

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS 900 Wilshire Blvd., Ste. 1700 Los Angeles, CA 90017 T: (213) 236-1800 www.scag.ca.gov

REGIONAL COUNCIL OFFICERS

President
Jan C. Harnik, Riverside County
Transportation Commission

First Vice President **Art Brown, Buena Park**

Second Vice President Curt Hagman, County of San Bernardino

Immediate Past President Clint Lorimore, Eastvale

COMMITTEE CHAIRS

Executive/Administration Jan C. Harnik, Riverside County Transportation Commission

Community, Economic & Human Development Frank Yokoyama, Cerritos

Energy & Environment Deborah Robertson, Rialto

Transportation
Ray Marquez, Chino Hills

MEETING OF THE

REGIONAL TRANSIT TECHNICAL ADVISORY COMMITTEE

Wednesday, November 30, 2022 10:00 a.m. – 12:00 p.m.

ZOOM AND TELECONFERENCE ONLY

VIDEOCONFERENCE AVAILABLE

ZOOM AND TELECONFERENCE MEETING ONLY

TELECONFERENCE IS AVAILABLE

TO JOIN THE MEETING:: https://scag.zoom.us/j/220315897

CONFERENCE NUMBER: +1 669 900 6833

MEETING ID: 220 315 897

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Priscilla Freduah-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.

REGIONAL TRANSIT TECHNICAL ADVISORY COMMITTEE AGENDA

Wednesday, November 30, 2022

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

(Joyce Rooney, City of Redondo Beach, Regional Transit TAC Chair)

2.0 <u>PUBLIC COMMENT PERIOD – Members of the public desiring to speak on items on</u> 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	RECE	IVE AND FILE	<u>Time</u>	<u>Page</u>
	3.1	Minutes of the August 31, 2022, RTTAC Meeting		3
	3.2	Regional Transit Operators Forum (Priscilla Freduah-Agyemang, Senior Regional Planner, SCAG)		7
	3.3	SCAG Transit Priority Best Practices Report (Priscilla Freduah-Agyemang, SCAG)		9
	3.4	Connect SoCal 2024 Transit Operations and Maintenance Financial Forecast (Jaimee Lederman, Senior Regional Planner, SCAG)		10
	3.5	American Public Transportation Association (APTA) Report on Transit Workforce Shortage, Root Causes, Potential Solutions and the Road Ahead (Priscilla Freduah-Agyemang, SCAG)		13
	3.6	Federal Transit Administration (FTA) Dear Colleague Letter: <u>Cutaway Rebuild Useful Life Waiver</u> (Priscilla Freduah-Agyemang, SCAG)		14

REGIONAL TRANSIT TECHNICAL ADVISORY COMMITTEE AGENDA

Wednesday, November 30, 2022

4.0	INFOR	RMATIONAL ITEMS		
	4.1	Connect SoCal 2024 Updates (Priscilla Freduah-Agyemang, Steve Fox, Jaimee Lederman, Camille Guiriba, SCAG)	30	16
	4.2	MOVE Culver City (Diana Chang, Transportation and Mobility Manager) (Presentation slides to be sent separately)	20	
	4.3	Antelope Valley Transit Authority (AVTA) Zero Emission Efforts (Martin Tompkins, CEO)	20	48
	4.4	Microtransit Update – OC Flex (Melissa Mungia, Jack Garate, OCTA)	15	57
5.0	STAFF	REPORT		
	5.1	<u>Transit Target Setting Update</u> (Priscilla Freduah-Agyemang, SCAG)	5	
	5.2	High Quality Transit Corridor (HQTC) and Major Transit Stop (MTS) updates (Steve Fox, Senior Regional Planner, SCAG)	5	
	5.3	2022 Transit and Intercity Rail Capital Program (TIRCP) Draft Guidelines (Steve Fox, SCAG)	5	

6.0 <u>ADJOURNMENT</u>

The next Regional Transit Technical Advisory Committee meeting is <u>tentatively</u> scheduled for <u>Monday, January 30, 2023</u>.

Regional Transit Technical Advisory Committee (RTTAC) of the

Southern California Association of Governments

August 31, 2022

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

Bill Tsuei Access Services

Esteban Rodriguez Antelope Valley Transportation Authority
Geraldina Romo Antelope Valley Transportation Authority

Alyssa Mendez Commerce Municipal Bus Lines

Barbara Andres City of Santa Monica

Diane Amaya City of Redondo Beach/Beach Cities Transit

Rolando Cruz Culver City Transit

Nick Szamet Culver City Transportation Department
Diana Chang Culver City Transportation Department

Josh Landis Foothill Transit Joe Raquel Foothill Transit

Matthew Miller Gold Coast Transit District
Austin Novstrup Gold Coast Transit District

Gustavo Gomez Imperial County Transportation Commission

Shirin Sadrpour Los Angeles DOT Teresa Wong Los Angeles Metro Lori Huddleston Los Angeles Metro **Avital Shavit** Los Angeles Metro Mark Vallianatos Los Angeles Metro Marisol Barajas Long Beach Transit Shirley Hsiao Long Beach Transit Christopher MacKechnie Long Beach Transit Chad Kim Long Beach Transit **Aubrey Smith** Metrolink (SCRRA) David Huang Metrolink (SCRRA) Montebello Bus Lines Abigail Marin Yessie Granados Montebello Bus Lines

Regional Transit Technical Advisory Committee (RTTAC) – August 31, 2022

Cheri Holsclaw Morongo Basin Transit Authority

Derek Donnell Norwalk Transit System

Charles Main Orange County Transportation Authority
Kim Tucker Orange County Transportation Authority

Jennifer Nguyen Riverside Transit Agency

Eric DeHate Riverside County Transportation Commission

Corie Zamora Santa Clarita Transit
Christopher Latham Simi Valley Transit
Manuel Alcala Sunline Transit Agency

Ryan Plumb Torrance Transit

Dolores Lopez Ventura County Transportation Commission

Dustin Strandberg Victor Valley Transit
Jonathan Overman Cambridge Systematics

Tom Coleman Federal Transit Administration

Savannah Speerstra Caltrans District 7
Maurice Eaton Caltrans District 11

SCAG Staff:

Philip Law Steve Fox
Priscilla Freduah-Agyemang Kate Kigongo
Courtney Aguirre Kevin Kane

Nancy Lo Warren Whiteaker

Mike Jones Buyan-Erdene Batbaatar

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 INTRODUCTION OF NEW VICE CHAIR

It was announced that Jennifer Nguyen, Riverside Transit Agency will serve as committee Vice Chair going forward.

4.0 RECEIVE AND FILE

4.1	Minutes of the June 29, 2022 RTTAC Meeting
4.2	Regional Transit Operators Forum
4.3	Better Bus for California
4.4	Federal Transit Administration (FTA) National Transit Database (NTD) Safety and
	Security Reporting Changes and Clarifications

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 welcomed.

5.0 <u>INFORMATIONAL ITEM</u>

5.1 <u>Federal Transit Administration (FTA) National Transit Database (NTD) Reporting</u> Changes and Clarifications

Thomas Coleman, FTA NTD Program Manager, provided an overview of recent reporting changes to the National Transit Database (NTD). Mr. Coleman reported on July 7, 2022, FTA published a notice in the Federal Register proposing changes and clarifications to the NTD reporting requirements. Some of the reporting changes would take effect beginning NTD report year (RY) 2023 or 2024 to correspond to an agency's fiscal year. The requirements would take effect in calendar year (CY) 2023. It was noted the five proposed changes include new sample-based monthly data, General Transit Feed Specification (GTFS), collecting geospatial data for demand response modes, emergency contact information and vehicle fuel type. Mr. Coleman reviewed in detail the logistics and implications of the proposed changes.

5.2 <u>Mobility Wallet Pilot – LADOT & Metro Partnership</u>

Avital Shavit and Rochelle Chavez, Los Angeles Metro, and Shirin Sadrpour, LADOT, reported on their Mobility Wallet Pilot partnership program. It was noted that the goal of the mobility wallet pilot includes an all-in-one mobility account, payment solution that provides access to all public transit (bus & rail) and private on-demand mobility options like carshare, ride-hail, taxis, scooters and bikes. It was reported total budget is \$4.5 million including \$4 million wallet subsidies. Noted goals include equity, customer experience as well as a view toward the 2028 Olympics. Community engagement was reviewed as well as how the subsidy would be made available to pilot participants. It was noted rider TAP cards are used for transit which involved a third-party App interface. The pilot program schedule was reviewed including an MOU in spring 2022 and pay with TAP architecture in summer 2022, a launch of Pay with TAP in spring 2023 and report back on the pilot early 2024.

5.3 <u>Transit Performance and Target Setting Introduction</u>

Jonathan Overman, Cambridge Systematics, provided an update on transit performance and target setting. First, background was provided on target setting development and its origin from the Moving Ahead for Progress in the 21st Century (MAP-21). It was noted 2022 target setting core tasks include stakeholder engagement, regulatory assessment, data collection, performance target setting and monitoring. The timeline was reviewed noting engagement with operators in fall 2022 to collect TAM and transit safety data. Initial targets will be developed by Spring 2023 and draft targets by June 2023 targets for draft 2024 Regional Transportation Plan (Connect SoCal 2024). Previous target setting efforts were reviewed. Highlights of the various stakeholder engagement efforts were provided

as well as upcoming operator meetings and trainings. It was noted SCAG and project team will coordinate directly with operators for supplemental information if needed. Next steps were reviewed and operators were invited to join future meetings and trainings in September and October.

5.4 Connect SoCal 2024 Updates

Priscilla Freduah-Agemang, SCAG staff, provided an update on Connect SoCal 2024. She noted that Connect SoCal 2024 will be developed in the upcoming two years in anticipation of adoption April 2024. It was noted SCAG prepares a long-range RTP/SCS every four years which provides a vision for integrating land use and transportation for increased mobility and more sustainable growth. Connect SoCal 2024 will be built upon the strategies and policies established in Connect SoCal 2020 such as the Core Vision and Key Connections. She noted a draft policy development framework is attached which will outline the approach for policy development. She noted SCAG is now entering into the data collection and policy development phase of plan development. Over the course of the next year, SCAG staff will be seeking direction from our policy committees on their priorities and strategies for Connect SoCal 2024.

6.0 **STAFF REPORT**

Priscilla Freduah-Agyemang, provided a staff report.

7.0 ADJOURNMENT

Joyce Rooney, Beach Cities Transit, adjourned the meeting at 11:37 a.m.



Southern California Association of Governments 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 Agenda Item No. 3.2 November 30, 2022

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.

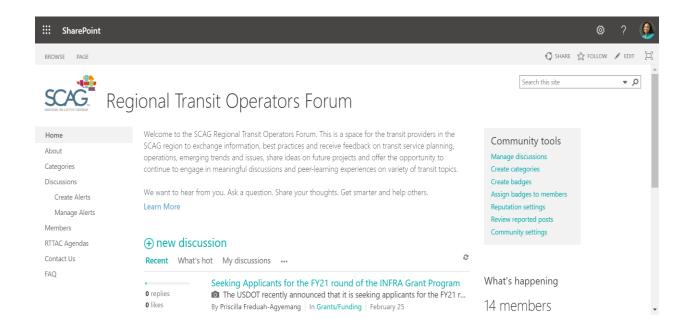
The forum is a discussion space for transit operators in the SCAG region to continue to dialogue and exchange information, share best practices and receive feedback on transit service planning, operations, emerging trends and issues, share ideas on future projects, as well as give operators the opportunity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







Southern California Association of Governments 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 Agenda Item No. 3.3 **November 30, 2022**

To: Regional Transit Technical Advisory Committee (RTTAC)

From: Priscilla Freduah-Agyemang, Senior Regional Planner,

213-236-1973, agyemang@scag.ca.gov

Subject: SCAG Transit Priority Best Practices Report

SUMMARY:

From: https://scag.ca.gov/post/transit-priority-best-practices-report-0

SCAG is currently conducting a Regional Dedicated Transit Lanes Study to explore the opportunities, needs, challenges and best practices for developing a regional network of dedicated bus lanes and other transit priority treatments. These dedicated bus lanes and transit priority treatments are anticipated to enable enhanced transit services, improve mobility, accessibility and sustainability, and advance implementation of Connect SoCal. As a part of the study, a <u>Transit Priority Best Practices report</u> was recently produced, which provides a toolkit of potential priority treatments and supportive policies, tools and practices. The highlighted practices can be tailored to a variety of local needs and constraints in Southern California communities.



Southern California Association of Governments 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 Agenda Item No. 3.4 **November 30, 2022**

To: Regional Transit Technical Advisory Committee (RTTAC)

From: Jaimee Lederman, Senior Regional Planner,

213-236-1948, lederman@scag.ca.gov

Subject: Connect SoCal 2024 Transit Operations and Maintenance

Financial Forecast

SUMMARY

The 2024 RTP/SCS (Connect SoCal 2024) must include a financial plan that estimates how much funding will be needed to implement recommended improvements, as well as operate and maintain the transportation system as a whole, over the minimum 20-year planning horizon. This includes information on how the region reasonably expects to fund the projects and programs included in Connect SoCal 2024, including anticipated revenues from federal, state, local, and private sources and user charges. The financial plan must demonstrate that there is a balance between the expected revenues sources for transportation investments and the estimated costs of the projects and programs described in Connect SoCal 2024, ensuring that the Plan is fiscally (or financially) constrained.

BACKGROUND

The initial O&M forecast comprises projections of expenditures to operate and maintain the current system over the life of the Connect SoCal 2024. This memo provides an update on significant issues and key assumptions that are fundamental to Connect SoCal 2024 financial plan development, including the Operations and Maintenance (O&M) forecast. SCAG's O&M analysis includes forecasts for four categories: transit, passenger rail, the state highway system, and regionally significant local streets and roads. For each of these categories, SCAG forecasts expenditures necessary for maintaining a state of good repair for the existing system based on historical data, key assumptions, and policy changes.

Key Assumptions and Policy Issues for O&M Forecasting

a. <u>Inflation / Cost Escalation</u>

Assumptions about inflation and construction cost escalation are a key issue for the financial plan. SCAG assumes long-term stability for the financial plan while acknowledging current short-term volatility. The O&M forecast incorporates assumptions about long-term construction and labor costs, which have significantly increased in the short-term. These increases present challenges for local governments and transportation agencies to maintain baseline conditions with historical funding



levels. Additionally, short-term financial volatility has increased uncertainty about many of the partner agency short-term cost forecasts relied on as inputs to the RTP/SCS financial plan.

b. Transit/Passenger Rail Uncertainties

The transit and passenger rail forecast includes O&M expenditures to maintain the existing system, as well as forecasted rehabilitation and replacement needs. Future transit O&M costs depend on a variety of factors, such as future revenue-miles of service, labor contracts, and the age of rolling stock. Forecasting O&M expenditures in this cycle entails grappling with multiple policy uncertainties.

- Service levels for many transit operators dropped during the COVID pandemic and are still
 recovering. To forecast the path for transit service recovery and how this impacts long-term
 service level forecasts from operators is crucial to the financial plan and Connect SoCal 2024.
 SCAG is working with local agencies and transit planning staff to incorporate service level
 assumptions into the financial plan.
- Service level planning is complicated by the significant drop in transit ridership during the
 pandemic and the slow recovery, particularly as increased levels of telework persist in the
 region. While transit service level planning is intertwined with ridership, the dependency of
 forecasts on ridership is part of a larger policy discussion on the role of transit as a backbone
 service and a tool to increase equity throughout the region by expanding mobility options.
- Transit agencies benefited from large-scale federal operating support during the pandemic from a series of one-time federal stimulus funding bills that partially compensated for increased costs and decreased farebox revenues. The recent surface transportation funding bill (the Infrastructure Investment and Jobs Act or IIJA) increased transit funding over previous legislation but does not rise to the level of support in the stimulus bills. There is additional uncertainty surrounding how much of the increased funding will flow to the SCAG region through competitive grant programs, and whether IIJA funding levels will continue after Fiscal Year 2026 when the current authorization expires.
- Our forecast for transit O&M also includes estimated expenditures for rehabilitation and replacement of rolling stock. Adopted in December 2018 by the California Air Resources Board (CARB), the Innovative Clean Transit Rule mandates the purchase of zero-emission buses (ZEBs) by transit agencies. Beginning in 2029, 100 percent of new purchases by transit agencies must be ZEBs, with a goal for full transition by 2040. Based on current costs for ZEB, this will likely increase rehabilitation and replacement costs compared to historical growth, and the rate of growth is uncertain and will likely differ across agencies depending on the current vehicle fleet mix and age.

c. Expanding needs to encompass resilience across all aspects of the transportation system

O&M forecasts are also dependent on incorporating the pressing need to encompass resiliency planning and expenditures to address potential vulnerabilities in the system from extreme weather events. SCAG staff are instituting processes to gather data on the magnitude of additional expenditures for system resiliency. These concerns extend to maintenance of all capital assets in the



transportation system and could increase operations spending as excessive heat and other factors impact operations.

NEXT STEPS

Staff will continue to update and revise the O&M forecast according to new data and evaluate the impact of policy scenarios as discussed above. Staff will continue to coordinate with CTCs and other stakeholders and update local data, and tracking expanded federal and state sources that could increase O&M funding. We will continue internal coordination to ensure consistency with Transportation Asset Management target setting and other SCAG planning activities.



Southern California Association of Governments 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 Agenda Item No. 3.5 **November 30, 2022**

To: Regional Transit Technical Advisory Committee (RTTAC)

From: Priscilla Freduah-Agyemang, Senior Regional Planner,

213-236-1973, agyemang@scag.ca.gov

Subject: American Public Transportation Association (APTA) Report:

Transit Workforce Shortage, Root Causes, Potential Solutions

and the Road Ahead

SUMMARY:

From: http://www.apta.com/research-technical-resources/research-reports/transit-workforce-shortage/

Public transit providers across North America face a shortage of operators and mechanics during a period of economic instability and reshuffling exacerbated by the COVID-19 pandemic. However, agencies' ability to respond to the worker shortage has been hampered by inadequate information about its causes and effects. The Transit Workforce Shortage Study builds a framework for APTA, its members, and its partner organizations to better understand the workforce shortage's causes and provides best practices for recruiting, hiring, and retaining transit operations workers. The study is comprised of two phases. This document, the Interim Findings Report, synthesizes the findings from Phase 1, which included a survey of transit agencies and background research into the macro causes of the shortage.



Southern California Association of Governments 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 Agenda Item No. 3.6 **November 30, 2022**

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) Dear Colleague Letter:

Cutaway Rebuild Useful Life Waiver

SUMMARY:

From: https://www.transit.dot.gov/funding/grants/dear-colleague-letter-cutaway-rebuild-useful-life-waiver

On November 2, 2022, FTA published a Dear Colleague letter announcing a temporary 24-month waiver of the FTA's minimum life extension requirement for medium size, light-duty transit buses, known as cutaways, and smaller vehicle rebuilds initiated over the next two years when using FTA funds. The waiver grants a shorter minimum useful life extension – from four to two years – in response to supply chain challenges.



Administration

Administrator

1200 New Jersey Avenue, SE Washington, DC 20590

November 2, 2022

Dear Colleague:

I am writing to inform you of a temporary 24-month waiver of the Federal Transit Administration's (FTA's) minimum four (4)-year useful life extension requirement for medium size, light-duty transit buses ("cutaways") and smaller vehicle rebuilds when using FTA funds. For these types and sizes of rolling stock assets, this waiver is granted to allow a shorter minimum useful life extension of two (2) years, or 50,000 miles. Recipients of FTA financial assistance will be eligible to use this waiver for rebuilds that are initiated between November 1, 2022 and October 31, 2024.

This waiver is granted in response to FTA recipients' inability to procure new light-duty buses within reasonable timeframes as a result of persistent supply chain challenges. Shortening the duration of minimum useful life extension requirements for these types of vehicles, which are typically not rebuilt, will allow rebuilds to serve as an alternative to pursuing the purchase of replacement vehicles by allowing recipients to keep existing vehicles in a state of good repair until market disruptions resolve.

This temporary minimum useful life extension waiver from four (4) years to two (2) years only applies to rebuilds for light-duty transit buses or smaller public transportation-related vehicles having an original minimum useful life of five (5) or fewer years (or 150,000 or fewer miles). It does not apply to medium- or heavy-duty transit buses with an original minimum useful life of greater than five (5) years. Rebuilds for medium- or heavy-duty transit buses must continue to extend the useful life of these types and sizes of vehicles by a minimum of four (4) years.

FTA defines a rebuild as "a capital activity associated with rolling stock that occurs at, or near, the end of a unit of rolling stock's useful life, and that results in an extended useful life for the unit of rolling stock consistent with the extent of the rebuilding." Rebuilds may involve the replacement or rehabilitation of a variety of vehicle systems or other elements, including, but not limited to, engines and propulsion systems, suspension and steering systems, vehicle electrical systems, etc.

FTA may extend this waiver or propose permanent changes to FTA's Award Management Requirements Circular 50101.1E should conditions warrant.

Should you have any questions or require additional information regarding this waiver, please contact your FTA regional office.

Sincerely.

Nuria I. Fernandez

The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies.



Connect SoCal 2024

Regional Transit Technical Advisory Committee November 30, 2022

WWW.SCAG.CA.GOV

Connect SoCal 2024 - Vision Statement

What kind of region do we want to be in 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



Connect SoCal 2024 – Mobility Goal

Build and maintain a robust transportation network.

- Support investments and programs that are well-maintained and operated, coordinated, and resilient, and result in improved safety and air quality.
- Ensure reliable, accessible, affordable, and quality travel options while striving to enhance equity in transportation resources offered in underserved communities.
- Plan for people of all ages, abilities, and backgrounds.





CONNECT SOCAL 2020 PLAN IMPLEMENTATION

Connect SoCal 2020 - Transit/Rail Implementation

- Research, Studies, & Projects
 - ADA Paratransit Demand Forecast Study
 - SCAG Integrated Freight and Passenger Rail Study
 - Mobility as a Service (MaaS) Feasibility White Paper & Swiss Cal Conference
 - Regional Dedicated Transit Lanes Study
 - Metrolink Transit Oriented Development (TOD) Study
 - First/Last Mile Plans (e.g., Omnitrans, Montebello)



New Transit/Rail Services & Improvements

- L.A. Metro NextGen
- Crenshaw "K" Line
- Redlands Rail Arrow Service
- Zero emission buses delivered (multiple operators)
- Metrolink Tier 4 locomotives & biodiesel
- Metrolink SCORE Improvements





CURRENT CONDITIONS

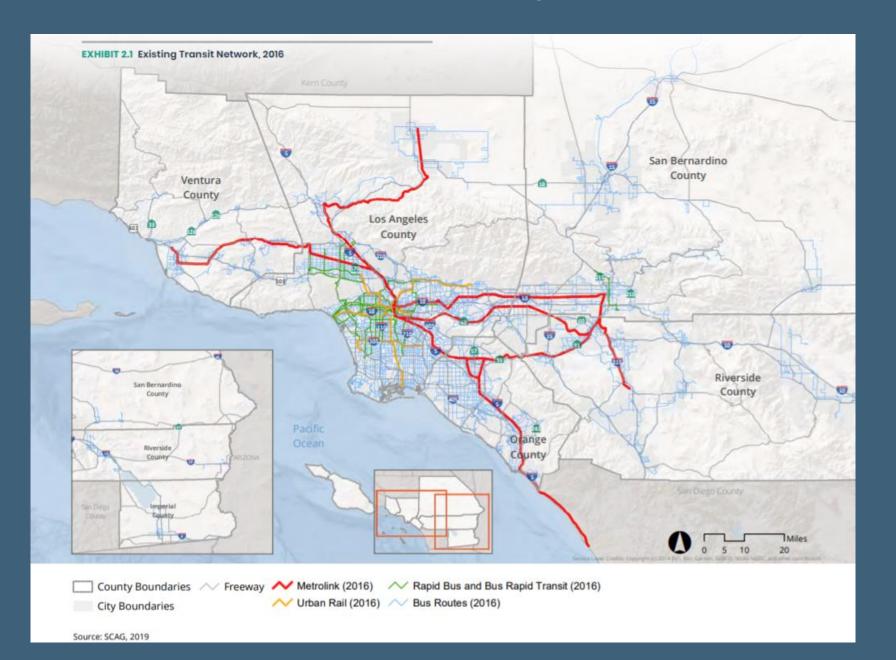
Current Conditions

- 100+ transit operators
- 2 passenger rail operators
 - Amtrak Pacific Surfliner
 - Metrolink Commuter Rail services
- 33,485 miles of bus routes
- 65% of bus routes are contained entirely inside of Los Angeles County
- 3 Bus Rapid Transit (BRT) corridors
 - Los Angeles Metro's G-line (Orange) and J-line (Silver)
 - Omnitrans sbX Green Line

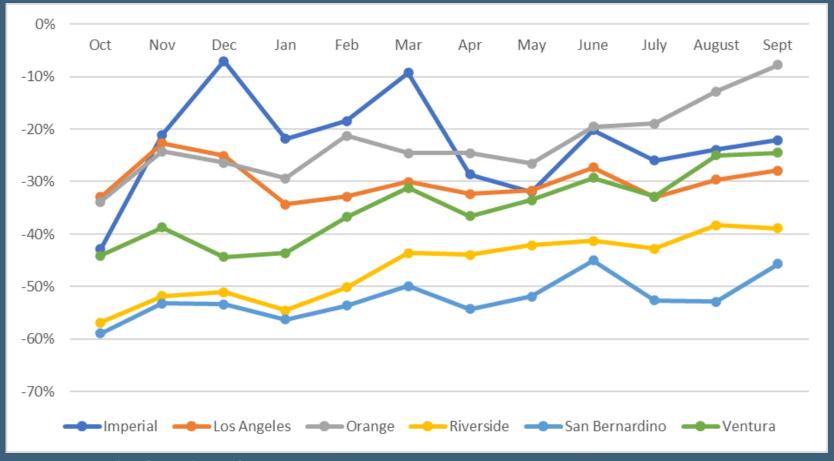




Connect SoCal 2020 Transit/Rail Network

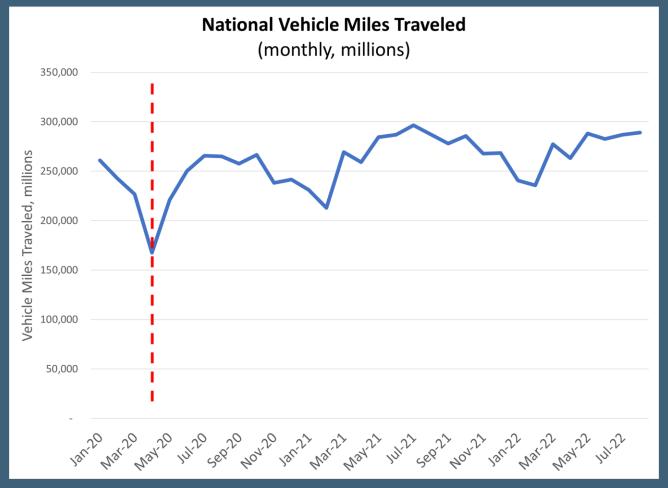


Current Conditions – Regional Ridership (Monthly Bus Ridership Percentage Change by County (Compared to 2019)



Source: National Transit Database, https://www.transit.dot.gov/ntd/data-product/monthly-module-adjusted-data-release as of September 2022

Current Conditions - Vehicle Miles Traveled (VMT)



Source: U.S. Bureau of Transportation Statistics, via https://fred.stlouisfed.org



CONNECT SOCAL 2024 TRANSIT/PASSENGER RAIL APPROACH

Mobility Technical Report







STREETS AND HIGHWAYS

TRANSIT/PASSENGER RAIL

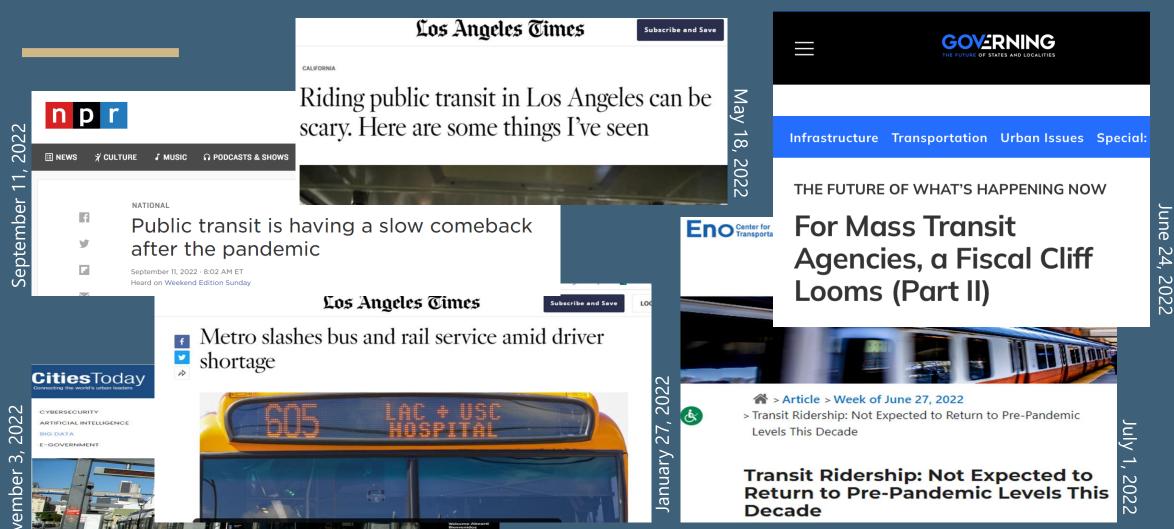
ACTIVE TRANSPORTATION

Transit/Rail – Planning Guidance

- Federal Requirements
 - ✓ MPO Final Rule Coordination with transit operators
 - ✓ Transit Asset Management Final Rule
 - ✓ Public Transportation Agency Safety Plan (PTASP) Final Rule
- State Requirements
 - ✓ RTP Guidelines
 - ✓Innovative Clean Transit (ICT)
- Recently Adopted State/Local Plans

Current Challenges

Fewer women taking LA transit amid safety concerns



Current Opportunities

- Mobility Hubs
- Mobility as a Service
- Universal Basic Mobility/Mobility Wallet
- Dedicated Lanes
- Shared Mobility (e.g., microtransit, TNCs, etc.)
- Transit ITS
- Metrolink SCORE
- Propulsion Technologies (e.g., zero emissions/ICT rule)



Metropolitan Planning Framework

Transit Operators

Plans,
Programs,
Projects



County
Transportation
Commissions

Countywide Planning/
Programming



Regional Transportation Plan

Federal
Transportation
Improvement
Program

Regional Transit Technical Advisory Committee forum for regional coordination

Transit/Rail Strategies – Others?

EQUITY

Dedicated Lanes Fare
Integration &
Ticketing

Schedule Coordination

Customer Experience

Transit
Oriented
Development

Clean Technology Promoting
Data
Standards



Plan Performance Measures

Mobility

- Trip distance
- Mode share
- Person hours of delay by facility type
- Person-delay per capita
- Truck delay by facility type
- Average travel time
- Travel time by mode
- Major destination accessibility
- Access to jobs
- Transit seat utilization

Communities

- Share of trips less than 3 miles
- Share of regional households located in PDAs
- Physical activity & air pollution-related public health incidences & costs

Environment

- VMT per capita
- GHG per capita
- Total square miles of greenfield & rural lands converted to urban use
- Criteria air pollutants
- Energy & water consumption per capita
- Park/open space accessibility

Economy

- New jobs added due to transportation system investments & improved regional economic competitiveness
- Share of employment growth in PDAs
- Transportation system investment benefit/cost ratio

On-going Monitoring Measures

Mobility

- Average travel time
- Commute mode share
- % reliable person-miles traveled on NHS
- Peak hour excessive delay
- NHS bridge, NHS road, & local roads condition
- Fatalities/serious injuries (incl. transit)
- Transit system reliability, equip. condition
- Transit boardings
- Transit seat utilization
- Managed lanes utilization

Communities

- Housing cost burden
- Asthma incidence & exacerbation
- % of residents within1/2 mile walk toopen space
- ADU development
- Housing vulnerable to environmental impacts

Environment

- VMT per capita
- Air quality by basin
- Number of acres of parks for every 1,000 residents
- % of households near high-volume roadways
- % of population in climate risk areas
- Nature adaptation investments
- Urban heat island reduction strategies
- Williamson Act contract acreage impacted

Economy

- Percent of Interstate system mileage providing reliable truck travel time
- Unemployment rate
- **Employment**

Timeline

- Jan. 2023: Share Transit/Rail Approach with Transportation Committee
- **Spring 2023:** Share updates with RTTAC
- Summer 2023: Share updates with RTTAC
- Fall 2023: Release Draft Connect SoCal 2024
- Fall/Winter 2023/24: Public Comment Period
- **Spring 2024:** Seek Adoption of Connect SoCal 2024







TRANSIT OPERATIONS AND MAINTENANCE FINANCIAL FORECAST

Jaimee Lederman

Financial Plan Background

- Financial plan a key requirement for RTPs
 - Estimate of funding needed over 20-year plus life of Plan to implement recommended improvements, operate and maintain the transportation system
 - RTP must be fiscally constrained balance reasonably available expected revenue sources versus estimated costs

• 0&M

- Initially, evaluate the cost of maintaining and operating the existing transportation system
- Then consider forecasted cost to maintain any capital expenditures (expanded system) in the Plan

Assumptions

 Builds off county transportation commissions, state forecasts, federal apportionments, and others

Looking for Feedback from Transit Operators

- 1. What are your plans for restoring pre-pandemic service levels and service level growth? How does this reflect trends in ridership?
- 2. What inflation factor are you using for labor? For capital (construction and vehicle) costs? Approach for short-term versus long-term?
- 3. How does the requirement to purchase of Zero Emissions Buses under California's Innovative Clean Transit Rule impact projected rehab and replacement costs and timeline?



DRAFT TECHNICAL METHODOLOGY FOR CONNECT SOCAL 2024

Camille Guriba

What is the Technical Methodology?

- Methods for calculating greenhouse gas (GHG) emissions
 - Explains how SCAG will estimate GHG reductions from Connect SoCal using the activity-based model or other off-model method
- Required by California Air Resources Board (CARB)
 - Every MPO must submit a draft to CARB prior to starting their formal public participation process
 - Connect SoCal 2024 public workshops slated to start in Spring 2023

SCAG's 2035 GHG
Reduction Target:
19% from
2005 levels

What is in the Technical Methodology?

- Addressing CARB's Previous Recommendations
- Existing Conditions
 - Changes in Planning Context
 - Key Regional Issues
- Population, Household, and Employment Growth Forecasts
- Modeling Background and Assumptions
- Approaches for quantifying GHG emission reductions for potential Connect SoCal strategies

Which strategies are quantified via the model?

- Pricing (Congestion Pricing, Express Lanes, Mileage-Based User Fees)
- Improved Bike Infrastructure
- Infill Development and Density Near Transit
- New Transit Capital Projects
- Land Use Strategies
- Transportation Demand Management
- Job Center Parking Strategy
- Average Vehicle Ridership (AVR) for Job Centers*
- Multimodal Dedicated Lanes*

Which strategies are quantified off-model?

- Improved Pedestrian Infrastructure
- Shared Mobility (Car Share, Bike Share/Micromobility, and Microtransit)
- Safe Routes to Schools
- Parking Deregulation
- Electric Vehicle Incentives and Infrastructure
- Co-working

What has changed since last cycle?

- Shared Mobility strategy merges 3 strategies
- Urban greening incorporated with Pedestrian Infrastructure
- Encouragement as focus of Safe Routes to School strategy
- New geography for Parking Deregulation strategy
- Identifying new locations for co-working sites

What's Next for the Technical Methodology?

- December 2022: Finalize draft
- January 2023: Submit draft to CARB
- Ongoing (2023): Continued SCAG staff refinement of strategies; review and feedback by CARB staff
- April 2024: Submit final Technical Methodology with SCS submission to CARB



THANK YOU!

For more information, please visit: https://scag.ca.gov/connect-socal

Transit Approach – Priscilla Freduah-Agyemang, <u>Agyemang@scag.ca.gov</u> & Steve Fox, <u>fox@scag.ca.gov</u>

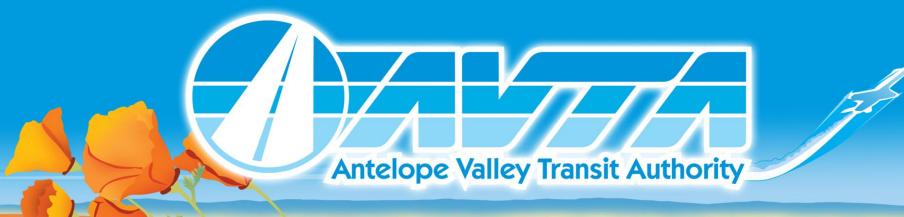
Transit O&M – Jaimee Lederman, <u>Lederman@scag.ca.gov</u>

Technical Methodology – Camille Guiriba, guiriba@scag.ca.gov

Electrification Journey North America's First Fully Zero-Emissions Fleet

November 30, 2022

Martin J. Tompkins, Executive Director/CEO



Agenda



AGENCY BACKGROUND:

- Locations
- Fleet Size
- > ZEB/BEB
- Infrastructure

PLANNING:

- Funding
- Electric or Hydrogen
- Infrastructure Footprint
- Service Providers (Cal Edison)
- Vehicle Type
- Chargers
- Route Mileage
- Back up Plan (power outages)

DEPLOYMENT/IMPLIMENTATION:

- > Construction
- >Vehicle Purchase and delivery timeline
- ➤ Training



Agency Background

AVTA



- Established in 1992 Joint Powers Authority (JPA 6 Member Agency)
- Facility 15 Acres With Solar Canopy Throughout
- ❖ Local Transit Fully Electric in 2020
- ❖ Commuter Service Fully Electric 2022
- ❖ 100% Fully Electric March 2022
- * 89 Charging Stations (80kW & 200kW)
- ❖ 12 WAVE Pads For Opportunity Charging Across Four Transit Centers (one additional center pending) Each Center has 3 Pads
- ❖ Service Area 1,200 Square Miles (Kern Co. To The North, Century City To The South, San Bernardino Co. To The East And 5Fwy & 138 Highway To The West
- Current Fleet Size 89 Vehicles
 - 44 BYD 40' (Local Transit)
 - 13 BYD 60' (Local Transit),
 - 24 MCI 45' (Commuter)
 - 8 GP 27' (Micro Transit).



Planning.....



Funding:

✓ Apply For All Grant Funding Sources For Vehicles And Infrastructure - FTA, State and Local

Choice of Alternate fuels

Electric or Hydrogen: For AVTA We Chose To Go Electric.

Infrastructure Plan

- ✓ Size Of The Footprint Layout
- ✓ Grid Capability. How Much Power Do You Have Coming Into Your Facility To Charge Multiple Buses?
- ✓ Charging Plan. How Much Capability Do You Have To Charge And When Peak of Peak?
- ✓ Engineering: Ensure Both The Project Engineer And Utility Provider Engineer Are Working Closely Together

Vehicle Type and Battery Size

- ✓ Vehicle Mileage Capacity (AVTA's 130-177)
- ✓ Battery Size (for AVTA 320kW, 579Kw, 544kW)

Back Up Plan (Power Outages)

✓ AVTA Invested In A 1 MW Generator That Can Charge Up To 15 Buses At Once In 6-8 Hours

Training: Will Be The Most Important Part Of The Transition Plan

- ✓ Maintenance Your Technicians Will Now Be Frechnicians. Training, Training, Training!!
 - Operations Involve Everyone And Ensure That Those Who Maintain And Drive The Bus Have

A Buy In. Operator Training Is Critics — Regen, Range Anxiety etc.





...Planning & Training

- Range Anxiety
- Brake Regeneration
- ✓ Speed Acceleration
- ✓ Bus Alignment At The Transit Center For Effective Opportunity Charge
- ✓ Well Trained Operations Staff That Understand Bus Ranges And Are Able To Makes Adjustments On The Go
- ✓ Charging Ambassador Ensures All Buses Are Plugged In Nightly So That All Buses are at 100% SOC For AM Pull – Out
- Route Planning For Opportunity Charging (OPTIBUS Scheduling)









Implementation/Deployment

Current

- Added Two Additional Lines Of Electricity At 12,500 Volts Each
- Eighty-nine Available Charger-ready Stalls At Our Facility
- Twelve WAVE Charging Pads Spread Out Among Four Transit Centers For Opportunity Charging.
- One 1.5MW Generator For Power Outages
- Charging/Monitoring Management Systems:
 - Electronic Load Management System (ELMS)
 - Health Alert Management System (HAMS)







What's Next For AVTA?

- > January 2023 On Schedule To Achieve 10,000,000 Electric Miles Traveled
- > 3rd QTR 2023 Receive 26 Additional Transit Buses (Replacement And Addition)
- > Install Additional Opportunity Charging WAVE Pads Throughout The Service Area
- ➤ Solar Farm AVTA Is In The Process Of Purchasing 43.5 Acres Of Land Adjacent To AVTA For The Installation Of A Complete Solar Farm With Battery Storage. Land Use Will Also Include Bus Parking, Additional Charging Infrastructure And Solar Canopy's In The Bus Parking Area. Solar Farm Estimated Completion Timeline 2024
- > Joint Grant Award, TIRCP 5 Partnership With Antelope Valley School Transportation Authority (AVSTA)

 Charging Opportunity For New Electric School Buses From Our New Solar Farm/Infrastructure
- Working With LADOT On A Back Up Plan For Charging Opportunity At A Shared Lay-over/Parking Location In Los Angeles



Thank you!



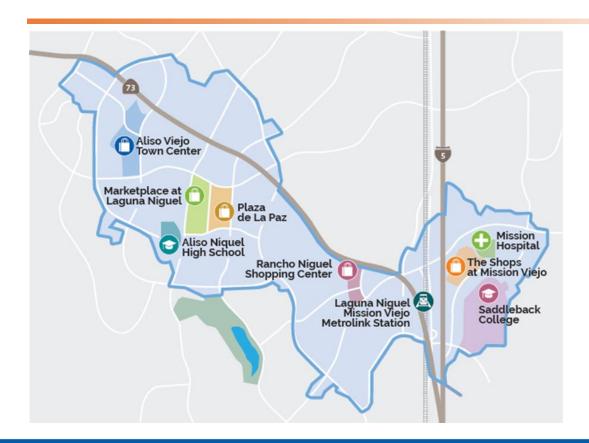


OCTA

SCAG
REGIONAL TRANSIT TECHNICAL
ADVISORY COMMITTEE
NOVEMBER 30, 2022

PILOT ZONE





PROJECT GOALS



OCTA identified five goals for micro-transit within Orange County:

- 1. Provide public transit mobility in low-demand areas
- 2. Reduce total operating and capital costs
- 3. Reduce vehicle miles traveled
- 4. Extend the reach of the OC Bus and Metrolink services
- 5. Meet customer needs

KEY PERFORMANCE METRICS



Board Adopted Goals	Target	FY21/22
Productivity (Boardings per Revenue Vehicle Hour)	6	1.9
Cost Effectiveness (Subsidy per Boarding)	\$9.00	\$33.88
Shared Rides (% of Bookings sharing a vehicle)	25%	25%
Connecting Transit Trips (% of transfer trips)	25%	27%
Customer Satisfaction (Average Rating)	85%	4.8

PROJECT UPDATES



Contract Structure

Incorporation of the OC Flex service into the OC ACCESS RFP in 2021

New Contractor and Technology

 On January 1, 2022, First Transit assumed responsibility for the maintenance and operation of OC Flex service, with use of RideCo technology

New Features

Advanced booking, push notifications, in-app messaging

RIDERSHIP TREND





PROJECT FUTURE



Making Better Connections Study

 As part of a comprehensive study to examine OC Bus service in a post-COVID-19 environment, potential new microtransit zones were identified for further analysis and possible future implementation.

OC Flex Rider Survey

 OCTA currently conducting market research to better understand the effects of the pandemic and associated changes on ridership.

CONTACT



Melissa Mungia

Section Manager, Specialized Transit Services mmungia@octa.net

Jack Garate

Department Manager, Specialized Transit Services igarate@octa.net