MEETING OF THE

REGионаl трансит Technical Advisory Committee

Monday, January 30, 2023
10:00 a.m. – 12:00 p.m.

***ZOOM AND TELECONFERENCE ONLY***

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Priscilla Fredua-Agyemang at (213) 236-1973 or email agyemang@scag.ca.gov

SCAG, in accordance with the Americans with Disabilities Act (ADA), will accommodate persons who require a modification of accommodation in order to participate in this meeting. SCAG is also committed to helping people with limited proficiency in the English language access the agency’s essential public information and services. You can request such assistance by calling (213) 630-1402. We request at least 72 hours (three days) notice to provide reasonable accommodations and will make every effort to arrange for assistance as soon as possible.
The Regional Transit Technical Advisory Committee may consider and act upon any of the items listed on the agenda regardless of whether they are listed as information or action items.

1.0 CALL TO ORDER
(Jennifer Nguyen, Riverside Transit Agency, Regional Transit TAC Vice Chair)

2.0 PUBLIC COMMENT PERIOD – Members of the public desiring to speak on items on the agenda, or items not on the agenda, but within the purview of the Regional Transit Technical Advisory Committee, must fill out and present a speaker’s card to the assistant prior to speaking. Comments will be limited to three minutes. The chair may limit the total time for all comments to twenty (20) minutes.

3.0 RECEIVE AND FILE

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3.1 Minutes of the November 30, 2022, RTTAC Meeting

3.2 2023 Regional Transit Technical Advisory Committee Agenda Look Ahead
(Priscilla Freduah-Agyemang, SCAG)

3.3 Regional Transit Operators Forum
(Priscilla Freduah-Agyemang, SCAG)

3.4 Transit Ridership Update
(Krista Yost, Assistant Regional Planner, SCAG)

3.5 Federal Transit Administration (FTA) Fiscal Year (FY) 2023 Triennial Reviews, Section 5307 Program Requirements
(Priscilla Freduah-Agyemang, SCAG)

3.6 Mobile Source Air Pollution Reduction Review Committee (MSRC) Request for Proposals for Microtransit Services Program
(Krista Yost, Assistant Regional Planner, SCAG)

3.7 Metro Visionary Seed Fund
(Krista Yost, Assistant Regional Planner, SCAG)

3.8 Transit Operators’ Final Draft Budget Letter to State Leaders
(Priscilla Freduah-Agyemang, SCAG)
REGIONAL TRANSIT TECHNICAL ADVISORY COMMITTEE
AGENDA
Monday, January 30, 2023

4.0 INFORMATIONAL ITEMS

4.1 MAP-21 Regional Transit Safety Target Setting Update
    (Jonathan Overman, Cambridge Systematics)

4.2 Hydrogen Fuel Cell Bus Deployment – Foothill Transit
    (Roland Cordero, Foothill Transit)

4.3 Connect SoCal 2024 Updates
    (Priscilla Freduah-Agyemang, SCAG)

4.4 Regional Dedicated Transit Lanes Study Final Report
    (Priscilla Freduah-Agyemang, SCAG)

4.5 SCAG Draft Clean Transportation Technology Policy
    (Alison Linder, Senior Regional Planner, SCAG)

5.0 STAFF REPORT

6.0 ADJOURNMENT

The next Regional Transit Technical Advisory Committee meeting is tentatively scheduled for Wednesday, March 29, 2023.
Minutes

THE FOLLOWING MINUTES ARE A SUMMARY OF ACTIONS TAKEN BY THE REGIONAL TRANSIT TECHNICAL ADVISORY COMMITTEE (RTTAC). AN AUDIO RECORDING OF THE MEETING IS AVAILABLE FOR LISTENING IN SCAG’S OFFICE.

The Regional Transit Technical Advisory Committee held its meeting telephonically and electronically given public health directives limiting public gatherings due to the threat of COVID-19 and in compliance with the Governor’s recent Executive Order N-29-20. The meeting was called to order by Chair, Joyce Rooney, Beach Cities Transit.

Members Participating:
Joyce Rooney (Chair) City of Redondo Beach/Beach Cities Transit
Jennifer Nguyen (V. Chair) Riverside Transit Agency
Martin Tompkins Antelope Valley Transportation Authority
Eric Hoch City of Santa Monica Big Blue Bus
Sudesh Paul City of Corona
Nicolle Aube City of Huntington Beach
Diane Amaya City of Redondo Beach/Beach Cities Transit
Ron Profeta City of Riverside
Socorro Gomez City of Riverside
Ben Gonzales City of Simi Valley
Diana Chang Culver City Transportation Department
Kaitlyn Zhang Culver City Transportation Department
Joe Raquel Foothill Transit
John Curley Foothill Transit
Josh Landis Foothill Transit
Austin Novstrup Gold Coast Transit District
Chun Leung Los Angeles DOT
Mariana Valdivia Los Angeles DOT
Lori Huddleston Los Angeles Metro
Randy Lamm Los Angeles Metro
Teresa Wong Los Angeles Metro
Christopher MacKechnie Long Beach Transit
Marisol Barajas Long Beach Transit
Shirley Hsiao Long Beach Transit
David Huang Metrolink (SCRRA)
Timothy Grensavitch Montebello Bus Lines
Adrianna Kendricks Montebello Bus Lines
Yessie Granados Montebello Bus Lines
Alfredo Machuca Montebello Bus Lines
1.0 CALL TO ORDER

Joyce Rooney, Beach Cities Transit, called the meeting to order at 10:05 a.m. Attending agencies introduced themselves.

2.0 PUBLIC COMMENT PERIOD

No members of the public requested to comment.

3.0 RECEIVE AND FILE

3.1 Minutes of the August 31, 2022 RTTAC Meeting
3.2 Regional Transit Operators Forum
3.3 SCAG Transit Priority Best Practices Report
3.4 Connect SoCal 2024 Transit Operations and Maintenance Financial Forecast
3.5 American Public Transportation Association (APTA) Report on Transit Workforce Shortage, Root Causes, Potential Solutions and the Road Ahead
3.6 Federal Transit Administration (FTA) Dear Colleague Letter: Cutaway Rebuild Useful Life Waiver

Priscilla Freduah-Agyemang, SCAG staff, reviewed the Receive and File items and noted the Regional Transit Operators forum is available and any issues, comments and discussions are welcome.
4.0 **INFORMATIONAL ITEMS**

4.1 **Connect SoCal 2024 Updates**

Priscilla Freduah-Agyemang, SCAG staff, introduced the updates noting that the vision for Connect SoCal 2024 includes a healthy, accessible and connected region for a more resilient and equitable future. She noted a group of studies supporting the plan including the ADA Paratransit Demand Forecast Study, SCAG Integrated Freight and Passenger Rail Study, Mobility as a Service (MaaS) Feasibility White Paper, Regional Dedicated Transit Lanes Study and Metrolink’s Transit Oriented Development (TOD) Study. The new transit/rail infrastructure improvements were noted including L.A. Metro’s NextGen Bus Route redesign, the “K” light rail line connecting Los Angeles Airport, Redlands Rail Arrow service, the increased deployment of zero emission buses across the region, Metrolink’s Tier 4 locomotives and biodiesel as well as its SCORE improvements.

She reported that the region has a vast transit network with greater than 100 operators, passenger rail operators Amtrak and Metrolink, 33,485 miles of bus routes and three bus rapid transit corridors. Despite recent ridership declines, the transit/rail system remains a key component of the region’s plans for improving air quality and reducing greenhouse gas emissions. She noted bus ridership has not recovered from pre-pandemic levels while vehicle miles travelled (VMT) has more than recovered. Steve Fox, SCAG staff, continued the presentation stating that the 2024 plan includes updated efforts to meet federal and state mandates for air quality. The plan will also look at emerging technology such as Mobility as a Service, Mobility Hubs, Basic Mobility Wallet as well as dedicated lanes. He reviewed the regional planning framework, performance measures and timeline.

Jaimee Lederman, SCAG staff, presented the financial forecast for the plan. She noted a key element is to estimate funding needed over the 20-year plus life of the plan to implement recommended improvements and operate and maintain the transportation system. The plan also needs to be fiscally constrained. Operations and Maintenance analysis includes four categories: transit, passenger rail, the state highway system and regionally significant local streets and roads.

Camille Guiriba, SCAG staff, also reported on the plan’s technical methodology. She reviewed the methods to be used to develop the plan and achieve greenhouse gas reduction requirements.

4.2 **MOVE Culver City**

Diana Chang, Transportation and Mobility Manager, Culver City Transportation Department, shared the Move Culver City project. It was noted Culver City is a 5 square miles city with a population of 40,779 and employment of 57,952. The transit service area is approximately 33 square miles. The goals for the project include rethinking mobility, connecting community, and enhancing quality of life with a view toward creating multi modal mobility choices for the public. The elements of MOVE Culver City include bus and bike lanes, gateway mobility hubs, bus stop improvements, placemaking asphalt art,
expanded mobility services, technology improvements, bus and bike platforms and transportation on demand.

She noted the first corridor improvement was completed November 2021, a 1.3 mile treatment from the Metro E Line light rail station toward Downtown Culver City and the Culver City Arts District. Bus and bike lanes were added in both directions. Lower cost and temporary materials were used to catalyze long term changes quicker utilizing paint, delineators, signs and bus/bike platforms. The build out time was 13 months. She reviewed performance indicators noting that bus ridership increased 52% in the corridor and 26% systemwide. Pedestrian activity increased 18% and 23% in the downtown area. Bike activity increased 32%. Ms. Chang reviewed the elements of the project success including city council support, extensive public outreach, quick build at lower cost and design agreement. She noted MOVE Culver City is an effort to change the mobility paradigm using a holistic approach.

Joyce Rooney, Beach Cities Transit, asked if signal timing and prioritization was needed at intersections. Ms. Chang responded that bike and bus signals were added at some intersections but had to be reevaluated in some cases to improve mobility.

4.3 Antelope Valley Transit Authority (AVTA) Zero Emission Efforts

Martin Tompkins, Antelope Valley Transit Authority reported on their Zero Emission efforts. He noted AVTA is the first transit agency in North America to convert to 100% zero emission technology using 100% electric buses and transit vehicles. AVTA utilizes 44 (forty-foot) local transit busses, 13 (sixty-foot) articulated buses, 24 (forty-five foot) commuter vehicles and 8 (27 foot) micro-transit vehicles. Mr. Tompkins stated AVTA uses 89 electric charging stations for its fleet that covers a 1,200 square mile service area. Buses can travel 135 to 145 miles per charge while commuter vehicles attain 177 miles on a full charge. A backup generator was also acquired which can charge 15 buses. He noted operator training was also a key component to the conversion as well as unique software to monitor vehicle fuel usage and performance.

Mr. Tompkins reported in January 2023, AVTA will achieve 10 million electric miles traveled. Later in the year, it will receive 26 additional transit buses to replace existing vehicles and increase fleet size. Future plans include the purchase of 43 acres adjacent to its current facility to be used as a solar farm with battery storage to further reduce its carbon footprint.

4.4 Microtransit Update – OC Flex

Jack Garate, OCTA, provided an update on OC Flex microtransit service. He reported OC Flex began in 2018 as an on-demand service available in two zones. The service provides rides within the zone as well as to key hubs where riders can transfer to other transit services. It is a wheelchair accessible service that customers can access and pay for the trip using a mobile phone application, or schedule with the app and pay at boarding. The
service is free for OCTA and Metrolink pass holders and day passes are available. He noted the service is currently operating in one zone. One service area was eliminated due to low ridership. OCTA identified five goals for micro transit including providing public transit mobility in low-demand areas, reduce total operating and capital costs, reduce vehicle miles traveled and extend the reach of the OC Bus and Metrolink services. He reviewed key performance metrics. Mr. Garate noted upcoming service changes include new contractors and technology modifications as well as updated market research to evaluate rider feedback.

5.0 STAFF REPORT

5.1 Transit Target Setting Update
Priscilla Freduah-Agyemang, provided a staff report on transit target setting. She noted data was sought from transit providers and encouraged agencies to share information.

5.2 High Quality Transit Corridor (HQTC) and Major Transit Stop (MTS) Update
Steve Fox updated the group on the development of High-Quality Transit Corridors for Connect SoCal 2024.

5.3 2022 Transit and Intercity Rail Capital Program (TIRCP) Guidelines
Steve Fox, provided an update.

6.0 ADJOURNMENT

Joyce Rooney, Beach Cities Transit, adjourned the meeting at 11:58 a.m.
Regional Transit Technical Advisory Committee
2023 Agenda Look Ahead

The RTTAC meets quarterly on the fifth Wednesday of the month. The following is a tentative look-ahead to the proposed RTTAC agendas for 2023. It includes three standing items requested by the Chair and Vice Chair for:

1) Regulatory Compliance – items addressing compliance with MAP - 21 and FAST Act rulemakings, as well as state regulations including SB 375 or ARB fleet rules
2) Performance – items related to understanding why ridership has declined, and highlighting steps local agencies are taking to address these losses
3) Technology and Mobility Innovations – items related to transportation network companies, ITS, advanced technologies, and other mobility innovations

The discussion items below are proposed and speakers have not yet been contacted. Suggestions from RTTAC members are welcome.

Spring 2023 (March 29)
- Regulatory Compliance Standing Item
  - Connect SoCal 2024 updates
  - MAP 21 Regional Transit Safety Target Setting Update
- Performance Standing Item
  - TBD
- Technology and Mobility Innovations Standing Item
  - California Integration Travel Project (CAL-ITP) update
  - LADOT LAnow Program Update
- VCTC Transit Integration and Efficiency Study (TIES)
- Metro NextGen Study and Recovery Plan Update
- Metrolink Transit Oriented Development (TOD) Study

Summer 2023 (May 31)
- Regulatory Compliance Standing Item
  - Connect SoCal 2024 updates
  - MAP 21 Regional Transit Safety Target Setting Update
- Performance Standing Item
  - Transit Ridership Update
- Technology and Mobility Innovations Standing Item
  - Regional Microtransit update
    - OC Flex
    - Metro Micro
- SBCTA – Redlands Passenger Rail Project (Arrow) Update
- HQTC/A Mapping Update
Fall 2023 (August 30)

- Regulatory Compliance Standing Item
  - Connect SoCal 2024 updates
- Performance Standing Item
  - TBD
- Technology and Mobility Innovations Standing Item
  - MTS San Diego Bus on Shoulder Pilot Project
  - Regional Microtransit update
    - RTA Go Micro
- Transportation Network Company (TNC) Access for All Program Update
  - Metro
  - VCTC
- Metro Fare Capping Policy

Fall 2023 (November 29)

- Regulatory Compliance Standing Item
  - Connect SoCal 2024 updates
- Performance Standing Item
  - TBD
- Technology and Mobility Innovations Standing Item
  - Metro Mobility Wallet Pilot Update
  - VCTC Cal-ITP mobile ticketing and contactless payment initiative – update
- Metro I-405 corridor studies
- Metrolink Station Accessibility Study
To: Regional Transit Technical Advisory Committee (RTTAC)

From: Priscilla Freduah-Agyemang, Senior Regional Planner, 213-236-1973, agyemang@scag.ca.gov

Subject: Regional Transit Operators Forum

DISCUSSION:

This is to remind the RTTAC members of the SCAG regional transit operators’ forum, which was launched in 2021. The community forum is a platform for operators to discuss relevant topics related to transit in the region.

The forum is a discussion space for transit operators in the SCAG region to continue to dialogue and exchange information, share best practices and receive feedback on transit service planning, operations, emerging trends and issues, share ideas on future projects, as well as give operators the opportunity to continue to engage in meaningful discussions and peer-learning experiences on variety of transit topics.

The membership is made up of the RTTAC members and is limited to agency staff from public transportation providers in the SCAG region and designees. Other membership to the site will be by request only, pending approval by SCAG staff. Every RTTAC member should have received an email with the link to the community.

SCAG wants to ensure the best experience for all members and has included some guidelines for members of the site. The guidelines include community rules, individual and group discussion etiquette, and information on privacy.

Please contact Priscilla Freduah-Agyemang, agyemang@scag.ca.gov or 213-236-1973 with any questions related to the forum. We also welcome any comments/thoughts on how to improve the site.
RECOMMENDED ACTION:
Receive and File

STRATEGIC PLAN:
This item supports the following Strategic Plan Goal 3: Be the foremost data information hub for the region.

EXECUTIVE SUMMARY:
Since before the pandemic, SCAG staff has monitored transit system performance and reported it to the Regional Transit Technical Advisory Committee and in Connect SoCal. In response to last summer’s Transportation Committee member comments, staff committed to presenting quarterly transit ridership data for transit operators across the region. Though transit ridership has improved over the course of the past several years, it is still significantly less than it was prior to the pandemic. Overall, the region’s bus ridership levels are currently 27% below what they were pre-pandemic. For Metro, bus and rail ridership have now recovered at a similar level when comparing September 2019 to September 2022 (down by roughly 30%). The issue with rail ridership recovery extends to Metrolink whose ridership is currently 60% lower than it was pre-pandemic at this time. Though some transit operators anticipate that higher gas prices and worsening traffic congestion may motivate more ridership, driver shortages present an immediate challenge and many remain uncertain of what the longer term future normal may look like, particularly if remote working remains a norm for discretionary riders who tend to take rail.

BACKGROUND:
In response to past Transportation Committee member comments regarding transit ridership recovery, SCAG staff has prepared this update depicting the ongoing impacts of the COVID-19 pandemic on transit ridership. Figures 1 and 2 and Table 1 below reflect National Transit Database (NTD) information reported by urban Full Reporters. These graphics demonstrate that bus ridership levels have improved over the course of the past year, though they are nowhere near their pre-pandemic levels.
Figure 1. Monthly Bus Ridership Percentage Change by County (Year-Over-Year)

Most counties in the region have experienced gains in transit ridership over the course of the past year, with Imperial County experiencing the most significant increase (43%, comparing September 2021 to September 2022), while San Bernardino and Los Angeles Counties are reflecting low to modest gains (18% and 3% respectively, comparing September 2021 to September 2022). The Counties of Riverside, Ventura, and Orange fall somewhere in between, with transit ridership gains of 32%, 31%, and 27% respectively, comparing September 2021 to September 2022. Regional bus ridership overall increased 6%, comparing September 2021 to September 2022. Note: the September increases across the board are lower than they were for the preceding months. For example, bus ridership overall increased 17% comparing June 2021 to June 2022 and 27% comparing May 2021 to May 2022.

Table 1. Bus Ridership Change by Operator, Fiscal Year-Over-Year

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### Table of Bus Ridership Percentages

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Overall, these trends are better than where the region was in September 2020 when overall transit ridership was down by 51%. However, bus ridership is still nowhere near what it was pre-pandemic for all counties aside from Orange County as reflected in Figure 2 below. In Orange County, bus ridership is 8% below what it was pre-pandemic for the most recent month of data, September, which is a significant improvement from preceding months (e.g., Orange County bus ridership was...
20% below pre-pandemic levels in June). In Imperial, Ventura, and Los Angeles Counties, bus ridership remains 22%, 25%, and 28% below where it was pre-pandemic for the most recent month of data, September. And in Riverside and San Bernardino Counties, bus ridership is 39% and 46% below where it was pre-pandemic for the most recent month of data, September. Overall, the region’s bus ridership levels are currently 27% below what they were pre-pandemic.

**Figure 2. Monthly Bus Ridership Percentage Change by County (Compared to 2019)**


Data reported by Metro for its bus and rail systems through September 2022 are reflected in Figures 3 and 4 below. Metro bus ridership is up by only 1% in September 2022 compared to September 2021. Metro rail ridership is up by 8% for the same time period. Similar to other transit operators, Metro ridership increases were more significant in May when they were 20% (bus) and 24% (rail). While these trends are better than where the region was in September 2020, they are still well below pre-pandemic levels. For example, when comparing September 2019 to September 2022, bus ridership was down 27% and rail ridership was down 30%.

**Figure 3. Monthly Metro Ridership Percentage Change (Year-Over-Year)**
Source: Los Angeles County Metropolitan Transportation Authority, [https://isotp.metro.net/MetroRidership/Index.aspx](https://isotp.metro.net/MetroRidership/Index.aspx) as of September 2022.

**Figure 4.** Monthly Metro Ridership Percentage Change (Compared to 2019)
Metrolink commuter rail ridership is up by nearly 38% in September 2022 compared to September 2021. Though this represents an improvement, ridership is still 60% lower than it was pre-pandemic at this time (September 2022 compared to September 2019). Metrolink estimates that it has only recovered 40% of its pre-pandemic ridership. Pre-pandemic, 80% of Metrolink trips were commute trips. That figure has declined to just over half (52%) of total ridership. At the same time, the percentage of non-commute trips has more than doubled, from 20% pre-pandemic to currently 48%. Metrolink has noted that higher gas prices and worsening traffic congestion may continue to attract traditional commuters.¹

**American Public Transportation Association (APTA) Ridership Trends Dashboard**

APTA and the Transit app developed a dashboard to track demand for transit and estimate real-time changes in ridership. The dashboard compares the differences between pre-pandemic ridership, using ridership figures reported by agencies and estimated ridership during the pandemic. Estimated ridership values for each week are extrapolated values from the most recent quarterly actual ridership figures reported by transit agencies (currently June 2022). Estimated ridership values are modeled based on measures of Transit app usage to provide a current measure of demand for public transit. These estimates do not represent actual reported ridership counts from agencies. The dashboard supports comparisons by size, region, and agency and includes estimates for 17 of the largest transit agencies in the SCAG region. The dashboard is available at https://transitapp.com/apta.

**NEXT STEPS:**

Staff will continue to provide updates for ridership trends using the NTD’s monthly adjusted data release as the data becomes available.

**FISCAL IMPACT:**

None.

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¹ Metrolink 2022 Customer Survey Staff Report:
https://d2kbkoa27fdvtw.cloudfront.net/metrolink/97954c01397b5cd4e13a0002dbcc1ef20.pdf
To: Regional Transit Technical Advisory Committee (RTTAC)

From: Priscilla Freduah-Agyemang, Senior Regional Planner
213-236-1973, agyemang@scag.ca.gov

Subject: Federal Transit Administration (FTA) Fiscal Year (FY) 2023 Triennial Reviews, Section 5307 Program Requirements

DISCUSSION:
Staff is providing this report to the RTTAC regarding the Federal Transit Administration (FTA) Fiscal Year (FY) 2023 Triennial reviews, Section 5307 program requirements, directly related to SCAG’s planning and programming processes and/or documentation, to facilitate consistent responses among the region’s transit providers.

Staff previously reported to the RTTAC regarding the FTA compliance checklist used as part of the Section 5307 Triennial Review. FTA asks recipients that rely on SCAG’s Federal Transportation Improvement Program (FTIP) public participation process to review SCAG’s adopted Public Participation Plan (PPP) using the compliance checklist, to ensure that the PPP describes explicit procedures, strategies, and desired outcomes. To assist operators undergoing the FTA review, SCAG staff completed the compliance checklist using SCAG’s adopted 2018 PPP, and provided the checklist to the RTTAC at its October 31, 2018, meeting.

Subsequently, on April 7, 2022, SCAG’s Regional Council adopted the new 2022 PPP, available at https://scag.ca.gov/community-participation-public-participation-plan. Staff has updated the compliance checklist to reflect the 2022 PPP and has attached the checklist to this report.

BACKGROUND:
As mandated by Congress in 1982, the FTA conducts triennial reviews of recipients of Urbanized Area Formula Program funds to examine grantee performance and adherence to statutory and administrative requirements and policies. FTA’s Triennial Review Recipient Information Request (RIR) for FY 2023 includes areas of review which directly relate to SCAG planning and programming processes and/or documentation—specifically, 5. Section 5307 Program Requirements, which are as follows:
5. SECTION 5307 PROGRAM REQUIREMENTS, BASIC REQUIREMENT: The recipient must participate in the transportation planning process in accordance with FTA requirements and the metropolitan and statewide planning regulations. Recipients shall develop, publish, afford an opportunity for a public hearing on, and submit for approval, a program of projects (POP). Recipients are expected to have a written, locally developed process for soliciting and considering public comment before raising a fare or carrying out a major transportation service reduction. For fixed-route service supported with Section 5307 assistance, fares charged to seniors, persons with disabilities or an individual presenting a Medicare card during off peak hours will not be more than one half the peak hour fares.

Question b in the RIR directly relates to SCAG’s planning and programming process and/or documentation.

The FTA allows Section 5307 recipients to rely on SCAG’s adopted public participation requirements for the FTIP, in lieu of the process required in the development of the Program of Projects (POP), if the recipient has coordinated with SCAG and ensured that the public is aware that the FTIP development process is being used to satisfy the POP public participation requirements.

To assist operators relying on SCAG’s adopted public participation plan requirements, SCAG staff has completed the compliance checklist and provided it as an attachment to this report. The compliance checklist is taken from page 19-7 of the FTA’s FY 2023 Comprehensive Review Contractors Manual. The references provided in the checklist are to SCAG’s newly adopted 2022 PPP.

SCAG’s latest 2023 FTIP was adopted on December 16, 2022, and is available at the following: 2023 Adopted FTIP. The FTIP notices are available here: 2023 FTIP Notices, see pages 377 – 402. This section includes public hearing flyers in various languages that note dates, time, locations and public hearing notices, certification that the notices were published in several newspapers, meeting minutes from the FTIP hearings and a list of public libraries that have been issued copies of the 2023 FTIP.

ATTACHMENT:
Updated Compliance Checklist
### DETERMINING COMPLIANCE
For recipients that rely on the MPO’s Public Participation Plan (PPP): Obtain and review the MPO’s adopted public participation plan to ensure it describes explicit procedures, strategies, and desired outcomes for:

**Note:** All page references are to the adopted SCAG 2022 Public Participation Plan at: https://scag.ca.gov/post/scag-2022-public-participation-plan

<table>
<thead>
<tr>
<th>Element</th>
<th>Addressed in Plan (page #)</th>
</tr>
</thead>
<tbody>
<tr>
<td>time for public review and comment at key decision points, including a</td>
<td></td>
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<tr>
<td>reasonable opportunity to comment on the proposed metropolitan</td>
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<tr>
<td>transportation plan and the TIP</td>
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<tr>
<td>Provide timely notice and reasonable access to information about</td>
<td><strong>Methods</strong>, pp. 8-15; <strong>Appendix A</strong>, pp. 20-27; and <strong>Appendix B</strong>, pp. 31-34</td>
</tr>
<tr>
<td>transportation issues and processes</td>
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<tr>
<td>Employ visualization techniques to describe metropolitan</td>
<td><strong>Overview</strong>, pp. 5-6; <strong>Methods</strong>, p. 9; and <strong>Appendix A</strong>, p. 20-21</td>
</tr>
<tr>
<td>transportation plans and TIPs</td>
<td></td>
</tr>
<tr>
<td>Make public information (technical information and meeting notices)</td>
<td><strong>Methods</strong>, pp. 8-15; <strong>Evaluation</strong>, pp. 16-19; <strong>Appendix A</strong>, pp. 20-21 and 24-27; and <strong>Appendix B</strong>, pp. 29 and 32-35</td>
</tr>
<tr>
<td>available in electronically accessible formats and means, such as the</td>
<td></td>
</tr>
<tr>
<td>web</td>
<td></td>
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<tr>
<td>Hold any public meetings at convenient and accessible locations and</td>
<td><strong>Methods</strong>, pp. 8-11; <strong>Appendix A</strong>, pp. 21 and 24-26; and <strong>Appendix B</strong>, pp. 30-35</td>
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<tr>
<td>times</td>
<td></td>
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<tr>
<td>received during the development of the metropolitan transportation plan</td>
<td></td>
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<tr>
<td>and the TIP</td>
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<td>Seek out and consider the needs of those traditionally</td>
<td><strong>Overview</strong>, pp. 5-7; <strong>Methods</strong>, pp. 8 and 13; <strong>Evaluation</strong>, p. 17; <strong>Appendix A</strong>, pp. 21-26; and <strong>Appendix B</strong>, pp. 28 and 35-36</td>
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<tr>
<td>underserved by existing transportation systems, such as low-income and</td>
<td></td>
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<tr>
<td>minority households, who may face challenges accessing employment and</td>
<td></td>
</tr>
<tr>
<td>other services</td>
<td></td>
</tr>
<tr>
<td>Provide an additional opportunity for public comment, if the final</td>
<td><strong>Appendix A</strong>, pp. 21-22</td>
</tr>
<tr>
<td>metropolitan transportation plan or TIP differs significantly from the</td>
<td></td>
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<tr>
<td>version that was made available for public comment by the MPO and raises</td>
<td></td>
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<tr>
<td>new material issues that interested parties could not reasonably have</td>
<td></td>
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<tr>
<td>foreseen from the public involvement efforts</td>
<td></td>
</tr>
<tr>
<td>Coordinate with the statewide transportation planning public involvement</td>
<td><strong>Overview</strong>, pp. 5-6; <strong>Appendix A</strong>, pp. 20-22 and 24-27; and <strong>Appendix B</strong>, pp. 28-29 and 32-34</td>
</tr>
<tr>
<td>and consultation processes</td>
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<tr>
<td>Periodically review the effectiveness of the procedures and strategies</td>
<td><strong>Methods</strong>, pp. 12-13; <strong>Evaluation</strong>, pp. 16-18; and <strong>Appendix A</strong>, p. 21</td>
</tr>
<tr>
<td>contained in the participation plan to ensure a full and open participation process</td>
<td></td>
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</tbody>
</table>

**NOTE:** Follow-up with the recipient if unable to locate the above items in the PPP.
To: Regional Transit Technical Advisory Committee (RTTAC)

From: Krista Yost, Assistant Regional Planner, 213-630-1503, yost@scag.ca.gov

Subject: Mobile Source Air Pollution Reduction Review Committee (MSRC), Request for Proposals (RFP) for Microtransit Services Program

SUMMARY:


On December 15, 2022, the MSRC approved an RFP for microtransit services: technology-enabled, shared transportation that fills the void between traditional “fixed route” transit and “ride hailing” technology. The purpose of the Microtransit Services Program is to provide funding for microtransit projects that propose a new microtransit service within a specified geographic area, particularly in an area that lacks adequate transportation options and/or suffers disproportionately from air pollution, or the expansion of an existing microtransit service targeting a new service area, new riders, and additional reductions in automobile vehicle miles traveled. The deadline for proposals is 4:00 pm on Friday, March 24, 2023.
SUMMARY:

From: https://www.metro.net/about/visionary-seed-fund/

Measure M allocates $20 million over 40 years for Metro’s Visionary Seed Fund (VSF) and the Measure M Final Guidelines give Metro authority to make $1.5 million available every three years through a competitive grant process to fund projects that “help spark and develop innovative mobility concepts in Los Angeles County.” Metro anticipates funding pilot projects to test and assess ridership strategies that demonstrate through measurable outcomes how to grow ridership to pre-COVID levels and beyond. Ideas include improving first/last mile connections, addressing women’s transportation needs, easing payment and navigation, and other creative proposals that will assist the region in restoring and growing ridership.

Metro anticipates releasing the first VSF call for proposals in February 2023 and hosting a public forum in March to answer questions and help ‘match’ innovators with public transit operators.
January 18, 2023

The Honorable Nancy Skinner
Chair, Senate Budget and Fiscal Review Committee
California State Senate

The Honorable Phil Ting
Chair, Assembly Committee on Budget
California State Assembly

Dear Chair Skinner & Chair Ting,

As you begin budget negotiations this year, the undersigned organizations request your support to help the state’s public transit systems avoid looming cuts to critical transit service that millions of Californians rely upon and that is foundational to our state’s climate strategy. These potential cuts reflect the lingering impact of the COVID-19 pandemic, which has devastated transit operating budgets as a result of diminished ridership as well as higher costs arising from inflation. While the Governor’s proposed budget for FY 2023-24 does not specifically address this need and in fact proposes $2 billion in reductions to public transit capital that the Legislature approved last year, we look forward to engaging with your budget subcommittees to ensure that this year’s final budget bill provides additional transit operating assistance to sustain critical transit service riders depend upon and fund proven strategies to attract new riders and help lessen financial challenges in the future.

A Strong Public Transit System is Vital to Creating an Equitable, Economically Vibrant and Climate Friendly Future

Based on 2021 U.S. Census data, almost 60 percent of California residents who commute via public transit have a household income below $35,000. Over half a million California households own no vehicle and count on public transit for their daily needs, including access to K-12 education and college. Public transit is an economic lifeline for these residents, especially seniors and persons with disabilities. Yet residents of all income levels also depend on transit to access their jobs and maintaining the viability of the transit systems is essential for the future of the state’s economy and quality of life. Public transit also supports good-paying jobs, employing over 31,000 California workers statewide in FY 2021.

When it comes to climate change, California prides itself on being a global leader. The state has taken a two-pronged strategy to reduce transportation-related emissions – the largest of any
sector – by decarbonizing the vehicle fleet, while also encouraging less driving through a combination of investments in transit and other modes plus a suite of policies to encourage more infill, transit-oriented development. Policies aimed at reducing vehicle miles traveled (VMT) depend on a reliable and convenient public transit system; they have little chance of success if transit agencies across the state have to make severe cuts to service.

Today, about 65 million trips/month are taken on transit in California, reducing VMT by hundreds of millions each year. To meet the state’s carbon neutrality goals by 2045, however, significantly more people will need to choose transit instead of driving. To encourage this shift, California Air Resources Board has urged the state to support efforts to double local transit coverage and service frequencies by 2030, recognizing that both vehicle decarbonization and less driving are needed to achieve our state’s bold greenhouse reduction targets. However, without a multi-year commitment of state funds to help sustain transit and put it on a path to attracting millions of new riders, the state’s climate strategy is in serious jeopardy.

**Bay Area Operators Face Significant Looming Budget Shortfalls**

We are at an unprecedented moment, with the survival of transit as we know it at risk. The rise of remote work, growing costs due to inflation, and apprehension to ride transit due to health concerns has led to a growing fiscal cliff on the horizon. Additionally, the transit sector is severely understaffed (with some agencies reporting as high as 30 percent of jobs unfilled for some positions), limiting service agencies can put on the street and placing upward pressure on salaries and benefits as agencies work to retain and attract workers.

Based on current ridership, service levels, and cost trends, Bay Area operators forecast annual budget shortfalls in the tens of millions of dollars in FY 2023-24, growing to hundreds of millions of dollars beginning in FY 2024-25 and thereafter. Funding gaps of this magnitude cannot be addressed through fare increases or service cuts; doing so would lead to service of such poor quality that it would erode transit’s climate benefits and cut off even basic access to critical destinations for those who rely on it most. For instance, to achieve budgetary savings in the range of 20-40 percent, the Bay Area Rapid Transit District (BART) would need to cut service by 65-85 percent, eliminating access to jobs, schools, grocery stores, and other essential services for many current riders. This, in turn, would further reduce passengers, leading to further cuts. We cannot let this doomsday scenario happen.

Fortunately, in the medium and long term, there is reason for optimism. While statewide ridership is around 60 percent of its 2019 levels and Bay Area ridership around 53 percent, ridership is steadily growing. In October 2022, statewide ridership was up 14 percent compared to a year before and in the Bay Area up by 34 percent. Bay Area transit operators are working more closely than ever, together with the Metropolitan Transportation Commission (MTC), to create a better, more seamless transit experience across the region. Plans are beginning for a future regional transportation measure to follow the regional housing measure planned for 2024. A unified mapping and wayfinding system is being designed to make transit easier to navigate. The first all-agency transit pass using the Clipper® card is being piloted at key colleges and affordable housing sites. Operators across the state are likewise deploying technology to shift to mobile fare payment and updating their routes and frequencies to better serve existing riders while also attracting more of them.
Honor Transit Commitments from FY 2022-23 Budget

Under your leadership, California has made historic investments in our transit capital infrastructure, supporting critical rail and bus expansion and the zero-emission transit transition. The historic transit investment made in last year’s Transportation Package includes $4 billion over the next two years for further transit and intercity rail capital investments, yet Governor Newsom proposes to cut this in half, reducing the amount to $1 billion next year and $500 million for the following two years. Doing so would put at risk the funding plans for high priority projects in the Bay Area, several of which are already under construction or poised to receive billions of dollars in highly competitive federal funds.

Request: Provide New Multi-Year Funding for Transit Operating Assistance

To address the operating challenges, we are seeking a new multi-year operations funding commitment on a limited term basis to assist California’s transit systems as they recover from the pandemic and develop long-term funding plans, as necessary. The funding picture for each transit system is unique and there is no one-size-fits-all path to financial sustainability. While some agencies need assistance to stave off service cuts next year, other agencies face deficits in the hundreds of millions of dollars starting in FY 2024-25 or FY 2025-26. Others may not face near-term service cuts but have priorities that, if funded, could attract significantly more riders (advancing the state’s climate goals) and help avoid budgetary challenges down the road. This month, we are working in coordination with partners statewide, including the California Transit Association, to refine our assessment of the funding need and aim to follow up with a more detailed proposal in February. In addition, we are seeking an extension of the statutory relief previously provided to transit agencies through FY 2024-25.

Californians demand meaningful action on climate change and want their state representatives to ensure transit is not just a viable option, but an attractive one to get to work, school, health care, shopping, dining, entertainment and more. We know that you share these goals and look forward to working with you to ensure that public transit both survives and thrives in California. Please contact Rebecca Long, MTC Director of Legislation and Public Affairs, at rlong@bayareametro.gov or 510-504-7914 with any questions.

Sincerely,

Therese W. McMillan
Executive Director, MTC

Robert Powers
General Manager, BART

Jeff Tumlin
Director of Transportation, San Francisco Municipal Transportation Agency

Mike Hursh
General Manager, AC Transit
Chair Skinner and Chair Ting
1/18/2023
Page 4 of 7

Carolyn Gonot
General Manager, Santa Clara VTA

April Chan
General Manager/CEO/Executive Director,
SamTrans/San Mateo County Transportation Authority

Michelle Bouchard
Acting Executive Director, Caltrain

Dennis Mulligan
General Manager, Golden Gate Bridge,
Highway and Transportation District

Steve Adams
Transit Manager, Union City Transit

Jason Baker
Senior Vice President,
Silicon Valley Leadership Group

Daniel Barad
Associate Director, Sierra Club

Rashidi Barnes
Chief Executive Officer, Tri Delta Transit

Tilly Chang
Executive Director, San Francisco County Transportation Authority

Sean Charpentier
Executive Director, San Mateo County
C/CAG

Bill Churchill
General Manager, County Connection

Eddy Cumins
General Manager, SMART

Zack Deutsch-Gross
Policy Director, Transform

Tim Haile
Executive Director, CCTA

Jared Hall
Transit Manager, Petaluma Transit

Daryl Halls
Executive Director, Solano Transportation Authority (Solano Express)
Caro Jauregui  
Co-Executive Director, Cal Walks

Beth Kranda  
Executive Director, Solano County Transit

Tess Lengyel  
Executive Director, Alameda County Transportation Commission

Eli Lipman  
Executive Director, Move LA

Carolina Martinez  
Climate Justice Director, Environmental Health Coalition

Kate Miller  
Executive Director, Napa Valley Transportation Authority

Sofia Rafikova  
Policy Advocate, California Coalition for Clean Air

Anne Richman  
Executive Director, Transportation Authority of Marin

Kevin Sheridan  
Executive Director, Tri-Valley – San Joaquin Valley Regional Rail Authority

Zoe Siegel  
Director of Climate Resilience, Greenbelt Alliance

Suzanne Smith  
Executive Director, Sonoma County Transportation Authority

Jennifer Thompson, Executive Director  
Sustainable Silicon Valley

Rob Thompson  
General Manager, Western Contra Costa Transit Authority

Adam Van De Water  
Executive Director, Transbay Joint Powers Authority

Nancy Whelan  
General Manager, Marin Transit

Jim Wunderman  
President & CEO, Bay Area Council
Zak Accuardi  
Transportation Advocate, NRDC

Arturo E. Aguilar  
Chairman, California Conference Board  
Amalgamated Transit Union

Shiloh Ballard  
Executive Director,  
Silicon Valley Bike Coalition

Eugene Bradley  
Founder, Silicon Valley Transit Users

Rita Clement  
Transportation Co-Leader,  
San Diego 350

David Diaz  
Executive Director,  
Active San Gabriel Valley

Christine Fitzgerald  
Community Advocate, Silicon Valley  
Independent Living Center

Sara Greenwald  
Transportation Committee Member,  
350 Bay Area Transportation Committee

Ian Griffiths  
Co-director, Seamless Bay Area

Josh Hawn  
President, Common Ground California

Lavie Kakol  
Democratic Socialists of America,  
San Francisco

Adina Levin  
Executive Director, Friends of Caltrain

Bryn Lindblad  
Deputy Director, Climate Resolve

Jerry Maldonado  
Vice President of Programs, PolicyLink

Richard Marcantonio  
Managing Attorney, Public Advocates

Emma Martin  
Community Engagement Program Manager,  
Center for Independent Living

Kristina Pappas  
President, SF League of Conservation Voters

Jesse O'Sullivan  
Policy Counsel, Circulate SD

Jared Sanchez  
Senior Policy Advocate, CalBike

Arnold Sowell, Jr.  
Executive Director, NextGen California

Laura Tolkoff  
Transportation Policy Director, SPUR

Cheryl Weiden  
Steering Committee Member  
350 Silicon Valley

Sam Wilkins  
California State Conference Chairperson  
Transport Workers Union of America,  
AFL-CIO

Ellen Wu  
Executive Director, Urban Habitat
cc: Bay Area Legislative Delegation
    The Honorable Toni Atkins, Senate President Pro Tempore
    The Honorable Anthony Rendon, Assembly Speaker
    The Honorable Lena Gonzalez, Senate Transportation Committee Chair
    The Honorable Laura Friedman, Assembly Transportation Committee Chair
    The Honorable Toks Omishakin, Secretary, California State Transportation Agency
Transit Performance Monitoring and Target Setting
Regional Transit Technical Advisory Committee

January 30, 2023

WWW.SCAG.CA.GOV
Agenda

1. Background
2. Progress to date
3. Draft 2022 Regional Targets
4. Approaches for Future Target Scenarios
5. Next Steps
Background

MAP-21 (2012)

TAM Rule (2016)
Create TAM Plans
Set TAM targets
Work with MPO on regional targets

PTASP Rule (2018)
Create PTASP
Set safety targets
Work with MPO on regional targets

MPO Planning Rule (2016)
Set regional targets in RTP
Monitor progress in FTIP
**Project Timeline**

**Primary Analysis**

**Fall 2022**
- Engage operators
- Collect TAM and Safety Data

**Winter 22/23**
- Develop Regional Targets

**Spring 2023**
- Engage Stakeholders
- Initial Targets Ready

**Key Deadlines**
- April 2023 – Initial Targets
- June 2023 – Draft Targets for Draft RTP/SCS
- April 2024 – Final Targets for RTP/SCS

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Spring 2023
- Draft RTP/SCS

---

April 2024
- Final Targets for RTP/SCS

---
2022 Target Setting – Progress

• Completed/Underway:
  • Met with transit operators and collected data/reviewed targets
  • Compiling data and calculating draft 2022 targets
  • Engaged other stakeholders
  • Interviewed peer MPOs

• Next Steps:
  • Scenarios for future targets
  • Feedback from RTTAC and CTCs on approach
## Federally Required TAM Targets

<table>
<thead>
<tr>
<th>Category</th>
<th>Performance Target</th>
</tr>
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<tbody>
<tr>
<td><strong>Rolling Stock</strong> <em>(Revenue Vehicles)</em></td>
<td>1) Percentage of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)  &lt;br&gt;   - <em>One target for each vehicle type</em></td>
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<tr>
<td><strong>Infrastructure</strong></td>
<td>2) Percentage of guideway track miles with performance restrictions by class  &lt;br&gt;   - <em>One target for each rail mode</em></td>
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<tr>
<td><strong>Facility</strong></td>
<td>3) Percentage of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) scale  &lt;br&gt;   - <em>One target for each facility type (Maintenance/Administration, Passenger/Parking)</em></td>
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<tr>
<td><strong>Equipment (Service Vehicles)</strong></td>
<td>4) Percentage of service vehicles that have met or exceeded their ULB  &lt;br&gt;   - <em>One target for each vehicle type</em></td>
</tr>
</tbody>
</table>
2022 Draft TAM Targets – Rolling Stock

Regional Targets Weighted Based on the Operator Targets and Number of Assets

<table>
<thead>
<tr>
<th>County</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>3-Yr Average</th>
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<tr>
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<td>0.0%</td>
<td>0.0%</td>
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<tr>
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<td>11.7%</td>
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<td>10.4%</td>
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</tr>
<tr>
<td>Riverside</td>
<td>3.8%</td>
<td>2.0%</td>
<td>2.3%</td>
<td>11.8%</td>
<td>5.4%</td>
</tr>
<tr>
<td>San Bernardino</td>
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<td>6.3%</td>
<td>15.6%</td>
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<tr>
<td>Metrolink</td>
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<td>0.5%</td>
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<tr>
<td><strong>SCAG Region</strong></td>
<td><strong>14.8%</strong></td>
<td><strong>17.2%</strong></td>
<td><strong>22.3%</strong></td>
<td><strong>14.4%</strong></td>
<td><strong>18.0%</strong></td>
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</table>

Preliminary targets will change as some agencies still to provide data and 2022 weights are based on 2020 quantities.
## 2022 Draft TAM Targets - Service Vehicles

### Regional Targets Weighted Based on the Operator Targets and Number of Assets

<table>
<thead>
<tr>
<th>County</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>3-Yr Average</th>
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<tr>
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<tr>
<td>Riverside</td>
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<tr>
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<td>Metrolink</td>
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<td>59.7%</td>
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<td><strong>SCAG Region</strong></td>
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<td><strong>33.3%</strong></td>
<td><strong>32.3%</strong></td>
<td><strong>36.5%</strong></td>
<td><strong>34.0%</strong></td>
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Percent of vehicles past useful life

Preliminary targets will change as some agencies still to provide data and 2022 weights are based on 2020 quantities.

Preliminary numbers. Still waiting to confirm 2022 targets from several agencies and are using 2020 asset quantities as a placeholder as we compile 2022 asset quantities.
## 2022 Draft TAM Targets - Facilities

### Preliminary numbers. Still waiting to confirm 2022 targets from several agencies and are using 2020 asset quantities as a placeholder as we compile 2022 asset quantities.

### Regional Targets Weighted Based on the Operator Targets and Number of Assets

<table>
<thead>
<tr>
<th>County</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>3-Yr Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperial</td>
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<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
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</tr>
<tr>
<td>Los Angeles</td>
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<tr>
<td>Orange</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Riverside</td>
<td>22.1%</td>
<td>11.2%</td>
<td>12.7%</td>
<td>0.0%</td>
<td>8.0%</td>
</tr>
<tr>
<td>San Bernardino</td>
<td>26.3%</td>
<td>6.4%</td>
<td>0.0%</td>
<td>26.1%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Ventura</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Metrolink</td>
<td>33.3%</td>
<td>0.0%</td>
<td>20.0%</td>
<td>20.0%</td>
<td>13.3%</td>
</tr>
<tr>
<td><strong>SCAG Region</strong></td>
<td><strong>10.3%</strong></td>
<td><strong>2.7%</strong></td>
<td><strong>2.6%</strong></td>
<td><strong>1.9%</strong></td>
<td><strong>2.4%</strong></td>
</tr>
</tbody>
</table>

**Percent of facilities rated <3 on TERM scale**

*Preliminary targets will change as some agencies still to provide data and 2022 weights are based on 2020 quantities*
## 2022 Draft TAM Targets – Infrastructure

**Regional Targets Weighted Based on the Operator Targets and Number of Assets**

<table>
<thead>
<tr>
<th>County</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>3-Yr Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles</td>
<td>1.5%</td>
<td>1.8%</td>
<td>2.0%</td>
<td>2.3%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Metrolink</td>
<td>15.0%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>1.5%</td>
<td>1.8%</td>
</tr>
<tr>
<td>SCAG Region</td>
<td>11.5%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>1.7%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Preliminary numbers. Still waiting to confirm 2022 targets from several agencies and are using 2020 asset quantities as a placeholder as we compile 2022 asset quantities.

*Percent of track segments with speed restrictions*
## Federally Required Safety Targets

<table>
<thead>
<tr>
<th>Category</th>
<th>Performance Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fatalities</strong></td>
<td>1) Total fatalities</td>
</tr>
<tr>
<td></td>
<td>2) Fatality rate by mode (per vehicle revenue mile (VRM))</td>
</tr>
<tr>
<td><strong>Injuries</strong></td>
<td>3) Total injuries</td>
</tr>
<tr>
<td></td>
<td>4) Injury rate by mode (per VRM)</td>
</tr>
<tr>
<td><strong>Safety Events</strong></td>
<td>5) Total safety events</td>
</tr>
<tr>
<td></td>
<td>6) Safety event rate by mode (per VRM)</td>
</tr>
<tr>
<td><strong>System Reliability</strong></td>
<td>7) Major mechanical failure rate by mode (per VRM)</td>
</tr>
</tbody>
</table>
### 2022 Draft Safety Targets – Fixed Route Bus

#### Regional Targets Weighted Based on the Operator Targets and Vehicle Revenue Miles

<table>
<thead>
<tr>
<th>County</th>
<th>Fatalities Target</th>
<th>Fatality Rate (per 100k VRM)</th>
<th>Injuries Target</th>
<th>Injuries Rate (per 100k VRM)</th>
<th>Safety Events Target</th>
<th>Safety Events Rate (per 100k VRM)</th>
<th>System Reliability (VRM/ failures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperial</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>8.0</td>
<td>0.24</td>
<td>102,868</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>0</td>
<td>0</td>
<td>191.7</td>
<td>0.6</td>
<td>40.5</td>
<td>0.34</td>
<td>10,843</td>
</tr>
<tr>
<td>Orange</td>
<td>0</td>
<td>0</td>
<td>80.2</td>
<td>0.6</td>
<td>131.7</td>
<td>1.02</td>
<td>14,912</td>
</tr>
<tr>
<td>Riverside</td>
<td>0.14</td>
<td>0</td>
<td>8.3</td>
<td>0.2</td>
<td>8.4</td>
<td>0.23</td>
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<tr>
<td>San Bernardino</td>
<td>0</td>
<td>0</td>
<td>16.2</td>
<td>0.1</td>
<td>16.2</td>
<td>0.10</td>
<td>17,070</td>
</tr>
<tr>
<td>Ventura</td>
<td>0.0</td>
<td>0</td>
<td>2.1</td>
<td>0.2</td>
<td>5.5</td>
<td>0.17</td>
<td>24,045</td>
</tr>
</tbody>
</table>

*Preliminary targets will change as some agencies still to provide data*
# 2022 Draft Safety Targets – Demand Response

Regional Targets Weighted Based on the Operator Targets and Vehicle Revenue Miles

<table>
<thead>
<tr>
<th>County</th>
<th>Fatalities Target</th>
<th>Fatality Rate (per 100k VRM)</th>
<th>Injuries Target</th>
<th>Injuries Rate (per 100k VRM)</th>
<th>Safety Events Target</th>
<th>Safety Events Rate (per 100k VRM)</th>
<th>System Reliability (VRM/ failures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperial</td>
<td>0</td>
<td>0</td>
<td>3.5</td>
<td>0</td>
<td>5</td>
<td>0.20</td>
<td>36,595</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>0</td>
<td>0</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.22</td>
<td>48,920</td>
</tr>
<tr>
<td>Orange</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>14,823</td>
</tr>
<tr>
<td>Riverside</td>
<td>0</td>
<td>0</td>
<td>3.1</td>
<td>0.1</td>
<td>1.5</td>
<td>0.21</td>
<td>7,120</td>
</tr>
<tr>
<td>San Bernardino</td>
<td>0</td>
<td>0</td>
<td>1.4</td>
<td>0.1</td>
<td>1.4</td>
<td>0.09</td>
<td>62,837</td>
</tr>
<tr>
<td>Ventura</td>
<td>0</td>
<td>0</td>
<td>2.2</td>
<td>0.3</td>
<td>3.2</td>
<td>0.23</td>
<td>41,899</td>
</tr>
</tbody>
</table>

*Preliminary targets will change as some agencies still to provide data*
Currently there is only one rail operator with safety targets for FTA. Metrolink falls under different safety regulations with the FRA.
Proposed TAM Scenarios

**Baseline Scenario**

To maintain current target, how much **funding** is needed?

**Constrained Scenario**

Based on anticipated funding, what **target** can we achieve?

**Unconstrained Scenario**

What is the total **funding** needed to replace all assets past their useful life?

This process was used for 2020 Connect SoCal regional TAM targets but SCAG would like feedback from RTTAC and CTCs.
Potential Safety Target Scenarios

What **change per year** is necessary to hit proposed aspirational target?

What **future target** would result from a consistent, incremental change?

This is a new approach and SCAG would like feedback from RTTAC and CTCs
Next Steps

• Soliciting feedback on approaches discussed today
• CTC meetings to be scheduled in February
• Develop future target scenarios
• Draft future targets will be ready for next RTTAC meeting
RTTAC and CTC Feedback

Provide feedback today or via e-mail by 2/15/23

• Data Collection
  • If we are still waiting on your data – please update ASAP

• Draft targets
  • SCAG is proposing moving to 3-year rolling average for baseline targets. Do you agree?

• Future targets
  • Do you have any feedback on the TAM or Safety scenarios?

Other comments or questions?
THANK YOU!

Jon Overman
Cambridge Systematics
joverman@camsys.com

Priscilla Freduah-Agyemang
SCAG
agyemang@scag.ca.gov
FOOTHILL TRANSIT’S
Zero Emissions Bus Journey

Roland Cordero | Director of Maintenance and Vehicle Technology
rcordero@foothilltrrttransit.org
ABOUT FOOTHILL TRANSIT

- Pomona and San Gabriel Valleys (Eastern Los Angeles County)
- 327 sq. mile service area, 1.5m service pop.
- 30 local and 6 express routes
- 337 CNG buses, 33 electric buses
- Innovation is part of our core mission
Los Angeles Basin Air Quality

- Poor air quality
- Large population base
- On-shore breeze pushes air inland
Foothill Transit is proud to introduce the world’s first heavy duty, fast charge, zero emissions electric bus.

Launching in Pomona, California September 3, 2010.
## ELECTRIC BUS PROGRAM MILESTONES

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>First three 35-ft buses and fast charge station deployed</td>
</tr>
<tr>
<td>2014</td>
<td>12 more 35-ft fast charge buses deployed</td>
</tr>
<tr>
<td>2016</td>
<td>Two 40-ft fast charge buses deployed</td>
</tr>
<tr>
<td>2017</td>
<td>14 extended range 40-ft buses and charging facilities deployed</td>
</tr>
<tr>
<td>2018</td>
<td>Three extended range 35-ft buses deployed</td>
</tr>
<tr>
<td>2020</td>
<td>Two Electric Double-deckers deployed</td>
</tr>
<tr>
<td>2022</td>
<td>2022, 33 Hydrogen Fuel Cell Buses deployed</td>
</tr>
</tbody>
</table>
IN-ROUTE CHARGERS

Pomona Transit Center

• Two high power fast-charge station with two overhead chargers, sufficient to serve all buses

• Over 200,000 charge cycles to-date, and 2.1 million electric bus miles

• Located at Pomona Transit Center, a central hub with off-street flexibility, safety and security
IN-ROUTE CHARGERS

Azusa Intermodal Transit Center - AITC

- Two overhead fast charges
- Supports extended range buses
- 14 Extended range buses
IN-DEPOT CHARGERS
BEB EXPERIENCE

- Limited Range
- Demanding charging requirements
- Operational impacts
- High cost of in-route chargers
- High cost of technology parts
BEB LESSONS LEARNED

- $120 M to electrify entire fleet
- Not one to one bus replacement
- Buses will be charged when returning to the depot.
  - Overnight charging will be the bottleneck in the future
  - Charged buses will move to parking area and another bus will be charged
- Only electrify 60% of bus routes
THERE ARE TWO ROADS TO ZERO

- 33 hydrogen fuel cell buses being delivered
- Fueling infrastructure under construction
THERE ARE TWO ROADS TO ZERO
WHY FUEL CELL?

- Vehicle Range
- System Resiliency
- Infrastructure Cost
- Vehicle Fueling Process
FUNDING IS CRITICAL

- $429,000 differential between fuel cell and CNG buses
- Hydrogen fuel is more than double the cost of CNG
- Electric charging infrastructure is very costly and impacts operations
- Zero Emissions can’t come at the cost of service cuts!
COLLABORATE, SHARE, AND SUPPORT

- California Transit Association’s Zero Emissions Vehicle Taskforce
- Zero Emission Bus Resource Alliance
- Hydrogen Fuel Cell Bus Coalition
- California Air Resources Board
Thank you!

Roland Cordero | Director of Maintenance and Vehicle Technology
rcordero@foothilltransit.org
Priscilla Freduah-Agyemang
Senior Regional Planner
Regional Transit Technical Advisory Committee (RTTAC)
January 30, 2023
Background on RTP/SCS
What kind of region do we want to be by 2050?

A healthy, accessible, and connected region for a more resilient and equitable future.

Simplified Goals

• Mobility, Communities, Environment, and Economy
• Further defined through sub-goals
Development Update
Connect SoCal 2024

Foundations and Frameworks

Data Collection and Policy Development

Outreach and Analysis

Plan Adoption

COMPLETED MILESTONES

✓ Draft Goals & Vision
✓ Draft Performance Measures
✓ Local Data Exchange
✓ Project List

MILESTONES FOR 2023

▪ Subcommittee Recommendations
▪ Public Outreach and Engagement
▪ Plan Modeling, Analysis, Writing
▪ Draft Release in Fall 2023
Regional Mobility Hubs Strategy
What are Mobility Hubs?

• Locations with a range of transportation options that connect and interact with each other
• May include public transit, active transportation, and shared vehicles
• Should be equipped with infrastructure that grants internet

GoActiveLB Hub (Long Beach)
What are Mobility Hubs?

- Not typically considered independently of land use
  - Potential for nesting within existing concepts – Livable Corridors, Neighborhood Mobility Areas
- Differing naming conventions and definitions
- Differing typologies

Union Station (Los Angeles)
Why Mobility Hubs?

• Support safe and convenient transfer between transportation modes
• Improve experience by supplying dynamic, real-time travel and location-based info
• Provide travel options, esp. for those underserved by transit
• Promote mode shift
• Motivate GHG reductions
Mobility Hubs Across the Region

• Los Angeles County
  • Union Station; North Hollywood Station
    • Secure bike parking, bus layover zones, and other infrastructure built into the station itself
  • Wilshire/Vermont Station; Willowbrook/Rosa Parks Station
    • Car share, bike share, bus shelters, and next bus information

• San Bernardino County
  • Fontana Transit Center
  • Montclair Transit Center
Mobility Hubs Across the Region by County

• **Imperial County:** Regional Mobility Hub Implementation Strategy (2017)

• **Los Angeles County:** City of Los Angeles Mobility Hubs Readers Guide (2016); I-710 North Mobility Hubs Plan (underway)

• **Orange County:** OCTA’s Mobility Hubs Strategy (2022)

• **Riverside County:** Downtown Hemet Specific Plan; Vine Street Mobility Hub (underway)

• **Ventura County:** City of Santa Paula Mobility Hub Expansion (Ventura/Mill Streets - underway)
Mobility Hubs could include:
- Car share
- Bike share
- Microtransit
- Average Vehicle Ridership for Job centers
Regional Mobility Hub Strategy

- Identify mobility hubs across the region
- Identify data needed to develop the methodology to quantify the strategies included in the mobility hub strategy for Connect SoCal
- Establish a recommended baseline mobility hubs network
- Develop regional mobility hub guidelines, implementation guidance and recommended tools to advance mobility hubs
Questions? Comments?

FOR MORE INFORMATION, PLEASE VISIT
SCAG.CA.GOV/CONNECT-SOCAL
AGENDA ITEM 10

Southern California Association of Governments
January 5, 2023

To: Transportation Committee (TC)
From: Priscilla Freduah-Agyemang, Senior Regional Planner
(213) 236-1973, agyemang@scag.ca.gov
Subject: Regional Dedicated Transit Lanes Study Final Report

RECOMMENDED ACTION:
Receive and File

STRATEGIC PLAN:
This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians.

EXECUTIVE SUMMARY:
SCAG’s Regional Dedicated Transit Lanes Study identifies best practices and key benefits of dedicated transit lanes and priority treatments and the primary factors for successful implementation, including where priority treatments may be most feasible and beneficial in the region. The Study also provides implementation guidance for local agencies. Advancing opportunities for more reliable, frequent, and accessible transit is aligned with Connect SoCal’s Core Vision and goals of improving mobility, the environment, communities, and the economy. Last July SCAG staff shared an update on the Study, including the key findings from the existing conditions analysis, best practices research, and the corridor identification and initial screening corridor list. This report is to provide an update on the final report, including the corridor evaluation and key recommendations.

BACKGROUND:
Though transit ridership has improved over the course of the past few years, it is still significantly less than it was prior to the COVID-19 pandemic. As detailed in the Transportation Committee’s Transit Ridership Update staff report, overall, the region’s bus ridership levels are currently 27% below what they were pre-pandemic. For Metro, bus and rail ridership have now recovered at a similar level when comparing September 2019 to September 2022 (down by roughly 30%). The issue with rail ridership recovery extends to Metrolink whose ridership is currently 60% lower than it was pre-pandemic at this time. And though the COVID-19 pandemic impacted transit ridership, it only exacerbated an existing transit ridership decline that was occurring nationwide. Transit ridership had been declining in the SCAG region in part because a majority of the region’s built
environment is designed to facilitate the movement of private vehicles. Taking public transit today is not convenient for most people. As SCAG’s report on Falling Transit Ridership: California and Southern California (2018) succinctly put it, as long as driving in the SCAG region is the easiest way to get around, people will drive more (often at a considerable cost burden) and ride transit less.

In the face of these challenges, the region’s transit agencies are continuing to work hard to restore services and recover ridership losses resulting from the pandemic and those from before. Efforts to attract riders include carefully responding to the pre-pandemic challenges they faced. Transit riders have consistently reported speed and reliability of services as key factors in decision-making in transit use, along with safety, security, convenience, and accessibility of the ride.

Supporting transit agencies as they work to improve transit offerings and the rider experience is critical to SCAG as it has ambitious goals to reduce greenhouse gas emissions (GHG) in transportation by reducing single-occupancy vehicle trips and increasing transit mode share. A key step toward meeting these goals, as well as local and county goals for mobility and equity, can come from improving the speed and reliability of transit services throughout the region.

The Regional Dedicated Transit Lanes Study (Study) explored the opportunities, needs, challenges, and best practices for developing a regional network of dedicated bus lanes and other transit priority treatments. Dedicated transit lanes and transit priority treatments are proven methods to address transit rider priorities. Examples of these improvements include dedicated bus lanes, peak-only bus lanes, bus service on Express Lanes, transit signal priority, bus bulb outs, level boarding platforms, all-door boarding, and a variety of others. Essentially, transit priority treatments adapt the built environment to provide a better user experience for transit riders, and in so doing increase the mobility of people through a given corridor. Transit priority treatments reduce common barriers that prevent people from using transit services. These include lack of confidence in when the bus will arrive, concern about being stuck in traffic, uncompetitive travel times compared to auto trips, and variable trip travel times that waste customer time by forcing them to arrive too early to their destination if they want to ensure they are on time.

The Study and the corresponding regional transit priority network are intended to enable enhanced transit services, improved mobility, accessibility and sustainability, and advance implementation of Connect SoCal. Furthermore, the Study is meant to inspire jurisdictions to explore transit priority treatments on regional corridors. While not a prescriptive list, the final network of corridors provides each county with a view of where priority treatments could improve mobility and access and a starting point for local communities as they embark on improving transit speed and reliability in their communities.
STAKEHOLDER ENGAGEMENT
Since the July update to the Transportation Committee, SCAG staff and the project team continued to engage with key stakeholders including the Regional Transit Technical Advisory Committee (RTTAC), which is comprised of dozens of transit operators from across the region, sharing project updates and the key research findings, and the screened and final evaluated corridor lists. Staff also shared the final evaluated corridor lists with various stakeholders, including Los Angeles Metro’s Bus Operators Subcommittee (BOS) and Local Transit Systems Subcommittee (LTSS), the Ventura County Transportation Commission Transportation Technical Advisory Committee (VCTC TTAC), local jurisdictions and transit agencies, and the project Technical Advisory Committee (TAC). The project team asked stakeholders to provide feedback on the final evaluated corridor lists. Staff continued to engage with stakeholders throughout the region as the Study advanced.

Technical Advisory Committee (TAC)
Since the last update to the Transportation Committee, the project team convened a final meeting with the project TAC in August. At this meeting, the project team discussed the corridor evaluation results, implementation planning, and the outline of the final report. TAC members were asked to review the final corridor evaluation results, share with other staff, departments, and stakeholders within their organizations and provide feedback. Members were also given the opportunity to review and provide feedback on the draft final report. An office hour session was held on December 6 to seek feedback, address comments, and respond to the TAC’s questions on the draft final report.

CORRIDOR EVALUATION
As shared previously with the Transportation Committee, a two-stage process was used to arrive at a set of corridors considered most promising for transit priority treatments in the region. The first stage, Corridor Identification and Screening, considered the universe of corridors within the SCAG region and from the over 15,000 miles of feasible roadways, narrowed down to just over 300 corridors that could be candidates for priority treatments. Around 100 of these corridors, as determined by potential performance and TAC feedback, were promoted to the second stage of the Corridor Evaluation process that simulated priority treatments on the corridors to assess likely performance.

Goals and Criteria for Priority Corridors
The TAC and the project team worked together to create a set of prioritized goals for transit priority corridors in the region. These goals (Table 1), shared with the Transportation Committee previously, were used to identify, screen, and evaluate roadways in the SCAG region to see where transit priority treatments would have the most impact. The TAC identified Goal Areas 1 and 2 as essential to why priority treatments are implemented; namely, to maximize mobility through speed and reliability improvements to the transit network. Goal Areas 3 through 6 were considered to be ideal outcomes of the most well-designed priority treatments. Within each of these six goal areas, the TAC identified key criteria that would be useful for determining whether that goal might be realized.
in a given corridor. In the screening and evaluation stages, the project team then assigned quantifiable metrics that correlated to each criterion, and weighted each based on its relative contribution to a given goal.

**Table 1: Criteria for Transit Priority Corridor Screening and Evaluation**

<table>
<thead>
<tr>
<th>Goal Area</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Improve transportation system performance</td>
<td>• Transit speed and reliability potential</td>
</tr>
<tr>
<td></td>
<td>• Minimize traffic and safety impacts</td>
</tr>
<tr>
<td></td>
<td>• Promotes regional connectivity</td>
</tr>
<tr>
<td>2. Increase people throughput and attract riders</td>
<td>• Population and employment density</td>
</tr>
<tr>
<td></td>
<td>• Travel markets/trip intensity</td>
</tr>
<tr>
<td></td>
<td>• Transit ridership</td>
</tr>
<tr>
<td>3. Improve access for equity-focused communities</td>
<td>• Equity populations (race (non-white))</td>
</tr>
<tr>
<td></td>
<td>• Equity populations (income)</td>
</tr>
<tr>
<td></td>
<td>• Proximity to schools and civic institutions</td>
</tr>
<tr>
<td>4. Promote local plans and priorities</td>
<td>• Identified plans and studies</td>
</tr>
<tr>
<td></td>
<td>• Financial feasibility</td>
</tr>
<tr>
<td></td>
<td>• Jurisdictional feasibility</td>
</tr>
<tr>
<td>5. Integrate with the built environment</td>
<td>• Transit supportive land use and transit oriented development (TOD)</td>
</tr>
<tr>
<td></td>
<td>• Supportive first/last mile and bike network</td>
</tr>
<tr>
<td></td>
<td>• Technical feasibility</td>
</tr>
<tr>
<td>6. Improve climate and health outcomes</td>
<td>• GHG and other emissions impacts</td>
</tr>
<tr>
<td></td>
<td>• Benefits to healthy places</td>
</tr>
</tbody>
</table>

**Final Transit Priority Corridors Network**

After each treatment corridor was simulated in SCAG’s transportation model and scored across all metrics, three tiers of performance were identified based on natural breaks in the scoring data. Tier 1 corridors scored the highest in the evaluation, followed by Tier 2 and Tier 3. It is important to note that any corridor that advanced to the evaluation stage represented an excellent opportunity to study transit priority treatments in more detail. The purpose of tiering the final scores was simply to prioritize focus and expected benefits in areas with limited resources for further study.
The final existing and proposed corridors span the SCAG region. Ultimately, 73 corridors were ranked using the evaluation process, and 58 corridors were included as either existing (30), planned (19), or added (9) by the TAC after analysis (see Attachment 1). The added corridors were included as planned/proposed on the map, but are not tiered as they did not go through the evaluation process. Of the new corridors that were fully evaluated as the strongest opportunities for development, 21 corridors were ranked Tier 1, 28 were ranked Tier 2, and 24 ranked Tier 3. If implemented in total, these corridors would expand SCAG’s regional transit priority network by 970 centerline miles.

The project team identified different treatment types for corridors based on the analysis. They include lane level treatments, which are bus lanes that provide a dedicated space for transit vehicles to operate, improving reliability and reducing travel times by keeping buses out of auto traffic. Examples include bus lanes, bus-on-shoulder, peak-only lanes, or bus service on Express Lanes. They also included intersection-level treatments, which are a mix of infrastructure and technology changes around the signalized intersections through which the transit vehicle must travel. Examples include transit signal priority, bus-only signals, queue jumps, or freeway queue jumps. And finally, stop-level treatments were also included, which focus on improving user experience, speed and reliability, and safety at the bus stop. Examples include level boarding, all-door boarding, or real-time information.

**RECOMMENDATIONS**

A final recommendation of the Study is to include the regional transit priority network into the development of Connect SoCal 2024 and related regional planning efforts. Improving the speed and reliability of public transit through transit priority treatments is a vital part of SCAG’s long-range strategy. As such, this Study—and the over 500 percent expansion to the regional transit priority network it imagines—helps inform Connect SoCal 2024 and SCAG’s long-range transportation planning efforts moving forward.

The Study also recommends promoting the corridors identified through this Study into local planning efforts, stakeholder discussions, and funding and grant opportunities. Planning and implementing transit priority treatments can be complex. It involves close collaboration between multiple governmental parties, especially public infrastructure owners and transit operators. Further, since transit priority treatments frequently consist of adapting the design and use of the existing built environment, corridor development must absolutely consider the voice and needs of local stakeholders, such as community groups, business owners, residential associations, and the general public.
NEXT STEPS
SCAG staff are currently working with the TAC to finalize the Study and anticipate the final Study will be posted online by February 2023. Moving forward, the Study findings and recommendations will inform and be incorporated into Connect SoCal 2024 development. As noted within the recommendations above, the identified regional transit priority network will be taken into account in Connect SoCal 2024. SCAG staff anticipate continuous policy discussions with the Transportation Committee during the plan development and incorporating key recommendations from the Study in the transit/passenger component of the Connect SoCal Mobility Technical Report.

FISCAL IMPACT:
Funding for staff work on this issue is included in the FY22/23 OWP 140.0121.01.

ATTACHMENT(S):
1. Corridors for Transit Priority
2. PowerPoint Presentation - Regional Dedicated Transit Lanes Study

---

1 Report will be posted online here: https://scag.ca.gov/transit-presentations-reports-guidelines
### CORRIDORS FOR TRANSIT PRIORITY

#### Tier 1 Corridors (Final Draft)

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#### Tier 2 Corridors (Final Draft)

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**Notes:** TSP = transit signal priority, BRT = bus rapid transit
## ATTACHMENT 1: REGIONAL DEDICATED TRANSIT LANES STUDY FINAL REPORT

### County Corridor Extent Direction Type

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### Notes:
- TSP = transit signal priority, BRT = bus rapid transit
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**Corridors Added by Stakeholders After Evaluation**

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Notes: TSP = transit signal priority, BRT = bus rapid transit
## Existing or Planned Corridors

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<td>Downtown LA</td>
<td>Peak Hour Bus Lane</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>G (Orange) Line</td>
<td>Lassen—Lankershim (Chatsworth—North Hollywood)</td>
<td>BRT</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>Grand Ave</td>
<td>Downtown LA</td>
<td>Bus Lane</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>I-10 Express Lane</td>
<td>I-605 to San Bern County Line</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>I-405 Express Lane (Los Angeles)</td>
<td>I-5N to Orange County Line</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>I-605 Express Lane (Los Angeles)</td>
<td>I-10 to I-405</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>J Silver Line/I-10 and I-110 Express Lanes</td>
<td>El Monte—Long Beach</td>
<td>Express Lane</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>J Silver Line Seg 1/I-10</td>
<td>El Monte—Long Beach</td>
<td>BRT</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>Lincoln Blvd</td>
<td>Dewey Ave to Venice Blvd</td>
<td>Bus Lane</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>Metro Rapid 754 Vermont</td>
<td>W 122nd St—Hollywood Blvd</td>
<td>Limited stop service</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>Metro Rapid Van Nuys Blvd</td>
<td>Expo and Sepulveda—Vermont, then on Van Nuys to San Fernando Rd to Metrolink, Laurel Canyon Blvd—Victory Blvd</td>
<td>Limited stop service</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>N Spring Street</td>
<td>Downtown LA</td>
<td>Bus Lane (EB)</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>Noho Pasadena BRT</td>
<td>Olive/Glenoaks/Broadway/Colorado</td>
<td>BRT</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>Olive Street</td>
<td>Downtown LA</td>
<td>Bus Lane</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>Santa Monica Blvd</td>
<td>Ocean Ave to 5th Street WB</td>
<td>Bus Lane</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>SR 91 Express Lanes</td>
<td>Orange County Line—Magnolia Ave</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>Sunset/Chavez</td>
<td>Dodger Stadium to Union Station</td>
<td>Game Day Bus Lane</td>
<td>Existing</td>
</tr>
</tbody>
</table>

Notes: TSP = transit signal priority, BRT = bus rapid transit
<table>
<thead>
<tr>
<th>County</th>
<th>Corridor Description</th>
<th>Extent</th>
<th>Type</th>
<th>Existing or Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunset-Glendale-Atlantic BRT</td>
<td>Atlantic Blvd via Vermont/Los Feliz/Central to Broadway</td>
<td>BRT</td>
<td>Planned</td>
<td></td>
</tr>
<tr>
<td>Venice Blvd</td>
<td>Santa Monica—Downtown LA</td>
<td>BRT</td>
<td>Planned</td>
<td></td>
</tr>
<tr>
<td>Washington/Culver Blvd</td>
<td>La Cienega Ave—Duquesne Ave.</td>
<td>Bus Lane</td>
<td>Existing</td>
<td></td>
</tr>
<tr>
<td>Wilshire Blvd</td>
<td>Centinela to Federal Ave; Crenshaw Blvd to Western Ave, Valencia to 5th</td>
<td>Peak Hour Bus Lane</td>
<td>Existing</td>
<td></td>
</tr>
<tr>
<td>Orange</td>
<td>Beach Blvd Bravo</td>
<td>La Mirada Blvd—PCH</td>
<td>TSP</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>Harbor Blvd Bravo</td>
<td>E Chapman Ave—Newport Blvd</td>
<td>TSP</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>I-5 (Orange County)</td>
<td>Orange County Section</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>SR 55 (Orange County)</td>
<td>Orange County Section</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>Westminster/17th Bravo</td>
<td>Beach, Harbor</td>
<td>Limited Stop</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>I-405 ExpressLane (Orange County)</td>
<td>Los Angeles County Line to SR 73</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>SR 91 ExpressLane (Orange County)</td>
<td>SR 55 to Riverside County</td>
<td>Express Lane</td>
<td>Existing</td>
</tr>
<tr>
<td>Riverside</td>
<td>I-215 Express Lane</td>
<td>I-15 to Van Buren Bl</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>SH 111 TSP</td>
<td>Coachella to Palm Springs along Highway 111</td>
<td>TSP, Limited Stop Service</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>SR 60 Express Lane</td>
<td>I-15 to Gilman Springs Rd</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>I-15 Express Lane</td>
<td>San Bernardino County Line to SR 74</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
<tr>
<td>San Bernardino</td>
<td>I-10 Express Lane</td>
<td>LA County Line to Ford St</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>SbX Green Line</td>
<td>California State University to Loma Linda University &amp; Medical Center</td>
<td>Express Lane</td>
<td>Existing</td>
</tr>
<tr>
<td></td>
<td>West Valley Connector</td>
<td>Pomona Transit Center to Rancho Cucamonga</td>
<td>Bus Rapid Transit</td>
<td>Planned</td>
</tr>
<tr>
<td></td>
<td>I-15 Express Lane</td>
<td>SR 18 to Riverside County Line</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
<tr>
<td>Ventura</td>
<td>U.S. 101 Express Bus lanes</td>
<td>Ventura County</td>
<td>Express Lane</td>
<td>Planned</td>
</tr>
</tbody>
</table>

Notes: TSP = transit signal priority, BRT = bus rapid transit
Background – Connect SoCal 2020
Study Background

• Decline in transit ridership (SCAG-UCLA 2018 study) and national trends

• Rethinking mobility and improving efficiencies
  • e.g., tactical transit lanes, transit signal priority

• COVID-19 pandemic and need for recovery
Why Transit Priority Treatments Matter

• Proven benefits in the short and long term
• Reinforces and informs land use investments over time
• Helps reduce the use of single-occupancy vehicles
• Achieves greenhouse gas emission goals
Regional Dedicated Transit Lanes Study

Purpose
• Support the development of a regional network of dedicated bus lanes and priority treatments

Summary
• Identify key benefits, challenges and opportunities for dedicated bus lanes and priority treatments
• Assess and recommend potential network of corridors for prioritization
• Provide best practices and implementation guidance for local jurisdictions
Stakeholder Engagement Efforts

• Transportation Agency stakeholders

• Conducted individual county meetings with CTCs, COGs, transit operators & CBOs

• Technical Advisory Committee (TAC)
  • Conducted 4 TAC meetings
High Level Methodology

Step I. Identification & Screening

1. Developed goals (and relative importance) for priority treatments
2. Associated metrics and weights to each goal
3. GIS assessment of metrics for corridors throughout region
4. Alternative methods for goals or treatments that are less quantifiable
5. Developed a first list of corridors or areas that pass screening thresholds

Step II. Evaluation & Prioritization

1. Applied treatment types to screened corridors based on feasibility/suitability criteria
2. Coded and run in SCAG model based on sensitivity test results
3. Calculated and weighted model-derived metrics
4. Off-model calculations and adjustments as needed (minimize)
5. Reviewed and prioritized based on goals and geographic considerations
## Transit Priority Corridor Screening and Evaluation Goals

<table>
<thead>
<tr>
<th>Goal Area</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Improve transportation system performance</td>
<td>• Transit speed and reliability potential  &lt;br&gt; • Minimize traffic and safety impacts  &lt;br&gt; • Promotes regional connectivity</td>
</tr>
<tr>
<td>2. Increase people throughput and attract riders</td>
<td>• Population and employment density  &lt;br&gt; • Travel markets/trip intensity  &lt;br&gt; • Transit RIDERSHIP</td>
</tr>
<tr>
<td>3. Improve access for equity-focused communities</td>
<td>• Equity populations (race (non-white))  &lt;br&gt; • Equity populations (income)  &lt;br&gt; • Proximity to schools and civic institutions</td>
</tr>
<tr>
<td>4. Promote local plans and priorities</td>
<td>• Identified plans and studies  &lt;br&gt; • Financial feasibility  &lt;br&gt; • Jurisdictional feasibility</td>
</tr>
<tr>
<td>5. Integrate with the built environment</td>
<td>• Transit supportive land use and TOD  &lt;br&gt; • Supportive first/last mile and bike network  &lt;br&gt; • Technical feasibility</td>
</tr>
<tr>
<td>6. Improve climate and health outcomes</td>
<td>• GHG and other emissions impacts  &lt;br&gt; • Benefits to healthy places</td>
</tr>
</tbody>
</table>
Network of Proposed Corridors for Priority Treatments
**Recommendations**

- Incorporate the regional transit priority network into the development of Connect SoCal 2024 and related regional planning efforts
- Promote the corridors identified through this study into local planning efforts, stakeholder discussions, and funding and grant opportunities
Next Steps

• Incorporate comments in the final report
• Share draft with Regional Transit Technical Advisory Committee (RTTAC) (Jan 2023)
• Publish Final Report by March 2023
THANK YOU

Contact info:
Priscilla Freduah-Agyemang, Senior Regional Planner, Mobility Planning & Goods Movement
agyemang@scag.ca.gov/213-236-1973
WHEREAS, SCAG is the largest Metropolitan Planning Organization (MPO) in the United States covering six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura), and serving 19 million people pursuant to 23 USC § 134 et seq. and 49 USC § 5303 et seq.; and

WHEREAS, SCAG is responsible for bringing Southern California’s diverse residents and local partners together with unifying regional plans, policies, and programs that result in more healthy, livable, sustainable, and economically resilient communities; and

WHEREAS, improving mobility, accessibility, reliability, regional environmental conditions, and transportation safety has been a goal included in SCAG’s long-range plans, including Connect SoCal, for decades; and

WHEREAS, Connect SoCal 2020 identified a vision to create a holistic and coordinated approach to de-carbonizing or electrifying passenger vehicles, transit, and goods movement vehicles; and

WHEREAS, improvement of regional air quality and attainment of Clean Air Act requirements remains a priority for the SCAG region; and

WHEREAS, Clean Transportation Technology is defined for SCAG’s purposes as “zero- and near zero-emission vehicles, their supporting infrastructure, and other facilitating products that reduce environmental impact over their life cycle,” and the below policy will formalize this; and

WHEREAS, Clean Transportation Technology will be necessary in order to meet state goals and requirements such as the Innovative Clean Transit Rule, Advanced Clean Cars Act, and the Advanced Clean Trucks Regulation; and

WHEREAS, SCAG’s Regional Council unanimously adopted a Climate Action Resolution in January 2021 that affirmed a commitment to reduce greenhouse gas emissions and establish partnerships to support local jurisdictions’ climate adaptation and mitigation initiatives, including implementation of Clean Transportation Technologies; and
WHEREAS, investment in Clean Transportation Technologies is an important part of meeting SCAG’s objectives in economic development and recovery, resilience planning and achievement of equity; and

WHEREAS, jurisdictions throughout the region including cities, counties, transit agencies, and private fleets, are currently evaluating and making investments in Clean Transportation Technology; and

WHEREAS, SCAG, though not an implementing agency, has an evolving role in Clean Transportation Technology Investment, including but not limited to the Last Mile Freight Program, and future funding opportunities; and

WHEREAS, SCAG supports the region in deployment of Clean Transportation Technology through research and evaluation, stakeholder support, partnerships, and advocacy;

NOW, THEREFORE, BE IT RESOLVED by the Regional Council of the Southern California Association of Governments, that SCAG hereby adopts a regional Clean Transportation Technology Policy with the long-term aim of supporting the development, commercialization and deployment of a zero-emission transportation system and its supporting elements to improve air quality, reduce greenhouse gas emissions, meet federal, state and regional targets and promote economic development, resilience and equity.

BE IT FURTHER RESOLVED THAT:

1. Clean Transportation Technology is defined as “zero- and near zero-emission vehicles, their supporting infrastructure, and other facilitating products that reduce environmental impact over their life cycle.”

2. SCAG will take a technology neutral approach in its study of, advancement of, and where applicable investment in Clean Transportation Technology where SCAG defines Technology Neutrality as a “stance that does not give preference to a particular technology as long as it furthers the desired outcome of a zero-emission transportation system that meets or exceeds federal and state targets.”

3. As part of the development of Connect SoCal 2024, SCAG will prepare a Clean Transportation Technology Compendium that will support decision making by providing information on various clean transportation technologies;
4. SCAG will continue to foster innovation and will support deployment of a range of Clean Transportation Technologies with consideration of the best available information and expected use case as determined by the end user, thus maintaining a Technology Neutral Approach;

5. SCAG will continue to support the region in deployment of Clean Transportation Technology through research and evaluation, stakeholder support, resource and tool provision, intrastate and intraregional coordination, advocacy, and where applicable investment programs;

6. SCAG will work to address equity impacts so that all, especially the under-resourced, can access and benefit from Clean Transportation Technologies.

PASSED, APPROVED AND ADOPTED by the Regional Council of the Southern California Association of Governments at its regular meeting this xx day of April, 2023.

[SIGNATURES ON FOLLOWING PAGE]
Jan Harnik  
President, SCAG

Attested by:

Kome Ajise  
Executive Director

Approved as to Form:

Michael Houston Chief Counsel
Clean Transportation Technology Policy
Clean Transportation Technology (Clean Tech) Vision

• Connect SoCal 2020 includes a holistic and coordinated approach to de-carbonizing or electrifying passenger, transit and goods movement vehicles and a vision for a zero-emission transportation system or using cleaner mobility options where zero emission options are not feasible.
Clean Transportation Technology Drivers

• Federal Clean Air Act
• GHG reduction
• Public Health
• Increased Public Funding
• Economic, Equity and Resilience Opportunities

100% ZEV sales by 2035

Full transition to ZEV short-haul/drayage trucks by 2035

Full transition to ZEV buses & heavy-duty long-haul trucks by 2045*

Full transition to ZE off-road equipment by 2035* ^where feasible
SCAG Clean Technology Program

• Ongoing research, evaluation and plan development
  • EV Charging Site Suitability Study (EVCSS), part of the Sustainable Communities Program
  • Medium and Heavy Duty Zero Emissions Roadmap
  • RHETTA pilot partnership with EPRI/CEC
• Providing Support to Regional Stakeholders
• Advocacy and Policy Work
  • Funding for city infrastructure and vehicle purchases
  • Continued funding for vehicle demonstration and early deployment (MD/HD)
  • Share success stories
• Investments in Clean Technology
  • Last Mile Delivery Program
Support to Regional Stakeholders

- Letters of Support
- Partnerships on Clean Tech related studies and plans
- Last Mile Delivery Program
- Clean Cities Coalition
- Trainings and Tools
  - PEV Atlas and Site Prioritization Tool
  - Toolbox Tuesday Webinars
- Research and Data Support
- Grant Partnerships
Clean Transportation Technology Policy

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Clean Transportation Technology Compendium

• Systematic and comprehensive approach to presenting technology options
• Includes vehicles, supporting infrastructure and facilitating technologies
• Covers passenger, transit, rail and commercial heavy duty
• Describes important characteristics and makes information transparent
  • ex - total cost of ownership, technology readiness level, environmental impacts, safety, etc.
• Includes existing conditions, scoping criteria for compendium inclusion, descriptive characteristics, and regional clean technology strategies.
Feedback

• PEV Study City Stakeholders, Jan 18
• PEV Study Steering Committee, Jan 26
• Regional ZE Truck Collaborative, (over email)
• RTTAC, Jan 30
• GLUE Council, Jan 30
Next Steps: Upcoming RTP/SCS Development (2024)

- Setting a vision for ZE Tech in the Region
  - Focus on publicly accessible stations
  - Regional Road Map for MD/HD Vehicles
- Demonstrate ability to meet and exceed state targets
- Create Technology Compendium (pending board direction)
- Continued Outreach

https://scag.ca.gov/connect-socal
linder@scag.ca.gov

What other innovations, benefits or potential consequences need to be addressed as we roll out this technology?
THANK YOU!

For more information, please visit:

https://scag.ca.gov/alternative-fuels-vehicles