approved by the Director, subject to other applicable requirements and authorizations in the most current editions of the City's Municipal Code or any applicable public works construction standards, to allow permitted work to commence.

(d) After an application has been approved, any subsequent excavation work or project by the applicant or any other Service Provider or third party in the project area shall be subject to Enhanced Remediation requirements

for five years following the completion or abandonment of such subsequent work or project. Enhanced Remediation may include general standards or standards specific to an excavation. The Public Works Department shall adopt policies and guidelines to set forth such Enhanced Remediation requirements consistent with the intents of this chapter.

#### **13.40.007 Implementation.**

Within 60 days after this chapter takes effect, the city shall email, fax, mail or deliver a copy of it to telecommunications service providers and other affected entities doing business within the city.

#### **13.40.008 Waivers.**

(a) In the event of an emergency or urgent conditions that require immediate action, or for other good cause relating to the public health, safety or welfare, the Public Works Director may waive or modify, in whole or in part, the Open Trench Notification requirements established by this chapter.

(b) The Public Works Director may exempt projects from the requirements of this chapter where compliance has been determined by the Public Works Director to be not practical or feasible. Requests for an exemption shall be made in writing and the Public Works Director's decision shall be final. A request for exemption shall include all information necessary for the Public Works Director to make a decision, including but not limited to documentation showing factual support for the requested exemption. The Public Works Director may approve the exemption request in whole or in part, with or without conditions.

#### **13.40.009 Violations**

Violations of this chapter is hereby declared to be a public nuisance. Any violation of this chapter shall be subject to abatement by the city, as well as any other remedies that may be permitted by law for public nuisances, and may be enforced by injunction, upon a showing of violation.

#### **13.40.010 No Conflict with Federal or State Law.**

Nothing in this chapter shall be interpreted or applied so as to create any requirement, power, or duty in conflict with nay Federal or State law.

### **SECTION 4. Severability**

If any provision of this Ordinance or the application thereof to any person or circumstance is held invalid or unconstitutional, the remainder of this Ordinance, including the application of such part or provision to other persons or circumstances, shall not be affected thereby and shall continue in full force and effect. To this end, provisions of this Ordinance are severable. The City Council of the City of South San Francisco hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, subdivisions, paragraphs, sentences, clauses, or phrases be held unconstitutional, invalid, or unenforceable.

### **SECTION 5. Publication and Effective Date**

Pursuant to the provisions of Government Code section 36933, a summary of this Ordinance shall be prepared by the City Attorney. At least five (5) days prior to the Council meeting at which this Ordinance is scheduled to be adopted, the City Clerk shall (1) publish the Summary, and (2) post in the City Clerk's Office a certified copy of this Ordinance. Within fifteen (15) days after the adoption of this Ordinance, the City Clerk shall (1) publish the summary, and (2) post in the City Clerk's Office a certified copy of the full text of this Ordinance along with the names of those City Council members voting for and against this Ordinance or otherwise voting. This Ordinance shall become effective thirty (30) days from and after its adoption.

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