

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 Cindy Allen, Long Beach

First Vice President Ray Marquez, Chino Hills

Second Vice President
Jenny Crosswhite, Santa Paula

Immediate Past President Curt Hagman County of San Bernardino

COMMITTEE CHAIRS

Executive/Administration Cindy Allen, Long Beach

Community, Economic, & Human Development

David J. Shapiro, Calabasas

Energy & Environment Rick Denison, Yucca Valley

Transportation
Mike T. Judge, Ventura County
Transportation Commission

MEETING OF THE

REGIONAL TRANSIT TECHNICAL ADVISORY COMMITTEE

Wednesday, October 29, 2025 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 ONE CONFERENCE ROOM NUMBER: 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

In accordance with the Americans with Disabilities Act (ADA), SCAG provides accommodations for persons who require them to participate in public meetings. SCAG also provides translations of its documents upon request in accordance with Title VI. Both services can be requested with at least 72 hours (three days) notice in advance of the meetings by calling (213) 236-1895.

REGIONAL TRANSIT TECHNICAL ADVISORY COMMITTEE AGENDA

Wednesday, October 29, 2025

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 Chair)

2.0 <u>PUBLIC COMMENT PERIOD</u> – Members of the public desiring to speak on an agenda item or items not on the agenda, but within the purview of the Regional Transit Technical Advisory Committee, must use the "raise hand" function on your computer or dial *9 by phone, and wait for the Chair to announce your name/phone number. Limit oral comments to three (3) minutes, or as otherwise directed by the Chair. 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 July 30, 2025, RTTAC Meeting (Priscilla Freduah-Agyemang, SCAG)		3
	3.2	<u>Transportation Trends Update</u> (Alexis Murrillo-Felix, SCAG)		9
	3.3	High Quality Transit Corridors (HQTCs) and Major <u>Transit Stops (MTS) Update</u> (Alexis Murrillo-Felix, SCAG)		34
	3.4	Federal Transit Administration (FTA) Safety Bulletin (Priscilla Freduah-Agyemang, SCAG)		35
	3.5	FTA National Transit Database (NTD) Reporting Requirement Changes for 2025-2026 (Priscilla Freduah-Agyemang, SCAG)		36
	3.6	American Public Transportation Association (APTA) 2025 Public Transportation Vehicle Database (Priscilla Freduah-Agyemang, SCAG)		37
	3.7	APTA 2025 Fact Sheet (Priscilla Freduah-Agyemang, SCAG)		38
	3.8	The Right-Sizing Playbook (Priscilla Freduah-Agyemang, SCAG)		39

REGIONAL TRANSIT TECHNICAL ADVISORY COMMITTEE AGENDA

Wednesday, October 29, 2025

	3.9	2026 SCAG Draft Public Participation Plan (Priscilla Freduah-Agyemang, SCAG)		40
4.0	INFO	RMATIONAL ITEMS		
	4.1	<u>Transit Transformation Task Force Update</u> (Lorelle Moe-Luna, RCTC)	20	42
	4.2	PRONTO: Open Loop Payments: "The Good, the Bad and the Unknown" (Israel Maldonado, San Diego MTS)	20	50
	4.3	Metrolink Reimagined (Sabrina Davis, and Henning Eichler, Metrolink)	20	61
	4.4	Innovative Clean Transit Regional Assessment Study Update (Fang Yan, ICF)	20	75
	4.5	<u>City of Santa Monica Big Blue Bus (BBB) Bus Lane</u> <u>Enforcement Program</u> (Abdallah Daboussi, City of Santa Monica)	20	95
	4.6	SCAG's Transportation Data Analysis Technical Assistance Program (Isabelle Legare, Associate Regional Planner, SCAG)	10	110
5.0	STAFF	REPORT		
	5.1	High Quality Transit Corridors (HQTCs) and Major Transit Stops (MTS) Update (Alexis Murrillo-Felix, SCAG)	5	

6.0 <u>ADJOURNMENT</u>

The next Regional Transit Technical Advisory Committee meeting is <u>tentatively</u> scheduled for <u>Monday</u>, <u>January 26</u>, <u>2026</u>.

Regional Transit Technical Advisory Committee (RTTAC)

of the

Southern California Association of Governments

July 30, 2025

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 virtually (telephonically and electronically). The meeting was called to order by Chair, Jennifer Nguyen, Riverside Transit Agency.

Members Participating:

Jennifer Nguyen (Chair) Riverside Transit Agency

Aubrey Smith (Vice Chair) Ventura County Transportation Commission

Judy Vaccaro-Fry Antelope Valley Transit Authority
David Ortega Anaheim Transportation Network

Diana Chang City of Culver City Bus

Randy Barragan City of Riverside

Abdallah Daboussi City of Santa Monica Big Blue Bus

Patti Solano City of Riverside Special Transportation

Josh Landis Foothill Transit

Austin Novstrup Gold Coast Transit District

Gustavo Gomez Imperial County Transportation Commission

Carolyn Jones-Mentor Long Beach Transit
Callum Lapper Long Beach Transit

Chun Leung Los Angeles Department of Transportation

Lori HuddlestonLos Angeles MetroTeresa WongLos Angeles MetroAllison HigginsLos Angeles MetroKyle HollandLos Angeles Metro

Brian Jacob Metrolink
Collin Mullaney Metrolink

Chris Wood Montebello Bus Lines
Yessie Granados Montebello Bus Lines
Lamicia Butler Montebello Bus Lines
Derek Donnell Norwalk Transit System

Alex Shippee Omnitrans
Ben Nolen Omnitrans
Jeremiah Bryant Omnitrans

Charles Main Orange County Transportation Authority
Lorelle Moe-Luna Riverside County Transportation Commission
Sheldon Peterson Riverside County Transportation Commission

Regional Transit Technical Advisory Committee (RTTAC) – July 30, 2025

Mairany Anaya San Bernardino County Transportation Authority

James Lee Torrance Transit System

Ryan Plumb Torrance Transit

Matt Miller Ventura County Transportation Commission

Sylvia Haris Victor Valley Transit Authority

Rod Goldman Victor Valley Transit

Carlo Ramirez Caltrans D7 Karen Herrera Caltrans D7 Kirk Schneider Caltrans D7 Linda Mendez Caltrans D7 Lorna Foster Caltrans D8 Darleen Mendez Caltrans D8 Lloyd Clark Caltrans D10 Seth Cutter Caltrans D12 Zachary Paul Caltrans D12 Joanna Xiao Caltrans

SCAG Staff:

Priscilla Freduah-Agyemang Alexis Murillo-Felix Courtney Aguirre

1.0 CALL TO ORDER

Jennifer Nguyen, Riverside Transit Agency, Chair, called the meeting to order at 10:05 a.m. Agencies and attendees 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 May 28, 2025, RTTAC Meeting
- 3.2 Transportation Trends Update
- 3.3 SCAG Letter on Advancing Transit to the California State Transportation Agency
- 3.4 How Transit Agencies Are Overcoming Workforce Shortages Without Expanding Their Fleet
- 3.5 ADA Compliance for Transit Agencies

- 3.6 Eno Transit Construction Costs Data Explorer
- 3.7 FTA's Capital Cost Database Analysis Study
- 3.8 Caltrans Draft Director's Transit Policy

Priscilla Freduah-Agyemang, SCAG, reviewed the Receive and File items. Priscilla directed members' attention to item 3.2 Transportation Trends Update, which includes the most recent transit ridership and Vehicle Mile Travel (VMT) trends over time. This report was also shared with the SCAG Transportation Committee. She then informed members about SCAG's letter on Advancing Transit to the California State Agency (CalSTA) and invited members to review the final version of the letter. Priscilla then highlighted the Caltrans Draft Director's Transit Policy. She shared that Caltrans had attended the RTTAC meeting previously to share the draft policy for feedback. She encouraged members to provide comments and attend the in-person workshop, where verbal comments will be accepted.

4.0 INFORMATIONAL ITEMS

4.1 <u>Imperial County Transportation Commission (ICTC) Microtransit Pilot</u>

Gustavo Gomez, Senior Transportation Planner at ICTC, introduced Calexico's on demand microtransit pilot. ICTC launched the pilot transit service in January of 2023 within the city of Calexico. The pilot was funded by the Clean Mobility Options (CMO) grant program that supports community driven clean transportation in underserved areas.

Mr. Gomez highlighted that the pilot gave ICTC the opportunity to experiment with a flexible, local service different from established circulators. He then described how the unique characteristics of Calexico have contributed to the success of the microtransit pilot. Prior to launching the service, ICTC was unaware of the community's need for on-demand transit service. He explained how the service worked for residents. Residents can make a reservation through a mobile app or through a phone call. The fare for the service is \$2.00 for the general public, and \$1.00 for discounted fare riders. The wait time is about 30 to 45 minutes and allows reservation for up to four people.

Mr. Gomez also shared the metrics such as productivity and met demand, which underscored the success of the service. However, despite the recent success of the pilot, it has not met the full demand for on-demand service because of the existing capacity constraints. As the pilot continues, ICTC will be adjusting the microtransit service to meet the needs of the Calexico residents. Further, he noted that ICTC is considering extending the service beyond the pilot phase and has plans to update the mobile app to create an easier interface for senior members to access the service.

Priscilla Freduah-Agyemang, SCAG, commented on the pilot program's limited grant funding and operational lifespan. Priscilla asked whether ICTC has plans to continue the service after the pilot concludes. She also asked if the low fares for the service would be sustainable if the project were implemented permanently.

Mr. Gomez explained that ICTC is undergoing a Comprehensive Operational Analysis (COA). ICTC plans to evaluate the microtansit service as part of the COA and will determine whether the program will be implemented permanently.

4.2 City of Riverside and Riverside Transit Agency Ohmio Autonomous Pilot Project

Jennifer Nguyen, Planning Director, RTA, provided insight into a new pilot project where the agency operates Ohmio autonomous transit service in the City of Riverside. Ms. Nguyen explained that the partnership was developed in coordination with the Local Amalgamated Transit Union (ATU), and agreed that RTA safety drivers are present at all times, on board the autonomous vehicles. The safety drivers on board will answer questions, board wheelchairs, and assist passengers.

Ms. Nguyen then shared more about the vehicles, which can operate up to 25 miles an hour but are currently operating at 15 miles per hour. The vehicles can accommodate 8 passengers, a wheelchair, and 6 standees. The City of Riverside has leased 3 of the vehicles that RTA is operating. She further explained that the service is being evaluated at locations throughout Riverside alternating between locations based on RTA's service changes. The first location of the new autonomous vehicles is at Riverside Municipal Airport. From there they will be utilized in locations with higher demand such as University of California Riverside and Downtown Riverside. RTA will later determine the locations for year 2.

RTA's partnership with Ohmio marks the first use of autonomous transit services in the nation. Ms. Nguyen explained that this new partnership could benefit multiple sectors of the transit industry from workforce development to improved service for underserved riders. She highlighted that the service offers RTA and City of Riverside the opportunity to explore first/last mile connections to transit, areas generally hard to serve with regular buses and underserved/low ridership areas. She then invited RTTAC members to try the service when in the Riverside area and noted they will be operating at the Riverside Municipal Airport through September 14th.

4.3 VCTC Open Loop Payment System

Matt Miller, Program Manager, VCTC provided an update on VCTC's open loop fare collection project. He provided details on the partnerships between Santa Barbara County Association of Governments (SBCAG) and the California Integrated Travel Program (Cal ITP), and SCAG, which made the project possible. Mr. Miller highlighted the work conducted to launch TAP2Ride including coordination between partners and vendors, rider education, and promotion of the service. On August 18th, 2025, VCTC will launch reduced fares with www.login.gov for eligible riders. VCTC's next step is to introduce the TAP2RIDE system to the entire county.

Next, Mr. Miller discussed the challenges and opportunities VCTC encountered while implementing the new system. From VCTC's experience with their closed loop system, they learned that fare revenue was being sent to VCTC instead of the operating agency. The

new system will allow them to implement direct revenue payment to local agencies. In addition, the open loop system allows riders to return unused funds from their transit card to their debit card or bank account. Lastly, the system provides local transit agencies the flexibility to designate their own fare capping policies. Mr. Miller finally provided an update of VCTC's fare capping system, which mirrors a monthly pass fare system. VCTC plans to launch this system and its benefits in March of 2026.

Allison Higgins, LA Metro, inquired why login.gov was used for the open loop verification process. Mr. Miller explained that CalITP developed the www.login.gov process for identity verification so the decision to use the portal was not only up to VCTC but recommended by the state. Ms. Higgins explained that using www.login.gov is a great tool for utilizing a government database to verify individuals. Mr. Miller provided details on the benefits system CAL ITP is developing with the portal, which will allow riders to access a menu of agencies from which they can choose to receive benefits.

Priscilla Freduah-Agyemang, SCAG, asked whether the benefits were related to social service agencies or other transit agencies. Mr. Miller clarified that the platform is intended for transit agencies but is also accessible to public agencies. Ms. Freduah-Agyemang then asked if riders could access benefits from other agencies outside of VCTC, provided those agencies were connected to the platform. Mr. Miller agreed that anyone connected to the CalITP system would be able to utilize the platform's benefits even from other agencies. Mr. Miller also confirmed that the platform's benefits would only be available to agencies that CalITP had previously worked with.

4.4 Metro Fare Capping Policy Update

Allison Higgins, LA Metro, provided an update on LA Metro's fare capping policy. She shared that since July of 2023, LA Metro has removed the one-day, seven-day, and 30-day passes and replaced them with one-day and seven-day fare capping systems. Metro also standardized all reduced fares to 75 cents for all eligible reduced fare riders.

In the first 30 days of the new fare capping system, Metro recorded 700,000 tap cards activated fare caps. Metro's fare capping system became the nation's first flexible sevenday fare cap, meaning the cap was no longer fixed from Monday to Sunday. Ms. Higgins then demonstrated the success of the new seven-day fare capping system compared to the previous seven-day fare pass system.

Ms. Higgins then provided an update of the 2025 success of the fare capping system. The one-day fare cap was activated by 16.55% of riders saving a total of \$1.1 million. The sevenday fare cap was activated by 5 % of riders saving a total of \$3.3 million.

Next, Ms. Higgins updated the RTTAC on Metro's fare modernization product, TAP Plus, which will launch in Spring 2026. This open loop system will allow riders to pay fares using credit or debit cards, while still allowing fare cap and transfer benefits. The following year

(2027) Metro will launch contactless payment for reduced fare riders. This change will allow reduced fare riders to link their benefits to credit or debit cards.

In addition, the TAP platform will support integration with a wide range of applications such as government benefit programs and joint ticketing for events. All these benefits will be rolled out alongside all of Metro's 27 TAP partners throughout the region. Finally, Ms. Higgins shared a timeline of the improvements to Metro's fare payment system scheduled in the coming years.

5.0 **STAFF REPORT**

5.1 CalSTA Transit Transformation Task Force Update

Priscilla Freduah-Agyemang, SCAG, shared updates on the CalSTA Transit Transformation Taskforce. She provided an overview of upcoming CalSTA TTTF meetings in August, as the last meeting to be held in June at Metro was cancelled. First, she shared that the 11th meeting of the Transit Transformation Task Force scheduled for August 1st in Oakland. She provided a preview of the agenda and the meeting materials and encouraged RTTAC members to register to attend the virtual option via Zoom, which is available to the public.

Ms. Freduah-Agyemang also informed the RTTAC about the additional meeting in August, scheduled for August 26th at OCTA. Again, she encouraged RTTAC members to plan to attend in person or virtually.

6.0 <u>ADJOURNMENT</u>

Jennifer Nguyen, Chair, adjourned the meeting at 11:46 a.m.



AGENDA ITEM 6

REPORT

Southern California Association of Governments

September 4, 2025

To: Transportation Committee (TC)

EXECUTIVE DIRECTOR'S APPROVAL

Kome F

From: Alexis Murillo-Felix, Senior Regional Planner

(213) 630-1461, felix@scag.ca.gov

Subject: Transportation Trends Update

RECOMMENDED ACTION:

Receive and File

STRATEGIC PRIORITIES:

This item supports the following Strategic Priority 3: Spur innovation and action through leadership in research, analysis and information sharing.

EXECUTIVE SUMMARY:

Considering the COVID-19 pandemic's enduring impacts on travel behavior, SCAG staff provides the Transportation Committee with regular updates on transportation trends, including the impacts from remote work. The staff report attachment provides a comprehensive analysis of post-pandemic transportation trends across the SCAG region. As of June 2025, the region's transit and roadway systems continue to recover, though progress remains uneven across modes. Bus ridership has shown the strongest rebound, reaching 76 percent of pre-pandemic levels, followed by light and heavy rail at 74 percent, and commuter rail at 63 percent. Vehicle miles traveled (VMT) have recovered to 97 percent of pre-pandemic levels, while vehicle hours of delay (VHD) remain significantly lower at 71 percent, indicating more efficient travel patterns possibly driven by hybrid work arrangements. Truck VMT has stabilized at approximately 95 percent of pre-pandemic levels. Remote work continues to reshape travel behavior, with 33 percent of full workdays still occurring from home in the SCAG region.

BACKGROUND:

The SCAG region is served by over 100 transit operators providing bus, rail, and commuter rail services across six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. However, 27 transit agencies were selected based on their operational scale and the availability of comparable ridership data to focus the analysis of the attached report. The network includes large regional agencies like Los Angeles County Metropolitan Transportation Authority (LA Metro), Orange County Transportation Authority (OCTA), and Southern California Regional Rail Authority (SCRRA) which operates Metrolink, as well as a wide range of local municipal operators. Bus systems dominate the public transportation landscape in terms of coverage and ridership,



particularly in dense urban areas. Metrolink, the region's commuter rail provider, links five counties with longer-distance service across seven lines. This regional diversity underpins the importance of analyzing ridership and system performance collectively.

Travel Trends and Ridership Recovery

The analysis in the attached report draws on multiple data sources to assess how travel patterns have evolved since the COVID-19 pandemic. Ridership data from the National Transit Database (NTD), LA Metro, and SCRRA highlight distinct trends by mode:

- Bus ridership is leading the recovery, with 76 percent of pre-pandemic levels restored. Growth has been steady but uneven, reflecting seasonal variation.
- Light and heavy rail ridership has reached 74 percent of pre-pandemic levels, though gains have been inconsistent due to fluctuating demand and travel preferences.
- Metrolink's commuter rail system has rebounded to 63 percent, supported by its transition to an all-day service model aimed at accommodating hybrid commuters and discretionary trips.

The report details rolling trends and month-over-month change comparisons, illustrating seasonal patterns, recovery plateaus, and the effects of service expansions. Collectively, these data points emphasize the challenges and opportunities in restoring transit usage to pre-pandemic levels.

Roadway Volumes, Goods Movement, and Remote Work Impacts

Vehicle travel on the region's highways has largely rebounded. According to California Performance Measurement System (PeMS) data:

- VMT has recovered to 97 percent of pre-pandemic volumes, indicating near-full resumption of driving activity.
- VHD, a measure of congestion, remains at 71 percent of prior levels, suggesting more efficient traffic flow potentially due to ongoing remote and hybrid work patterns.
- Truck VMT has settled at 95 percent, reflecting shifts in freight logistics, e-commerce demand, and industrial activity.

Remote work continues to exert a strong influence on travel demand. Using Survey of Working Attitudes and Arrangements (SWAA) data, the report finds that roughly one-third of workdays are still performed from home, a trend that has remained stable since early 2023. This persistent behavior helps explain continued reductions in peak-period congestion and transit ridership lag in downtown corridors.



Together, the findings offer a nuanced picture of how Southern California's mobility landscape is evolving. The persistence of flexible work, dispersed trip-making, and new travel preferences call for adaptive planning approaches and policy strategies.

NEXT STEPS:

Staff will continue to provide quarterly updates to the Transportation Committee on regional transportation and work-from-home trends using monthly PeMS, NTD, and SWAA data as the data becomes available. Staff will also continue to update the work-from-home statistics monthly on the SCAG SoCal Economic Trends Dashboard.

FISCAL IMPACT:

None.

ATTACHMENT(S):

1. Transportation Trends Report through June 2025 - FINAL



Multimodal Integration Program

Transportation Trends Report: June 2025

SEPTEMBER 2025

MORILITY + COMMUNITIES + ENVIRONMENT + ECONOMY

Attachment: Transportation Trends Report through June 2025 - FINAL (Transportation Trends Update)

Table of Contents

List of Exhibits	•••
Introduction	2
Overall Transportation Trends	4
Transit Ridership	
Vehicular Travel	. 13
Telework Impacts	.17
Conclusion	.18

List of Exhibits

Exhibit 1	Public Transit Operators in the SCAG Region	2
Exhibit 2	Total Bus Passenger Trips Distribution by County in the SCAG Region for Fiscal Year 2024-25	5
Exhibit 3	Bus Total Unlinked Passenger Trips, 12 Month Rolling	6
Exhibit 4	Bus MoM Comparison as a Percentage Change, 12 Month Rolling	7
Exhibit 5	Post-Pandemic Bus Ridership Recovery as a Percentage of Fiscal Year 2018-19, 12 Month Rolling	7
Exhibit 6	Light and Heavy Rail Total Passenger Trips, 12 Month Rolling	8
Exhibit 7	Light and Heavy Rail MoM Comparison as a Percentage Change, 12 Month Rolling	9
Exhibit 8	Post-Pandemic Light/Heavy Rail Ridership Recovery as a Percentage of Fiscal Year 2018-19, 12 Month Rollin	ıg 10
Exhibit 9	Metrolink Commuter Rail Total Passenger Trips, 12 Month Rolling	11
Exhibit 10	Metrolink MoM Comparison as a Percentage Change, 12 Month Rolling	12
Exhibit 11	Post-Pandemic Metrolink Ridership Recovery as a Percentage of Fiscal Year 2018-19, 12 Month Rolling	12
Exhibit 12	VMT in the SCAG Region by Month, 12 Months Rolling	14
Exhibit 13	VHD in the SCAG Region by Month, 12 Months Rolling	15
Exhibit 14	Truck VMT in the SCAG Region by Month, 12 Month Rolling	
Exhibit 15	Monthly Percentage of Full, Paid Working Days at Home, SCAG Region	18

Introduction

The SCAG region is home to a diverse and expansive public transit ecosystem, with over 100 operators providing a broad range of services across its six counties. These services span local fixed-route bus systems, regional transit networks, intercity services, and commuter rail—reflecting the region's varied geography and population density.

To focus this analysis, 27 transit agencies were selected based on their operational scale and the availability of consistent and comparable ridership data. These agencies represent a cross-section of public operators, including municipal systems, joint powers authorities (JPAs), county transportation commissions, and transit districts. Exhibit 1 categorizes these agencies by county and mode.

Each county's transit network is shaped by its unique context:

- Imperial County is served by the Imperial County Transportation Commission, which offers intercity bus services across a vast, rural area.
- Los Angeles County features the highest number and variety of operators. Los Angeles County
 Metropolitan Transportation Authority (LA Metro) operates an extensive network that includes
 local and rapid bus service, as well as both light rail and heavy rail lines. Smaller municipal
 operators such as Santa Monica's Big Blue Bus, Culver CityBus, and the Los Angeles Department
 of Transportation (LADOT) also provide critical bus services within the county.
- In Orange County, the Orange County Transportation Authority (OCTA) operates a comprehensive fixed-route bus system, while Anaheim Transportation Network (ATN) offers circulator and shuttle services, particularly in the resort district.
- In Riverside and San Bernardino counties, major operators include Riverside Transit Agency (RTA), SunLine Transit Agency, and Omnitrans, each of which provides local and regional bus service.
- Ventura County's transit landscape includes Gold Coast Transit District and the Ventura County Transportation Commission, both of which provide regional and local bus service.
- Commuter rail service across five counties in the SCAG region is provided by Metrolink, which connects key population centers via seven lines. As a regional backbone for longer-distance and intercounty commuting, Metrolink supports systemwide mobility and integration.

Exhibit 1 Public Transit Operators in the SCAG Region

County	Transit Agency	Service Area	Mode
Imperial	Imperial County Transportation Commission	Regional	Bus
Los Angeles County	Antelope Valley Transit Authority	Local	Bus
	Beach Cities Transit (City of Redondo Beach)	Local	Bus
	City of Commerce Municipal Buslines	Local	Bus
	City of Gardena Transportation Department	Local	Bus
	Culver CityBus	Local	Bus
	Foothill Transit	Regional	Bus
	Glendale Beeline	Local	Bus
	LA Metro	Regional	Bus, Heavy/Light Rail
	LADOT Transit	Regional	Bus
	Long Beach Transit	Local	Bus

County	Transit Agency	Service Area	Mode
	Montebello Bus Lines	Local	Bus
	Norwalk Transit System	Local	Bus
	Pasadena Transit	Local	Bus
	Santa Clarita Transit	Local	Bus
	Santa Monica Big Blue Bus	Local	Bus
	Torrance Transit	Local	Bus
Orange County	Anaheim Transportation Network	Local	Bus
	OCTA	Regional	Bus
Riverside County	RTA	Regional	Bus
	SunLine Transit Agency	Local	Bus
San Bernardino	Omnitrans	Regional	Bus
County	Victor Valley Transit Authority	Local	Bus
	Arrow Service	Local	Light Rail
Ventura County	Gold Coast Transit	Regional	Bus
	Ventura County Transportation Commission	Regional	Bus
Multi County	Metrolink, operated by the Southern California Regional Rail Authority (SCRRA)	Regional	Commuter Rail

In addition to ridership trends, this report presents a comprehensive analysis of travel behavior in the SCAG region using three primary datasets:

- National Transit Database: Provides monthly ridership trends by mode and operator.
- **California Performance Measurement System:** Offers near real-time data on vehicle miles traveled, vehicle hours of delay, and truck activity on the state highway system.
- **Survey of Working Attitudes and Arrangements:** Captures how remote and hybrid work patterns are reshaping commute behavior.

Each dataset offers a unique perspective. Together, they help contextualize how travel has changed in the post-pandemic era—highlighting uneven recovery across counties and modes, as well as emerging trends such as reduced congestion and persistent telework. By referencing these sources and developing integrated analysis, this report provides SCAG's Transportation Committee, policymakers, and stakeholders with a timely, data-driven foundation to:



Evaluate shifts in travel behavior across the region.



Shape future transportation investment and planning decisions.



Develop strategies to rebuild transit ridership.



Assess the equity impacts of transportation trends.



Anticipate changes in commuting patterns due to hybrid work arrangements.

Overall Transportation Trends

This report evaluates transportation trends and ridership across the SCAG region by mode and month and provides a systemwide assessment, regardless of whether specific rail lines have opened, extended, or suspended service during the evaluation period. Similarly, bus agencies across the region adjust service levels by suspending or discontinuing routes as needed. The intent of this report is to evaluate overall bus and rail ridership totals rather than analyze changes at the individual route level. For the purposes of assessing post-pandemic ridership recovery, this report uses fiscal year 2018-19 as the baseline year for comparison.

As of June 2025, transit ridership and vehicle travel in the SCAG region have continued to recover from the impacts of the COVID-19 pandemic, though patterns vary by mode, further summarized below:

- Across all transit modes, bus ridership has led the recovery, followed by light and heavy rail, while commuter rail has been the slowest to return to pre-pandemic ridership levels.
- Bus ridership has shown a steady recovery, with 76 percent of pre-pandemic ridership
 recovered as of June 2025. In the last 12 months ridership experienced seasonal fluctuations;
 most months ranged between 86 percent and 89 percent, suggesting relative stability before the
 decline observed June 2025.
- **Light and heavy rail ridership recovered 74 percent of pre-pandemic ridership** as of June 2025, despite recent service expansions.
- Commuter rail has recovered 63 percent of pre-pandemic ridership and experienced ridership gains month over month, averaging a growth of 1.4 percent the last year. This may be the result of a shift to a more frequent, all-day service model.
- On the roadways, overall vehicle miles traveled (VMT) is at 97 percent of pre-pandemic levels.
 Truck VMT has trended below pre-pandemic levels at 95 percent, with modest fluctuations over the past year.
- Remote work continues to be a key factor; approximately 34 percent of workdays were performed from home over the last year, contributing to reduced peak-hour demand across all travel modes.

JUNE 2025 AT A GLANCE



27.1M Bus Trips

76% recovery of prepandemic ridership



5.3M Rail Trips

74% recovery of prepandemic ridership



621.5K Commuter Rail Trips

63% recovery of pre-pandemic ridership



5.8B VMT

97% recovery of prepandemic levels



236.8M Truck VMT

95% recovery of prepandemic levels

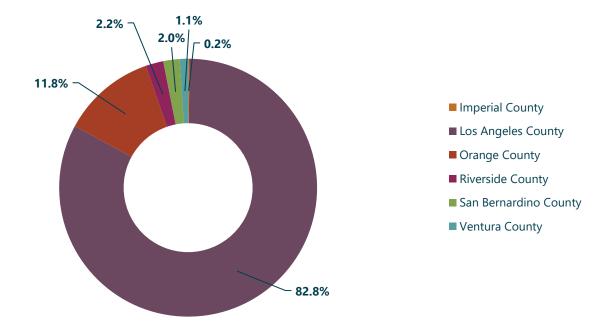
Transit Ridership



BUS RIDERSHIP

Bus ridership in Southern California is heavily concentrated in Los Angeles County, which accounts for the majority of regional trips (82.8 percent). This concentration of regional trips is due to the scale of LA Metro's network and its dense urban coverage (see Exhibit 2). Orange County follows, led by the OCTA's system, with San Bernardino and Riverside counties contributing through agencies like Omnitrans and RTA. Ventura and Imperial counties have comparatively smaller shares, reflecting their lower population densities. Overall, the distribution of ridership aligns closely with population centers and the extent of bus service coverage.

Exhibit 2 Total Bus Passenger Trips Distribution by County in the SCAG Region for Fiscal Year 2024-25



DATA SOURCE

SCAG staff collected and summarized transit data for the region using the National Transit Database (NTD), administered by the Federal Transit Administration. The NTD is the main source of information on U.S. transit systems. SCAG used the NTD's Monthly Ridership Module to track bus ridership trends. However, the NTD has limitations. There is often a delay of several months between when data is collected and when it becomes available. Sometimes, the latest month's data might be incomplete if agencies submit their reports late. These delays make it difficult to provide immediate and current insights.

BUS RIDERSHIP TRENDS

Exhibit 3 presents bus ridership trends across the SCAG region from July 2024 to June 2025. Total ridership fluctuated between 27.1 million and 35.9 million trips. Bus ridership peaked in October 2024 at 35.9 million trips, followed by a decline through the winter months, reaching a low of 29.5 million in February 2025. A modest rebound is observed through the spring months, with ridership rising to 34.3 million trips in May 2025. A decline in ridership to 27.1 million trips was observed June 2025, a seasonal decrease that coincides with school breaks. Federal activities and operations in the region could have also impacted transit ridership during the period observed. The data reflects typical seasonal patterns, with higher ridership in the fall and declines during winter.

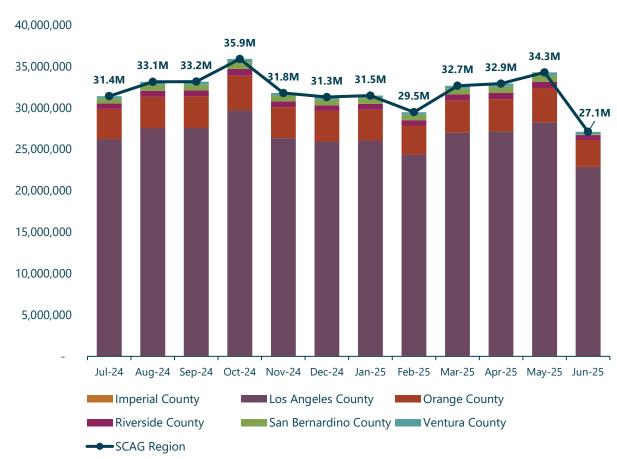


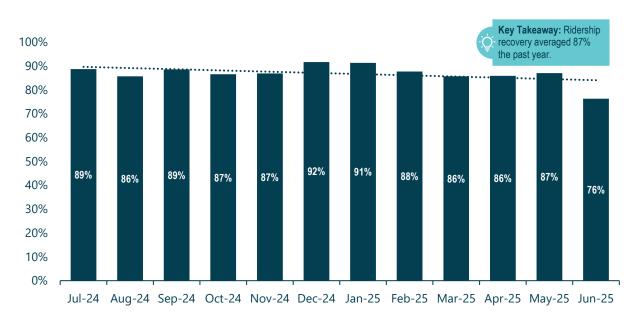
Exhibit 3 Bus Total Unlinked Passenger Trips, 12 Month Rolling

Exhibit 4 presents the month-over-month (MoM) percentage change in bus ridership for the SCAG region from July 2024 to June 2025. Ridership fluctuated significantly over the year, with periods of growth and decline. The largest increases occurred in March 2025 (10.8 percent), October 2024 (8.2 percent), and August 2024 (5.5 percent), while the steepest declines were seen June 2025 (-20.9 percent), November 2024 (-11.4 percent), and February 2025 (-6.4 percent). Bus ridership declined by an average of 0.6 percent month over month, with the data showing significant volatility and several sharp increases and decreases rather than a steady trend.

15.0% Key Takeaway: MoM Below 0% Above 0% ridership averaged a 0.6% decline over the past year. 10.0% 5.0% 0.0% D1.5% Mar-25 Jul-24 Aug-24 Sep-24 Oct-24 Nov-24 Feb-Apr-25 Jun-25 Jan-2 Mav--5.0% -10.0% -15.0% -20.0% -25.0%

Exhibit 4 Bus MoM Comparison as a Percentage Change, 12 Month Rolling





Bus ridership recovery during the past 12 months fluctuated between 76 percent and 92 percent of fiscal year 2018-19 levels, as presented in Exhibit 5, with an average recovery rate of 87 percent over the past 12 months. The highest recovery was observed in December 2024 (92 percent). The relatively narrow range of variation (between 76 percent and 92 percent) indicates bus ridership remains below full recovery, with a noticeable dip in the final month of the reporting period.



LIGHT AND HEAVY RAIL RIDERSHIP

The SCAG region's rail network features a blend of light and heavy rail services that provide critical connectivity. LA Metro operates the largest light and heavy rail system in Southern California, with a network that has expanded significantly over the past five years through the opening of the K (Pink) Line and the Regional Connector, which streamlined travel between key corridors. The system includes light rail lines such as the A (Blue), E (Expo), and C (Green) Lines, as well as the heavy rail B (Red) and D (Purple) subway lines. In San Bernardino County, the Arrow service launched in 2022 as a modern, diesel multiple unit light rail line designed for seamless integration with Metrolink's commuter rail services, extending rail access to the cities of Redlands and San Bernardino. Together, these systems enhance regional mobility, offering frequent urban rail service alongside Metrolink's broader commuter rail network.

DATA SOURCE

SCAG staff sourced transit and rail data from LA Metro's Interactive Estimated Ridership Statistics dashboard, which provides monthly ridership statistics. Arrow Service data was obtained directly from the Southern California Regional Rail Authority (SCRRA).

RAIL RIDERSHIP TRENDS

Light and heavy rail ridership in the SCAG region exhibited notable seasonal fluctuations over the past year, presented in Exhibit 6. Total passenger trips reached a high of 6.3 million in October 2024 before declining steadily through the winter months, bottoming out at 5.3 million in January and February 2025. Ridership began to recover in the spring, rising to 6.0 million in April, but declined once again to 5.3 million by June 2025—matching the winter low. These trends suggest that while rail ridership briefly rebounded from pandemic lows, the recovery has not been sustained. The overall pattern points to an ongoing challenge in stabilizing and growing light and heavy rail ridership in the post-pandemic context, despite service expansions and broader travel recovery in the region.

Exhibit 6 Light and Heavy Rail Total Passenger Trips, 12 Month Rolling

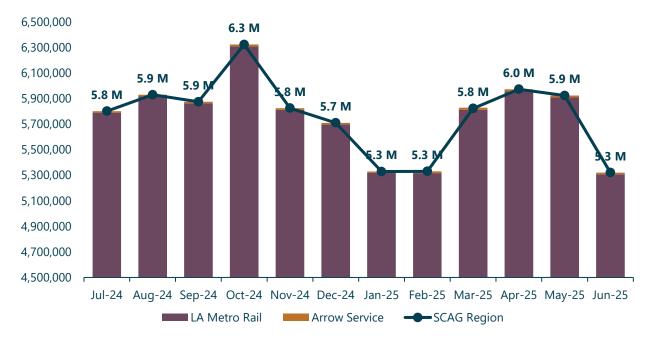


Exhibit 7 illustrates the monthly percentage change in total light and heavy rail ridership in the SCAG region from July 2024 to June 2025. The data highlights the volatility in ridership patterns over the year, with a mix of growth and decline across different months. Similarly, the winter months show reduced ridership, a trend that reflects the holiday season, when daily travel demand typically falls. The most significant positive change occurred in March 2025, with a 9.2 percent increase over the previous month, suggesting a notable spring rebound following the holiday season. In contrast, the largest monthly decline took place in June 2025, dropping 10.2 percent. The sharp decline in June 2025 is likely attributable to the beginning of the summer season, when K-12 schools and universities are out of session, reducing student travel demand. Federal activities and operations in the region might have also affected rail ridership. Importantly, Exhibit 7, underscores that monthly rail ridership changes have been inconsistent, with six out of 12 months showing negative growth, including four months where the decline exceeded six percent. This fluctuation results in a net average decline of 0.5 percent per month over the year.

Exhibit 7 Light and Heavy Rail MoM Comparison as a Percentage Change, 12 Month Rolling

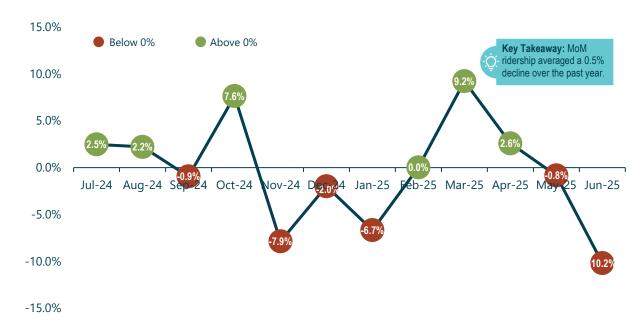


Exhibit 8 illustrates how light and heavy rail ridership in the SCAG region compares to pre-pandemic levels over the past year. Ridership recovery remained relatively steady between July and December 2024, fluctuating between 63 and 68 percent. A sharp seasonal drop occurred in January 2025, when recovery fell to 57 percent, aligning with the winter holiday ridership trough observed in other charts. However, the months that followed show a notable rebound: February 2025 reached 70 percent, with a steady climb to 74 percent by April, a level that persisted through May and June 2025. The overall trend suggests that while rail ridership has not returned to pre-pandemic volumes, recent months show signs of recovery.

100.0% Key Takeaway: Ridership 90.0% recovery averaged 68% the past year. 80.0% 70.0% 60.0% 50.0% 40.0% 74% 73% 74% 71% 70% 68% 67% 65% 64% 65% 63% 30.0% 57% 20.0% 10.0% 0.0%

Jul-24 Aug-24 Sep-24 Oct-24 Nov-24 Dec-24 Jan-25 Feb-25 Mar-25 Apr-25 May-25 Jun-25

Exhibit 8 Post-Pandemic Light/Heavy Rail Ridership Recovery as a Percentage of Fiscal Year 2018-19, 12 Month Rolling



COMMUTER RAIL RIDERSHIP

Metrolink is Southern California's regional commuter rail system, operating a network of seven lines that span over 540 route miles and connect six counties: Los Angeles, Orange, Riverside, San Bernardino, Ventura, and San Diego (five of which are in the SCAG region). Originally designed to bring suburban commuters into downtown Los Angeles during peak morning and evening hours, Metrolink has recently transitioned toward a "regional rail" service model. This approach emphasizes all-day, bidirectional service, with train frequencies distributed more evenly throughout the morning, midday, and afternoon periods to better accommodate a wider range of travel needs, including off-peak commuting, reverse commutes, and discretionary trips. The shift supports greater regional mobility, reflects changing travel patterns in the post-pandemic era, and serves as a key strategy to capture new riders and support ridership recovery across the system.

DATA SOURCE

Staff obtained monthly rail ridership data, delineated by line, from SCRRA, to evaluate trends in regional rail ridership. Monthly ridership figures for Metrolink were estimated based on ticket sales, utilizing average trip rates.

COMMUTER RAIL RIDERSHIP TRENDS

On October 21, 2024, Metrolink added 32 new weekdays trains, a nearly 23 percent increase in systemwide service, to better accommodate local travel and regional passenger rail by increasing weekday service levels and optimizing connections. The San Bernardino Line received the majority of new weekday trains with 18 while the Orange County Line added seven. On January 27, 2025, Metrolink implemented additional service changes to the San Bernardino line to better manage track capacity issues while retaining service improvements.

Exhibit 9 reflects monthly systemwide ridership across Metrolink's seven commuter rail lines from July 2024 through June 2025. Metrolink ridership began the period at 587,500 trips in July 2024, steadily

increasing to a peak of 676,700 in October 2024, before declining through the winter months. The lowest point occurred in January 2025, with 573,200 trips, followed by a strong spring rebound that culminated in the system's highest monthly ridership total of 701,200 trips in April 2025. Ridership declined again slightly in the final two months, ending at 621,500 trips in June 2025. The decline in June 2025 is likely attributable to the beginning of the summer season, and reduced student travel demand.

All seven lines contributed to the overall trend, with the Orange County Line and San Bernardino Line consistently making up the largest shares of total ridership. These were followed by the 91/Perris Valley Line, Riverside Line, and Antelope Valley Line, with the Ventura County Line and Inland Empire-Orange County Line contributing smaller portions. The data reflects a steady year-over-year recovery trajectory, particularly in early 2025, likely driven by the continued rollout of Metrolink's regional rail service model, which emphasizes all-day, bi-directional service beyond the traditional peak commute periods.

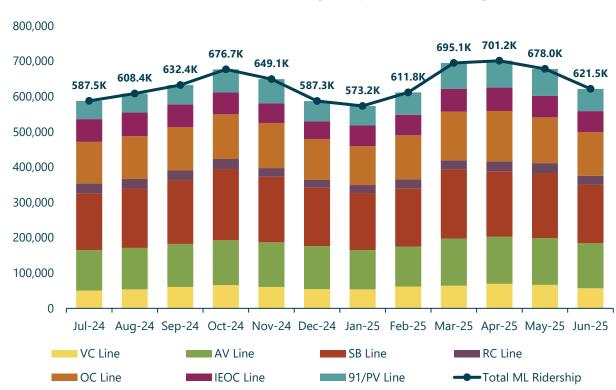


Exhibit 9 Metrolink Commuter Rail Total Passenger Trips, 12 Month Rolling

Exhibit 10 displays the month-over-month percentage change in total system ridership from July 2024 to June 2025. The data shows substantial variability across the year, with several months experiencing strong gains, notably March 2025 (13.6 percent). Conversely, December (-9.5 percent) and June (-8.3 percent) marked the most significant declines, aligning with typical seasonal slowdowns due to holidays, school breaks, and vacation periods. Despite these fluctuations, the average month-over-month growth rate was 1.4 percent, indicating a generally positive trajectory for Metrolink ridership during the period. The winter downturn and early spring rebound mirror broader trends seen across other transit modes.

15.0% Below 0% Above 0%

10.0%

3.6%

3.6%

3.9%

7.0%

6.7%

6.7%

6.7%

Feb-25 Mar-25 Mar-25 Mar-25 Jun-25

-5.0%

-10.0%

Exhibit 10 Metrolink MoM Comparison as a Percentage Change, 12 Month Rolling

-15.0%

Exhibit 11 Post-Pandemic Metrolink Ridership Recovery as a Percentage of Fiscal Year 2018-19, 12 Month Rolling

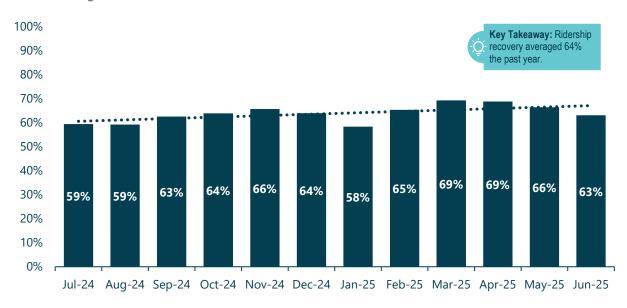


Exhibit 11 presents Metrolink's ridership recovery as a percentage of fiscal year 2018-19 pre-pandemic levels. Over the past year, recovery averaged 64 percent, with a steady climb through fall 2024 to a high of 66 percent in November, followed by a dip to 58 percent in January 2025, the lowest point of the year. Recovery accelerated in early spring, reaching 69 percent in both March and April 2025, before tapering slightly to 63 percent in June 2025. This pattern suggests that while significant progress has been made, commuter rail still faces challenges in returning to full pre-pandemic demand, particularly as work-fromhome patterns and hybrid commuting continue to reshape ridership behavior.

Vehicular Travel



VEHICULAR VOLUMES

Vehicle miles traveled (VMT) is the total number of miles driven by all vehicles in a specific area over a set time. It shows how much people are traveling by car and can reflect factors like population growth, economic activity, and land use. Higher VMT often means more driving, which can lead to more pollution and wear on roads. Tracking VMT helps policy makers and planners understand road usage, plan maintenance, and achieve changes in how people travel. Vehicle hours of delay (VHD) measures the extra time drivers spend stuck in traffic compared to free-flowing conditions. It shows how bad congestion is and helps identify where improvements like road expansions or traffic signal changes are needed. VHD also reveals the economic impact of traffic delays by showing lost time for drivers and freight. Watching VHD over time helps measure if efforts to reduce congestion are working. The following sections analyze VMT and VHD trends in the SCAG region, covering its six counties.

DATA SOURCE

For this vehicular travel volume assessment, staff used data from the California Performance Measurement System (PeMS). PeMS collects information through sensors placed along the State Highway System. California has nearly 47,000 of these sensors covering over 41,000 miles of highway. In the SCAG region, PeMS uses about 22,000 sensors covering around 7,600 miles of highway. However, PeMS has some limits. It only tracks highways and doesn't include local roads or streets. Also, many sensors can be offline at times due to construction or equipment problems. For the SCAG region, PeMS does not have sensors in Imperial County. Despite these issues, PeMS is still the best available source for current highway travel data. However, since the intention of this report is to provide the most current information, PeMS remains the most appropriate data source available for this analysis.

VEHICLE TRAVEL AND CONGESTION PATTERNS FOLLOWING THE PANDEMIC

Exhibit 12 displays monthly VMT in the SCAG region from January 2019 through June 2025, revealing both short-term disruptions and long-term recovery trends. VMT experienced a sharp and unprecedented decline in early 2020 due to the COVID-19 pandemic, reaching its lowest point in April 2020. Following this disruption, travel steadily rebounded throughout 2021 and 2022. By early 2023, monthly VMT had returned to pre-pandemic levels, with volumes generally fluctuating between 5.5 and 6.2 billion miles. While seasonal dips are still present, such as during winter months or holiday periods, the overall trend has stabilized in recent years. The chart's linear trend line indicates an upward trajectory, suggesting that total vehicle travel has not only recovered to pre-pandemic levels but is increasing over time. This pattern points to a sustained reliance on personal vehicle travel in the region, even as other modes like transit have experienced slower post-pandemic recovery.

Exhibit 12 VMT in the SCAG Region by Month, 12 Months Rolling

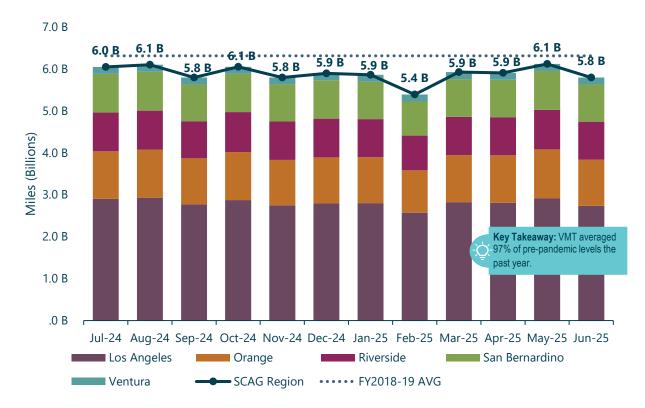


Exhibit 13 presents VHD in the SCAG region from January 2019 through June 2025, offering insight into regional roadway congestion patterns over time. Prior to the COVID-19 pandemic, monthly VHD consistently ranged between 16 to 18 million hours, reflecting high levels of traffic congestion across the region. In early 2020, VHD dropped sharply, reaching its lowest point in April 2020, corresponding with widespread shutdowns and reduced travel demand. Following the pandemic-induced low, VHD gradually rebounded throughout late 2020 and 2021, but has not returned to pre-pandemic levels. Since 2022, monthly VHD has generally fluctuated between 11 and 14 million hours, indicating a persistent reduction in regional traffic delay despite the recovery of VMT. The linear trend line reflects a modest overall decline in VHD over the full time period.

18.0M 16.0M 13.9M 13.6M 14.0M 13.0M 13.1M 13.0M 12.8M 12.8M 12.6M 12.6M 12.1M 11.7M 1.4M 12.0M Hours (Millions) 10.0M 8.0M 6.0M Key Takeaway: VHD is at 71% of prepandemic levels. VMT has nearly returned to 4.0M pre-pandemic levels: however lower VHD suggests improved overall congestion. 2.0M M0. Jul-24 Aug-24 Sep-24 Oct-24 Nov-24 Dec-24 Jan-25 Feb-25 Mar-25 Apr-25 May-25 Jun-25 Los Angeles County Orange County Riverside County San Bernardino County Ventura County **SCAG Region** ••••• FY2018-19 AVG

Exhibit 13 VHD in the SCAG Region by Month, 12 Months Rolling

VHD has only reached 71 percent of pre-pandemic levels, implying that congestion remains significantly lower than before. This sustained reduction in congestion might be partially attributed to long-term changes in commuting behavior, such as hybrid and remote work arrangements, as well as shifts in travel patterns and peak demand periods. The correlation between high VMT recovery and lagging VHD recovery suggests that while people are back on the road in near-full force, they might be doing so in ways that avoid peak congestion periods, resulting in more efficient roadway performance and lower congestion overall.



GOODS MOVEMENT & TRUCK VOLUMES

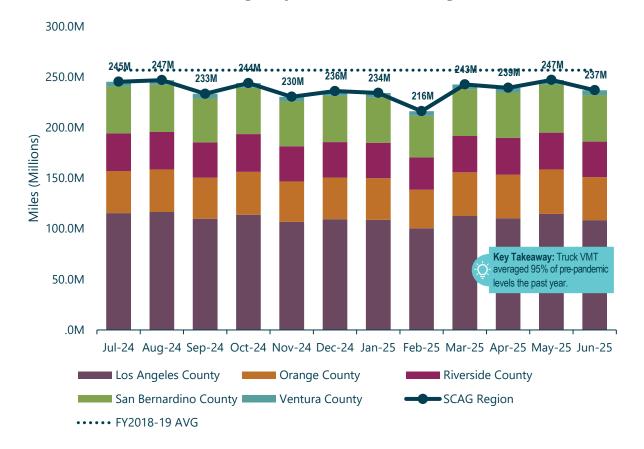
Truck vehicle miles traveled (Truck VMT) is the total number of miles driven by trucks within a specific area (like a city, region, or state). It works the same as overall VMT but focuses only on trucks, which usually means medium-duty and heavy-duty commercial vehicles. Truck VMT is an indication of the following:

- Freight Movement: How much goods and cargo are being transported on the road.
- Economic Activity: Higher truck VMT often signals more trade, shipping, and industrial activity.
- **Roadway Impact:** Trucks cause more wear on roadways, so truck VMT helps plan for maintenance needs.

- **Air Quality and Emissions:** Since trucks produce more emissions per mile than passenger cars, truck VMT is important for air quality and environmental planning.
- **Traffic Operations:** Helps analyze congestion patterns, especially on freight corridors and near ports, warehouses, and distribution centers.

Exhibit 14 displays truck VMT in the SCAG region from July 2024 through June 2025, highlighting monthly fluctuations and longer-term trends in goods movement activity. Prior to the COVID-19 pandemic, truck VMT generally ranged between 240 and 260 million miles per month, reflecting steady freight operations across the region's highways. A noticeable decline occurred in early 2020, with a temporary dip below 210 million miles, coinciding with the early stages of the pandemic and related disruptions in supply chains and economic activity. However, unlike passenger travel, truck VMT rebounded quickly by mid-2020, driven by demand for freight and logistics services, especially in support of e-commerce and essential goods distribution. Since 2021, truck VMT has remained relatively stable but has trended slightly downward compared to pre-pandemic levels. Volumes generally fluctuated between 225 and 250 million miles per month with a modest overall decline across the six-year period. The data suggests that while truck travel was less disrupted and quicker to recover than passenger travel, it has remained below 250 million miles for the last 32 months. Rather than signaling a structural shift in freight patterns or logistics operations, this trend is more likely driven by a slowdown in consumer spending and a normalization of shipping volumes following the pandemic-era surge.

Exhibit 14 Truck VMT in the SCAG Region by Month, 12 Month Rolling



Telework Impacts



REMOTE WORK TRENDS

Analyzing work-from-home trends is essential for understanding shifts in travel demand, as remote work reduces the need for daily commuting and directly impacts traffic volumes and transit ridership. By tracking these patterns, policy makers and planners can better assess changes in peak-hour congestion and forecast long-term impacts on transportation infrastructure and funding needs. Work-from-home trends also provide insights into evolving travel behavior, helping agencies plan for a more flexible and resilient transportation network.

DATA SOURCE

SCAG staff used data from the Survey of Working Attitudes and Arrangements (SWAA) by WFH Research, which collects monthly online responses from adults nationwide, including the Los Angeles Combined Statistical Area (LA CSA). To correct for overrepresentation of college-educated individuals, staff reweighted the sample using iterative proportional fitting to better match the region's age, sex, and education levels based on the 2022 American Community Survey (ACS). While the reweighted sample now more closely reflects the age and education distribution found in the ACS, it still underrepresents people without a high school degree and those with some college education. Nonetheless, the work-from-home rates across subgroups without a college degree are expected to show minimal differences.

OVERALL WORK FROM HOME TRENDS

The onset of the COVID-19 pandemic in March 2020 led to a significant increase in the rate of remote work, replacing traditional commutes to fixed work sites. However, recent data indicates a modest decline in the frequency of remote workdays, attributed to the adoption of hybrid schedules by many office workers. This trend is illustrated in Exhibit 15, which shows the monthly percentage of full, paid working days spent at home in the re-weighted LA CSA sample, representing the SCAG region. Based on current SWAA data, from July 2024 to June 2025, the percentage of full, paid working days spent at home in the SCAG region ranged between 30 percent and 36 percent, with an annual average of 34 percent, reflecting relatively stable remote work levels over the year.

Exhibit 15 Monthly Percentage of Full, Paid Working Days at Home, SCAG Region

Conclusion

The SCAG region's travel patterns reflect an ongoing but uneven recovery. Bus, light and heavy rail, and commuter rail ridership are steadily climbing, but remain below pre-pandemic ridership levels. Roadway volumes are close to rebounding, yet congestion levels remain lower, reflecting lasting impacts of remote work and evolving commute habits. The persistence of hybrid work models continues to reshape travel demand, easing congestion and moderating peak-period transit use. Truck activity also shows volumes are returning to pre-pandemic levels.

^{*}We estimate the pre-COVID rate using the 2019 American Time Use Survey.

^{*} The microdata retrieved from www.wfhresearch.com is re-weighted to be representative of the Los Angeles Combined Statistical Area.

REFERENCES

Federal Transit Administration. (2025). National Transit Database (NTD) Ridership Statistics. https://www.transit.dot.gov/ntd/data-product/monthly-module-adjusted-data-release

Los Angeles County Metropolitan Transportation Authority. (2025). Metro Ridership Statistics. https://opa.metro.net/MetroRidership/

California Department of Transportation. (2025**).** *Performance Measurement System (PeMS)*. https://pems.dot.ca.gov/

Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, 2021. "Why working from home will stick," National Bureau of Economic Research Working Paper 28731. https://wfhresearch.com/





MAIN OFFICE

900 Wilshire Blvd., Ste. 1700 Los Angeles, CA 90017 Tel: (213) 236-1800 www.scag.ca.gov

REGIONAL OFFICES

IMPERIAL COUNTY

1503 N. Imperial Ave., Ste. 104 El Centro, CA 92243 Tel: (213) 236-1967

ORANGE COUNTY

OCTA Building 600 S. Main St., Ste. 1108 Orange, CA 92868 Tel: (213) 630-1599

INLAND EMPIRE

3403 10th St., Ste. 805 Riverside, CA 92501 Tel: (951) 784-1513

VENTURA COUNTY

4001 Mission Oaks Blvd., Ste. L Camarillo, CA 93012 Tel: (213) 236-1960



Southern California Association of Governments 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 Agenda Item No. 3.3 October 29, 2025

To: Regional Transit Technical Advisory Committee (RTTAC)

From: Alexis Murillo Felix, Senior Regional Planner,

213-630-1461, felix@scag.ca.gov

Subject: High-Quality Transit Corridors Interactive Map Update

SUMMARY:

From: hub.scag.ca.gov/datasets/d4feb4ee0e5444ed98e41eb0fe33d480

Assembly Bills (AB) 2097 and 2553 require updates to SCAG's methodology and corresponding digital mapping tool, the High-Quality Transit Corridor (HQTC) Interactive Map. AB 2097 prohibits local governments from imposing minimum parking requirements on developments located within a half mile of public transit. The goal is to reduce reliance on cars, lower housing costs, and encourage transit-oriented development (TOD) by eliminating costly parking mandates. The legislation applies to residential, commercial, and other developments within a half mile of a major transit stop. The California Department of Housing and Community Development's (HCD) released its Technical Advisory On the Implementation of AB 2097, providing guidance on how these provisions should be applied. In addition, AB 2553 modifies the definition of a Major Transit Stop, expanding eligibility to include more frequent bus intersections, rail stations, and ferry terminals, and adjusting the peak-period service frequency threshold from 15 to 20 minutes. HCD's Technical Advisory incorporates these changes, offering a consistent statewide interpretation of statutes governing Major Transit Stops and HQTCs.

To comply with these updates, SCAG revised its GIS datasets and web-based HQTC mapping tools. Key modifications include adding eligible Amtrak stations and ferry terminals, incorporating the new 20-minute frequency threshold for Major Transit Stops, and updating datasets to align with HCD guidance while retaining the existing 15-minute standard for HQTCs. SCAG anticipates completing these updates this fall, with revised datasets and interactive maps available for regional partners and transit agencies later this year.



Southern California Association of Governments 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 Agenda Item No. 3.4 October 29, 2025

To: Regional Transit Technical Advisory Committee (RTTAC)

From: Priscilla Freduah-Agyemang, Senior Regional Planner,

213-237-1973, agyemang@scag.ca.gov

Subject: Federal Transit Administration (FTA) Safety Bulletin on National

Transit Database (NTD) Reporting Deadlines for Safety and

Security Events

SUMMARY:

From: https://www.transit.dot.gov/sites/fta.dot.gov/files/2025-09/SB-25-01-NTD-Reporting-Deadlines-09-25-2025.pdf

On September 25, 2025, the FTA issued a safety bulletin reminding transit agencies that receive certain FTA funding of the important deadlines for reporting safety and security events, to the NTD. The FTA relies on timely safety and security data to carry out its safety oversight programs effectively.

FTA reminds applicable reporters of the following reporting deadlines for safety and security events:

- Major Event Report (S&S-40) is due no later than 30 days after the event date.
- Non-Major Monthly Summary Report is due at the end of each month.

FTA considers any report submitted after the stated deadlines to be late. Report revisions do not affect the timeliness of the report.

FTA has available resources to support transit agencies with meeting the required timelines, including the policy manual and FAQs.



Southern California Association of Governments 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 Agenda Item No. 3.5 October 29, 2025

To: Regional Transit Technical Advisory Committee (RTTAC)

From: Priscilla Freduah-Agyemang, Senior Regional Planner,

213-237-1973, agyemang@scag.ca.gov

Subject: Federal Transit Association (FTA) National Transit Database (NTD)

Reporting Requirement Changes for 2025-2026

SUMMARY:

From: https://www.transit.dot.gov/ntd

The FTA has updated the National Transit Database (NTD) reporting requirements for Report Year 2025 and 2026 through a Federal Register Notice. The changes will ensure that the NTD continues to collect accurate and comprehensive data that benefits the transit industry, riders, and communities.

Improvements include:

- Refinements to geospatial Data Reporting. FTA recently began collecting geospatial data
 from transit agencies in the form of General Transit Feed Specification (GTFS) feeds. This
 data helped build the National Transit Map; supports trip planning for transit users; and
 standardizes information collecting on routes and schedules. FTA will begin requiring
 shapes.txt files for visual route information. FTA is also requiring all reporters with GTFS
 submissions to provide an identifier in the agency_id field that can be cross-walked to a
 - field on the NTD's P-50 form, promoting cohesion between NTD and GTFS data...
- Enhanced safety reporting for cyber security and rail collisions. FTA clarified guidance on reporting cybersecurity events to better monitor and mitigate risks for transit agencies. For rail collisions, FTA is adding an element, disabling damage, in line with FTA's recent rulemaking on State Safety Oversight (49 CFR Part 674). Asset data collection improvements. To better track ADA accessibility of passenger stations and simplify NTD reporting, FTA is consolidating stations and facility reporting into a single form. FTA is also adding three asset categories to improve state of good repair estimation and modeling. NTD system improvements. FTA is formally expanding waivers for NTD full reporters who predominantly serve rural areas. This will lower reporting requirements for eligible agencies, particularly those affected by changes in the 2020 Census. In addition, FTA will add a self-certification to identify agencies who report to the NTD.



Southern California Association of Governments 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 Agenda Item No. 3.6 October 29, 2025

To: Regional Transit Technical Advisory Committee (RTTAC)

From: Priscilla Freduah-Agyemang, Senior Regional Planner,

213-237-1973, agyemang@scag.ca.gov

Subject: 2025 American Public Transit Association (APTA) Public

Transportation Vehicle Database

SUMMARY:

From: https://aptapassengertransport.com/apta-releases-2025-public-transportation-vehicle-database/

APTA released the 2025 Public Transportation Vehicle Database, an annual resource aggregating data on bus and rail fleet characteristics from in U.S. and Canada. The database includes 155 public transit agencies, 135 operating bus modes, 37 operating rail modes, and some operating both. The database serves as a valuable tool for understanding the current state and future direction of transit fleets across the nation. The database provides comprehensive information on transit vehicles including manufacture date, specifications, accessibility features, and equipment details. The resource equips transit providers with the data needed to make informed decisions about public fleet management and inventory planning.

The database highlights safety enhancements, passenger experience upgrades, and operational improvements.

The 2025 edition of the database also includes several other features:

- Summary tables grouping vehicles by mode, manufacturer, size, and year built
- A special section on the new vehicle market, covering orders, planned orders, and vehicle costs
- Information on several types of autonomous/automated safety equipment, such as Collision Mitigation/Warning, Emergency Autonomous Braking, and Pedestrian/Bicyclist Detection.
- Emerging modes adopted by the National Transit Database such as BRT, hybrid rail, commuter bus, and streetcar.



Southern California Association of Governments 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 Agenda Item No. 3.7 October 29, 2025

To: Regional Transit Technical Advisory Committee (RTTAC)

From: Priscilla Freduah-Agyemang, Senior Regional Planner,

213-237-1973, agyemang@scag.ca.gov

Subject: American Public Transportation Association (APTA) 2025 Public

Transportation Fact Book

SUMMARY:

From: https://www.apta.com/research-technical-resources/transit-statistics/public-transportation-fact-book/

APTA published the 2025 Public Transportation Fact Book, an annual resource containing national aggregate statistical data covering all aspects of the transit industry in the United States and Canada. The data presented in the Fact Book is based on data from the Federal Transit Administration's (FTA) 2023 National Transit Database.

The Fact Book provides data in the following sections:

- Overview of U.S. transit facts
- Transit finances and operating statistics by mode of travel
- Transit vehicle characteristics and deliveries
- Facts and numbers relating to federal grants and the Federal Transit Act

The data provided in the Fact Book highlights the changing trends in public transportation that can be used to quickly understand the national transit environment. The Fact Book also emphasizes benefits of public transportation for the economy, environment, and public. Together the Fact Book creates a comprehensive snapshot of the current state of public transportation.



Southern California Association of Governments 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 Agenda Item No. 3.8 October 29, 2025

To: Regional Transit Technical Advisory Committee (RTTAC)

From: Priscilla Freduah-Agyemang, Senior Regional Planner,

213-237-1973, agyemang@scag.ca.gov

Subject: The Right-Sizing Playbook: How Transit Agencies Can Cut Costs

and Improve Service with Small Transit Buses

SUMMARY:

From: <a href="https://knowledgehub.apta.com/resource/microbird-the-right-sizing-playbook-how-transit-agencies-can-cut-costs-and-improve-service-with-small-transit-buses?utm_source=apta-knowledge-hub&utm_medium=cast&utm_campaign=APTA_MICROBIRD_SOLO_101425

The playbook published by APTA is a guide by Micro Bird, which considers the challenging shifts in transit, and presents the benefits of right sizing transit service to adapt to new trends in public transportation. The playbook emphasizes that choosing the right vehicle size for each route can help reduce operational costs, improve service frequency, and maintain rider satisfaction. To help agencies evaluate, optimize fleet mix, and spec vehicles that deliver long-term value, the playbook provides the following tools:

- The Case for Right-Sizing
- Fleet Optimization Framework
- Small Transit Buses: The Strategic Advantage
- Spec Writer's Toolkit
- From Plan to Practice

The playbook also presents Micro Bird's vehicle capabilities as a solution for public transportation agencies that are considering right sizing their vehicle fleets.



Southern California Association of Governments 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 Agenda Item No. 3.9 October 29, 2025

To: Regional Transit Technical Advisory Committee (RTTAC)

From: Priscilla Freduah-Agyemang, Senior Regional Planner,

213-237-1973, agyemang@scag.ca.gov

Subject: Southern California Association of Governments 2026 Draft

Public Participation Plan

SUMMARY:

From: https://scag.ca.gov/public-participation-plan?utm source=SCAG+Community&utm campaign=5406988834UPDATE 2025 10 22&utm medium=email&utm term=0 d8c0406cae-5406988834-1305277962

On September 22, 2025, SCAG released the <u>2026 Draft Public Participation Plan</u> (PPP) for public comment. Public participation is fundamental to SCAG's mission because understanding the needs of local governments, stakeholders, and the public strengthens planning processes. SCAG's work must reflect the multitude of voice, interests, and resources within the Southern California Region.

This draft PPP outlines SCAG's commitments to representative, accessible, and effective public and stakeholder participation in the development of its plans, programs, and initiatives. This plan also defines audience categories, outlines, methodology for conducting participation efforts, summarizes communication methods, and describes SCAG's measures and processes for evaluating its participation efforts. This draft contains the following sections with more details on SCAG's public participation efforts:

- SCAG's Audiences
- Audience Communication Preference
- SCAG's Public Participation Standards
- Participation in Methodology Based Audience
- Public Participation Tactics Toolbox

This draft PPP was approved for public release on September 16, 2025. The comment period for the draft PPP began on September 22, 2025, and concludes November 7th, 2025, at 5pm.



Comments will be accepted throughout the comment period via online form, email, dedicated phone line, and U.S. mail, which are outlined here.



Transit Transformation Task Force Update

Regional Transit Technical Advisory Committee (RTTAC)

October 29, 2025

WWW.SCAG.CA.GOV

Transit Transformation Task Force (SB 125)

- December 2023 CalSTA held first meeting of Task Force (formed under SB 125)
- Met on bimonthly/monthly basis through
 September 2025
- Included 25 members, including SCAG, RCTC, LA
 Metro, Move LA, and UCLA ITS
- Focused on developing policy recommendations to grow transit ridership, improve the transit experience, and address long-term operational needs



SB 125 Transit Program

SB 125 Transit Program

Subject Areas

Overview

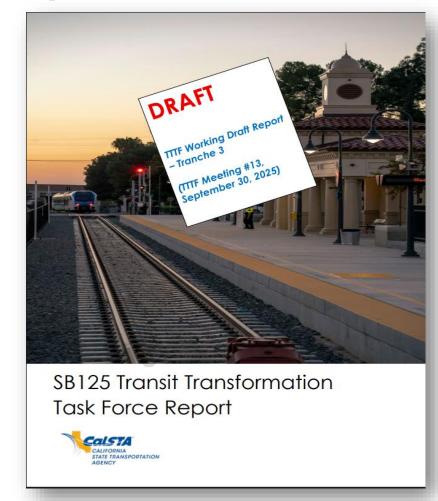
SB 125 (Chapter 54, Statutes of 2023) guides the distribution of \$4 billion in General Fund through the Transit and Intercity Rail Capital Program on a population-based formula to regional transportation planning agencies, which will have the flexibility to use the money to fund transit operations or capital improvements. The transportation budget trailer bill also establishes the \$1.1 billion Zero-Emission Transit Capital Program to be allocated to regional transportation planning agencies on a population-based formula and another formula based on revenues to fund zero-emission transit equipment and operations. SB 125 includes an accountability program to govern the distribution of these funds, on which there is more detail below.

In addition, SB 125 establishes a Transit Transformation Task Force led by the California State Transportation Agency to develop policy recommendations to grow transit ridership, improve the transit experience and address long-term operational needs.

43

Transit Transformation Task Force (SB 125)

- Work will result in a report of findings and policy recommendations
- Will be shared with policy and fiscal committees of the Legislature on or before October 31, 2025
- Updates on the Task Force's progress are being shared at Transportation Committee meetings and RTTAC
- More information regarding the Task Force is available on the <u>CalSTA website</u>



44

Task Force Meetings #11-13 Debrief

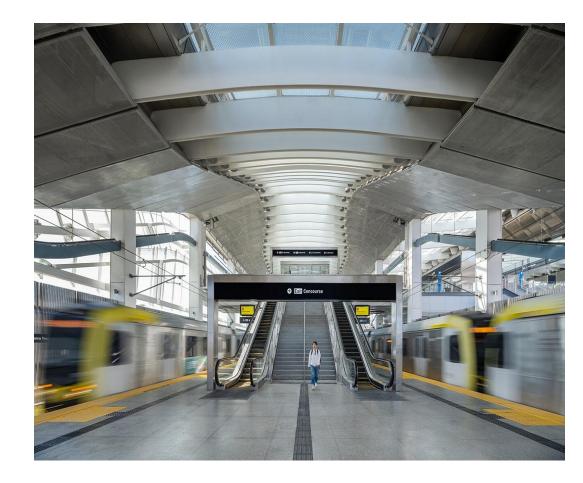
- Task Force reviewed the draft final report due to the Legislature by end of October
- Finalized five guiding principles for the report
- Discussed recommendations related to bus rapid transit infrastructure, safety improvements, and coordination with health and human services.
- Finalized recommendations related to accessible transportation, including paratransit, dial-a-ride, and transit needs of seniors and people with disabilities
- Discussion of new strategies and recommendations related to new options of revenue sources for funding for transit



DRAFT FINAL REPORT

Draft Final Report Outline

- **Vision:** Transit as the backbone of a prosperous, equitable, and climate-resilient California.
- Challenges: Declining ridership, funding gaps, outdated policies, and equity issues.
- Guiding Principles: Sustainability, Safety,
 Connectivity, Accessibility, Community Integration.
- **Strategies and Recommendations**: Fare and schedule coordination, new revenue sources, transit funding, TOD, safety programs, transit prioritization, value capture.



Guiding Principles



- 1. Transit should be operationally and financially sustainable
- 2. Safety is fundamental.
- 3. Transit services should be fast, reliable, connected, and convenient.
- 4. Transit should be accessible and easy to use for all.
- 5. Public transit systems should support the development of complete communities.



THANK YOU!

For more information, please visit:

https://calsta.ca.gov/subject-areas/sb125-transit-program



Open Payments: "The Good, the Bad and the Unknown"

SCAG Regional Transit Technical Advisory Committee

Israel Maldonado

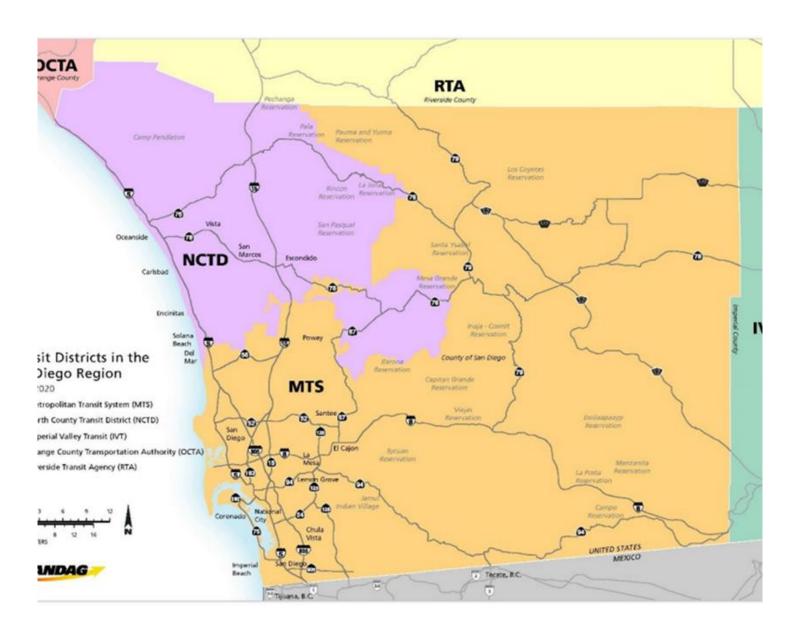
PRONTO Today

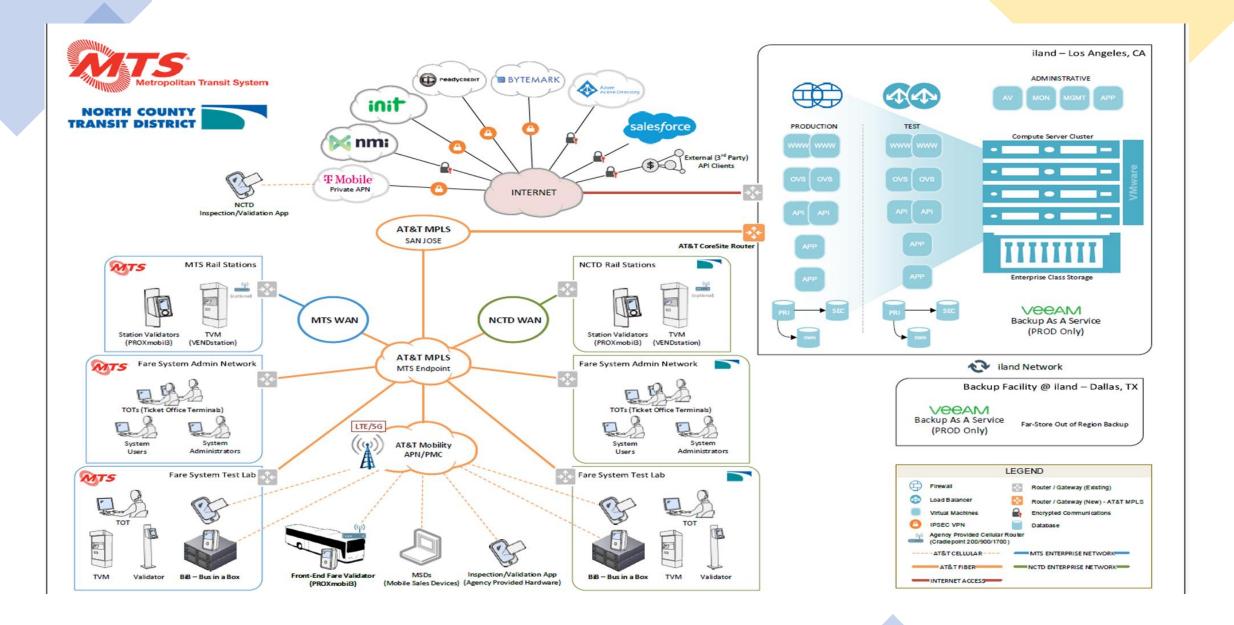
- San Diego Metropolitan Transit System
- PRONTO fare system
- Implementation Strategy
- Features & Policy
- Key Stats!
- The Good, the Bad and the Unknown



San Diego Metropolitan Transit System (MTS)

- Operator for the San Diego region
 - Bus and Light Rail
 - System ridership FY25 81M (75M in FY24)
 - Serves 3 million residents within San Diego County





Implementation Strategy

- Original procurement in 2018, required validators to support open payment
- Agree on a core, impactful functionality
- All hands-on deck approach from marketing, operations, finance department
 - Financial reconciliation will become more nuanced, buy in from finance team is critical
 - Settlement strategy: each transaction, every time OR aggregation model
 - PCI approach
- Launched in under 10 months from NTP



Features and Policy

- Simply Tap and Ride! Can't beat the customer experience!
 - Tap physical or mobile wallet-based credit cards
- Core functionality: Supports Adult one-way fares
 - Includes unlimited twohour transfer



Key Stats!

- Over 1.8 Million Taps as of 10/1/2025 (launched July 2024)
- August averaged 4% of ridership
- % unrecoverable debt FY25 4.2% (FY26 2.9%)
 - First Tap Risk



Open Payments: The Good

- Customer Experience
 - Fast and Easy
 - No Kiosk needed
 - No agency app needed
 - No need to reload
 - Help bridge gap with unbanked communities (e.g. Cash app)









Open Payments: The Bad

- Lack of standards for the administrative modules
- Murky fare inspection solution for open payments
- Leads to challenges in administering reduced fares and open payment
- Big Factor: tailored fare systems and varying approach by agencies
- Factors create apprehension in adoption



Open Payments: The Unknown

- What will the rate of open payment adoption be over the next 5 years in public transit?
- Will there be a more standardized polished solution for administering reduced fares?
- How will the interchange fees change over the next 5 years?
- What technological advancements may help disrupt this space?

Questions?

Israel.Maldonado@sdmts.com

Thanks for having me!



METRCLINK

SCAG October 29, 2025

Regional Transit Technical Advisory Committee

Sabrina Davis, Director, Customer Experience

Henning Eichler, Senior Manager, Market Insights & Analytics



Counties Served

Routes/Lines

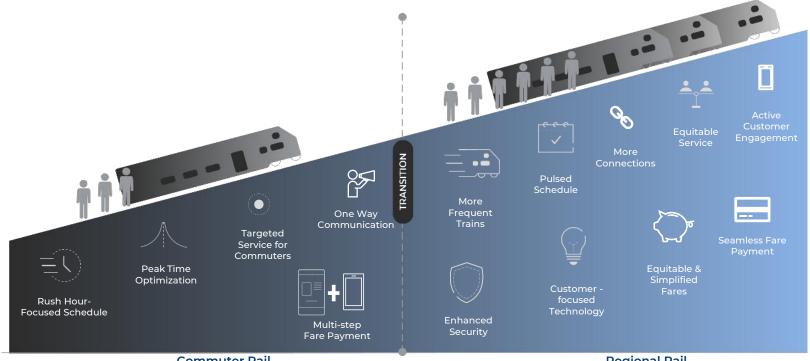
545.6Route Miles

Stations

Weekday Metrolink Trains

Weekday Arrow Trains





Commuter Rail Regional Rail

Metrolink Reimagined

A Year of Big Things



Implemented largest schedule change in Metrolink history



Awarded most significant contract for Operations & Maintenance



Fare Restructure Pilot



64

Alstom Team Training for Transition

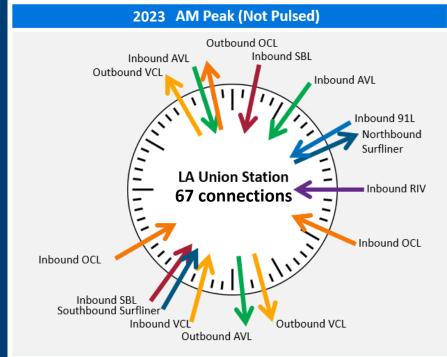
Four principles driving schedule change

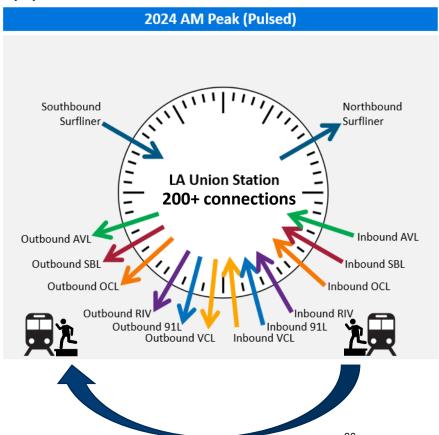
- More trains at peak and non-peak
- Clock-faced schedules
- More efficiency with equipment and crews
- More line-to-line connections at Los Angeles Union Station



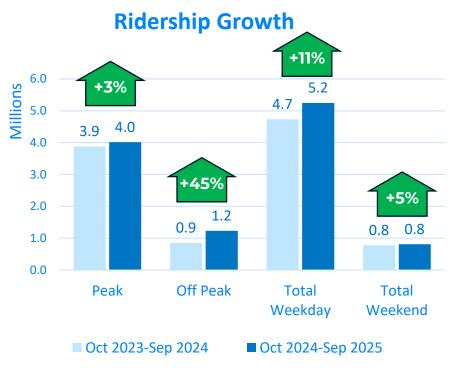
METROLINK

4X Transfer Opportunities 10 to 20-Minutes





Peak/Off-Peak Ridership Analysis



Ridership growth in the 12 months since the October 2024 schedule change compared to prior year:

• Peak: +3%

• Off-peak: +45%

• Total Weekday: +11%

• Total Weekend: +5%

Source: Conductor counts





Simplified Fare Structure

Fare pilot launched July 1, 2025

Why?

- Response to post-pandemic travel patterns
- Supports agency shift from commuter to regional rail Metrolink Reimagined

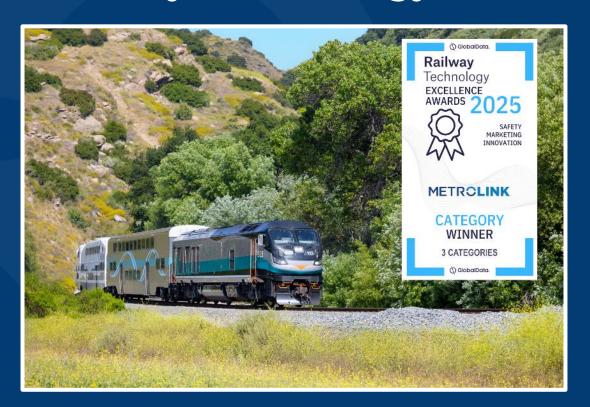
Key Changes

- Simplified fare options: reduced complexity, fewer duplicate products
- Lower prices: Monthly Pass now ≤ cost of 3 round-trips/week
- Expanded discounts for Students/Youth, Veterans, other disadvantaged riders
- New pass types introduced: \$15 SoCal Day Pass, \$5 L.A. Zone Day Pass

Benefits

- Less customer confusion, greater affordability for new riders
- Supports new ridership acquisition and long-term growth

Railway Technology Excellence Awards



- Marketing Award Student
 Adventure Pass
- Safety Award Earthquake
 Warning Systems USGS
 ShakeAlert integration
- Innovation Award Smart
 Mobility (for Wireless
 Crossing Nearside Station
 Stop technology)

Metrolink **Real- Time Alerts**Text & Email

- Subscribe at metrolinktrains.com/subscribe
- Timely, accurate updates *knowbefore you go*
- Real-time information:
 - Track changes
 - Delays
 - Cancellations
 - Track closures
 - Elevator outages
- Multilingual support
- Over 10,000 customers signed up in 4 months



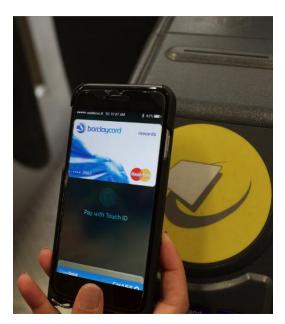
Open Payment Pilot

Partnership: Metrolink and Southern California Association of Governments (SCAG)

Funding source: \$2.8 million from the federal Carbon Reduction Program (CRP) under the Infrastructure Investment and Jobs Act

Highlights:

- Implement a contactless payment system on one line to glean insights ahead of potential full system deployment
- Customers will tap their cards before and after boarding (distancebased fare system)
- Supports state and regional goals to reduce transportation emissions
- Part of SCAG's Regional Pilot Initiatives (RPI)
- Emphasis on innovation, equity, and sustainability



The Pilot Scope Includes:



San Bernardino & Arrow Lines



Open to All (no registration)



Station-Based Validators



Single Ride Fare (Fare capped at day pass rate)

Wayfinding Improvements

- Metrolink awarded a grant to conduct a wayfinding study
- Study includes a pilot at 5
 Metrolink stations
- Partnering with Morlin and Metro for LAUS wayfinding improvements







SCAG Innovative Clean Transit (ICT) Regional Assessment Study

October 29, 2025

WWW.SCAG.CA.GOV

Background

- Innovative Clean Transit (ICT) Regulation, 2018 (Cal. Code Regs. Tit. 13 § 2023.1)
 - California Air Resources Board
- Two Primary Requirements
 - 1. Transit agencies to publish a ZEB rollout plan.
 - 2. ZEB purchase requirements for transit agencies of different sizes by year



PROJECT OBJECTIVES & SCOPE

Project Primary Objectives

Assessing Current Efforts

Ongoing efforts aimed at clean transit solutions

Identify Existing Gaps

- Identify gaps via existing ZEB rollout plans
- Explore avenues for improvement and enhancement.

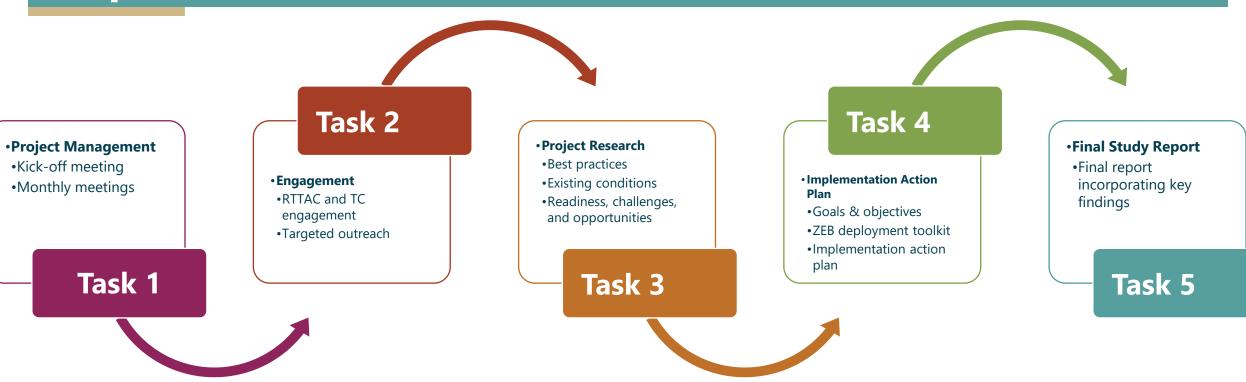
Enhancing Coordination Across Agencies

Defining SCAG's Support

Supporting the transition to clean transit in the region.



Scope of Work





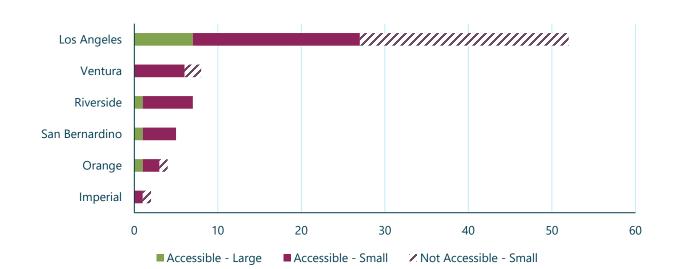




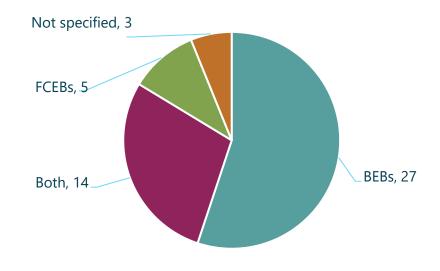
PROJECT RESEARCH Existing Conditions

Rollout Plans





Technology Pathways in Rollout Plans



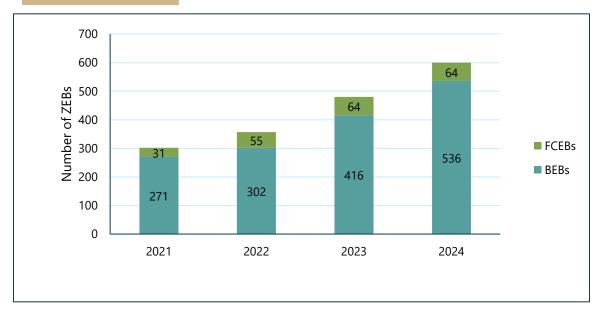
Source: ICT Rollout Plan, CARB

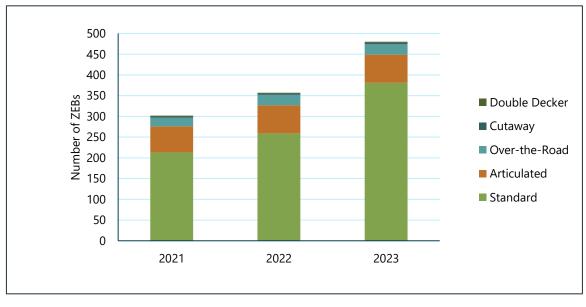
- Out of **78** Agencies (**10** large and **68** small) in SCAG region:
 - 49 have accessible rollout plans via CARB's website, email communications w/ CARB, or individual agency websites.
 - 27 have committed to BEB pathways, while 5 have opted to follow FCEB pathways; the remaining agencies either did not specify a pathway or are pursuing both technologies

81

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

ZEB Deployment – Bus Counts





- * Data for 2021–2023 is sourced from CARB's ICT reporting, while 2024 data comes from CEC's ZEV dashboard, which only has breakdown of BEBs vs. FCEBs, but not by bus category. The 2024 figures will be updated once CARB releases its ICT 2024 reporting this fall
- ZEBs deployment in the SCAG region (~6,600 buses in total) has increased from **302** in 2021 to **600** in 2024:
 - Between 2021-2024, FCEBs x2.06, BEBs x1.98
 - Primarily applied to standard and articulated buses, with limited use for cutaways, double-deckers, and over-the-road coaches.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

ZEB Deployment –Agencies

	Number of ZEBs					1		
Transit Agency	Standard	Articulated	Over-the-Road	Cutaway	Double Decker	Total ZEB	Total Buses	% ZEB
Anaheim Transportation Network	36	10				46	82	56%
Antelope Valley Transit Authority	65	18	24			107	107	100%
City of Artesia	1					1	1	100%
City of Beaumont				2		2	22	9%
City of Culver City	4					4	57	7%
City of Gardena (GTrans)	6					6	65	9%
City of Glendora	2					2	4	50%
City of Norwalk	6					6	47	13%
City of Santa Monica	19					19	194	10%
City of South Pasadena				2		2	3	67%
Foothill Transit	50				2	52	355	15%
Long Beach Transit	29					29	242	12%
Los Angeles County Metropolitan Transportation Authority		40				40	2,299	2%
Los Angeles Department of Transportation	99		1			100	478	21%
Montebello Bus Lines	3					3	61	5%
Omnitrans	4					4	243	2%
Orange County Transportation Authority	20					20	1,128	2%
Sunline Transit Agency	25					25	85	29%
Victor Valley Transit Authority	12					12	104	12%
Total	381	68	25	4	2	480		

^{*} Note that this list is only about transit agencies who have ZEBs via 2023 ICT reporting; not the full list of all transit agencies in the SCAG region.

8

ZEB Deployment – OEMs

OEMs	2021	2022	2023	2024*		
BEBs						
BYD	120	137	219	334		
New Flyer	63	70	97	92		
Proterra	56	43	43	58		
Phoenix	1	1	2	N/A		
GreenPower	2	2	4	27		
Gillig	6	23	25	23		
MCI	21	24	24	N/A		
Alexander Dennis	2	2	2	2		
FCEBs						
Eldorado (ENC)	10	10	10	N/A		
New Flyer	21	45	54	64		

^{*} Data for 2021–2023 is sourced from CARB's ICT reporting, while 2024 data comes from CEC's ZEV dashboard. The 2024 figures will be updated once CARB releases its ICT 2024 reporting this fall

84

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Charging Infrastructure - Technologies

Depot Plug-in Charging





Depot Overhead Charging





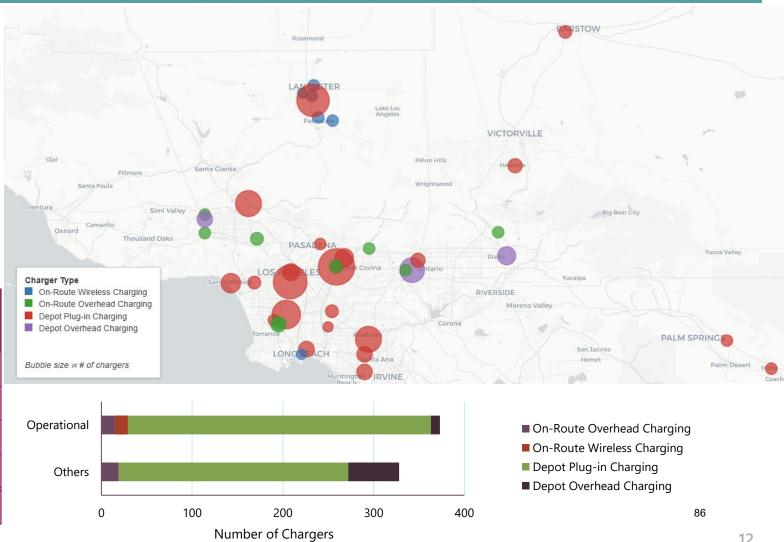
On-Route Wireless Charging

85

Charging Infrastructure – Charger Distribution

- Transit agencies do not report charging infrastructure to ICT or other programs
- Challenging to get up-to-date info
- Due diligence per desktop research;
 Better to *further confirm* with individual agencies

Type of Chargers	Total Number of Chargers
Depot Overhead Charging	66
Depot Plug-in Charging	587
On-Route Overhead Charging	34
On-Route Wireless Charging	14
Grand Total	701



SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Number of Chargers

12

Charging Infrastructure – Other Advanced Technologies

- **Distributed Energy Resources (DERs)** like solar PV and battery storage support resilience and cut costs.
- Microgrids can maintain charging and operations during outages.
- Examples in the SCAG Region:
 - Anaheim Transportation Network (ATN): solar powered EV charging hub
 - Los Angeles Department of Transportation (LADOT): microgrids (solar+BESS)
 - City of Gardena (Gtrans): solar array



Hydrogen Infrastructure







In Operation







Under Development

86

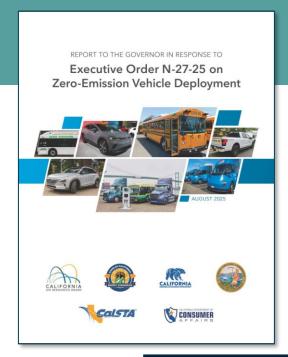
Existing Policies

Policy Mandates

- State:
 - Innovative Clean Transit (ICT)
 - Executive Order N-79-20 (2020)
 - Executive Order N-27-25 (2025)
 - Directing agencies to advance Advanced Clean Cars III,
 - Update state purchasing and planning requirements,
 - Expand strategies to accelerate ZEV deployment across all vehicle classes.

Regional:

 SCAG's Connect SoCal/SB 375 plan embeds aggressive GHG reduction targets and supports the transition to zero-emission transit as a key environmental strategy.





SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Funding Programs

Strategic Funding & Market Signals

- Federal programs
 - Bipartisan Infrastructure Law (BIL),
 - Inflation Reduction Act (IRA), and
 - FTA Low-No & Buses and Bus Facilities grants

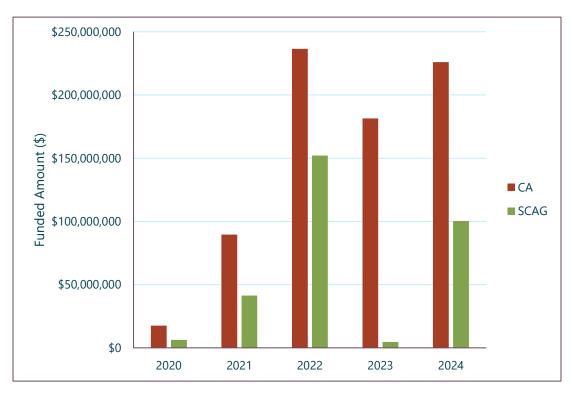
State incentives

- HVIP vouchers,
- EnergIIZE program,
- LCTOP,
- TIRCP and
- · LCFS credits,

Region and local level,

- SCAG's Connect SoCal 2024
- SCE's Charge Ready Transport program

FTA's Low-No and Buses & Bus Facilities grants in the SCAG region



90

Workforce Training

- Transit Workforce Center
- Electric Vehicle Infrastructure Training Program (EVITP)

 New Flyer MCI Academy & Vehicle Innovation Center



- California Transit Training Consortium (CTTC)
- Zero Emission Bus Resource Alliance (ZEBRA)
- Other Resources

- San Bernardino Valley College
- Santa Anna College
- IDEAL ZEV Workforce Pilot Projects

91

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Next Steps

- Working on finalizing the Best Practices Review
- Continuing to conduct stakeholder engagement
 - Receive survey results will summarize and include key findings in the Study
- Share Progress with Stakeholders
 - SCAG Policy Committees
 - Regional Transit TAC

Questions

- What is missing in the existing conditions analysis?
- What inputs needs to be added/considered for the best practices analysis?
- What else should we consider overall as we move forward?



THANK YOU!

For more information, please visit:

www.scag.ca.gov

Big Blue Bus
Automated Bus Lane
Enforcement (ABLE)
Program

10/29/25





Program Description

- Hardware w/ cloud-hosted Al software on 10 Buses
 - Vendor: Hayden Al
- Al technology monitors for potential parking violations at bus stops and bus lanes
- Video evidence generated for flagged events used for issuing citations
- Evidence reviewed by Santa Monica PD traffic enforcement staff and approved
- Authority Stems from AB917
 - Allows public transit operators to capture images of bus stop/lane violations for citations

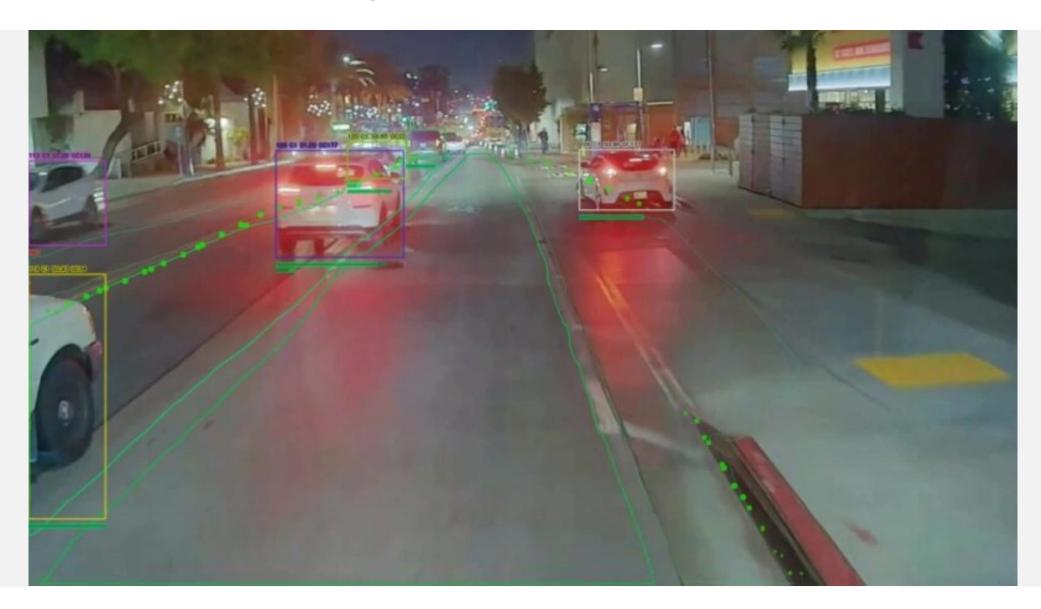


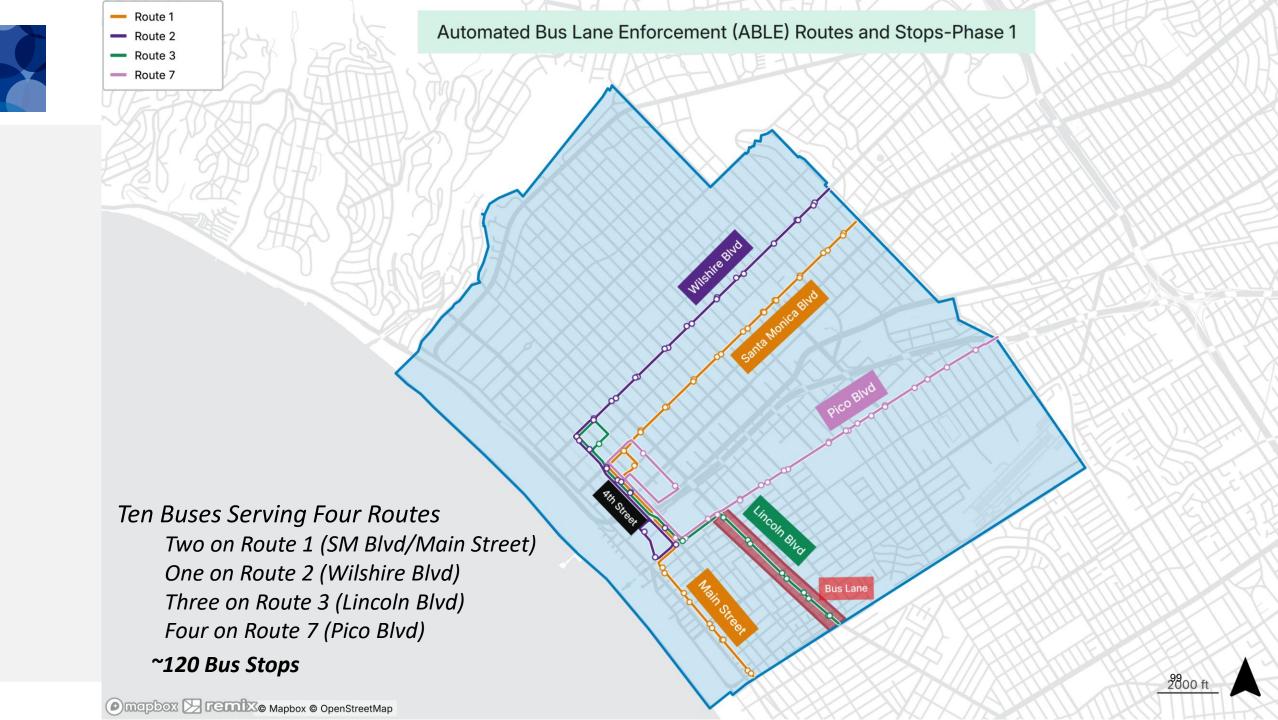




System in Action









Other Transit Agencies with ABLE

- LA Metro
- Culver City Bus
- AC Transit (Oakland, CA)
- New York MTA
- WMATA (Washington DC)



Various Communication Streams





- Dedicated Landing Page
- Program Fact Sheet
- Press Release
- City Blog Posts
- Social Media Education
- Email Notifications
- Onboard Screen Notice
- Transit App Banner
- GTFS alert
- Community Outreach
 - Neighborhood Associations
 - Local Businesses

More accessible and reliable **Big Blue Bus Service**

Automated Bus Lane and Bus Stop Enforcement (ABLE) Fact Sheet

The City of Santa Monica's Big Blue Bus is launching Automated Bus Lane and Bus Stop Enforcement (ABLE) to improve bus service in Santa Monica. Keeping bus lanes and bus stops clear for buses is essential to making Big Blue Bus safe, reliable, and accessible to everyone who rides.

Illegal parking in bus lanes and bus stops prevents transit riders from reaching their destinations on time and makes boarding unsafe and inaccessible for riders, especially those with disabilities. In summer 2023, Big Blue Bus piloted ABLE technology on two buses, and found over 500 instances of vehicles illegally parked in bus lanes and bus stops in just 45 days.

Big Blue Bus is launching ABLE to deter illegal parking in bus lanes and bus stops; this program uses advanced, forward-facing camera systems mounted behind bus windshields to detect instances of violations in Santa Monica. Parking officers at the City of Santa Monica will manually review each bus lane or bus stop parking violation.

What do drivers need to know?

Starting July 1, 2025, registered owners of vehicles parked illegally in bus lanes and bus stop zones in Santa Monica will receive warning notices in the mail. Citations will be issued starting September 1, 2025 and cost \$293.

Payment plans are available to low-income individuals who receive a citation for parking in a bus lane or bus stop. You can learn more at bigbluebus_com/confidence

Program benefits:

- · Safe and accessible bus stops
- More reliable, on-time bus service
- Safer roads for everyone moving around Santa Monica





Keeping bus stops clear:

When a bus stop is blocked by an illegally parked vehicle, Big Blue Bus operators are unable to safely deploy wheelchair access ramps on the curb, making it challenging for people using wheelchairs to board and exit buses. Illegal parking at bus stops also forces riders to walk around parked cars and into active traffic lanes to access the bus, putting them in dangerous situations.

Keeping bus lanes clear:

The City of Santa Monica has installed dedicated bus lanes to improve bus speeds and keep buses on-time for the thousands of people who rely on Big Blue Bus everyday. Illegal parking in bus lanes slows down buses and prevents riders from reaching their destinations on time.

Learn more:

Visit bigbluebus_com/confidence to learn more about the ABLE program.





Summer 2025 Warning Period

- ~60-day warning period
 - 7/1/25-8/31/25
- 1,259 total 'events' during warning period
- 891 events issued a warning
 - 71% of total events deemed citable by officer
- 14.4 'citable events' per day
- Assuming long term trend of 7.2 citable events per day
 - 50% reduction due to behavior adjustment



September 2025 Citation Figures

326 citations issued

10.9 events per day

•~1.1 per bus per day





Citation Details



- **•**\$293!
- Reviewed and issued by SMPD
- Alleged violator receives citation notice in mail
 - Provides link to view video evidence of violation
 - Has 21 calendar days to pay or contest citation



PARKING VIOLATIONS BUREAU CITY OF SANTA MONICA

9040518562

2509 TENNIS CT

BETTY BOOP

P.O. BOX 515214 LOS ANGELES, CA 90051-6514

RETURN SERVICE REQUESTED Mail Date: 04/02/2025

CITY OF SANTA MONICA CALIFORNIA



CITY OF SANTA MONICA P.O. BOX 515214 LOS ANGELES, CA 90051-6514

1 (800) 214-1526 (U.S. calls only) (213) 689-8423 (outside U.S.)

Citation Number: 2010797679 Violation Date: 03/18/25 Violation Time: 04:44 PM

Violation Description: EXCLUSIVE FOR BUSES Violation Code: 22500M

Vehicle Plate: CAJEFFG

Vehicle Make: TOYT Vehicle Color: BK Vehicle Registration Expiry Date: 08/31/25

Violation Location: SB SOUTH ST

Notice:

Your vehicle was photographed violating California Vehicle Codes §40240, §40240.5 and §40241 and Santa Monica municipal code 22500 (m) on the date and time listed above. Under State and Municipal law, the registered owner of a vehicle is liable for payment of the fine for violations recorded using an automated traffic enforcement system. POINTS WILL NOT BE ASSESSED.

SANTA MONICA CA 90405-1856

Contest Information:

If you wish to contest the parking violation listed on this notice, you must request an Initial Review ON or PRIOR TO the 04/16/2025 on this notice. This may be done by web, mail, phone, or in person at the offices listed on the back of this notice.

Sanctions Enforced by the City May Apply If Unresolved: Failure to pay the amount owed by the due date, may result in the City of Santa Monica imposing the following sanctions:

- Additional penalties and collection fees being added to your fine amount (CVC 40203.)
- Registration hold at the Department of Motor Vehicles (CVC 4760(a)(1)
 - Obligation must be complying to re-register your vehicle.
- Vehicle immobilization or impoundment (CVC 22651.7, 22651(i))
- Civil judgment (CVC 40220)





Detach and return this portion with your payment, or you may pay your citation online at: www.lacity-parking.org

Citation Number: 2010797679

Vehicle Plate: CAJEFFG Amount Due: 293.00 Due Date: 04/16/2025 View your violation online at: SM-Parking.org

LOGIN CREDENTIALS

Citation Number 2010797679

Pin Number

Amount Due If Paid before Due Date: 293.00 Amount Due If Paid after Due Date: 381.00

Payment in full must be received ON or PRIOR to the DUE DATE on this notice. Per CVC 40309, payment of parking penalty forwarded by mail is effective only when received by DUE DATE.

Payment Options					
Pay Online Pay by Phone Pa		Pay by Mail	Pay in Person		
Paytickets.smgov.net	(800) 214-1526 or (213) 689-8423 (Outside US)	Check or Money Order with coupon	See reverse side for payment location		

FINANCIAL ASSISTANCE IS AVAILABLE FOR THOSE WHO QUALIFY

Payment plans are available for indigent and eligible low-income customers. If you are experiencing homelessness, please inquire about the Community Assistance Parking Program (CAPP).





Measures of Success





- Improvements to travel time and on-time performance
- Road and passenger safety improvement
- Reduction in citable offenses
- Financial sustainability

Looking Ahead...





- Parking Behavior Change
- Bus Run Time Performance
- Stay Connected with PD
- Consider Expansion
 - Number of Busses
 - Routes
 - Service Area
- Advocate for Extending or Eliminating Sunset of AB917
 - Currently scheduled for January 2027







Questions?

abdallah.daboussi@santamonica.gov



Transportation Data Analysis Technical Assistance Program

October 29, 2025

WWW.SCAG.CA.GOV



PURPOSE

Present SCAG's Transportation Data Analysis Technical Assistance (TA) Program:

- SCAG's regional investment in technical assistance
- Empowering local agencies with data-driven planning tools
- Strengthening coordination and equity in mobility planning

What Is Big Data Analytics?

Translating large, disparate datasets into usable information

Volume, Velocity, Variety, Value



Transportation Data Analysis TA Program

PROGRAM BACKGROUND & STRUCTURE

The Need

Many smaller agencies in the SCAG region face a barrier to leverage decision-making data tools/resources, often due to the lack of in-house capacity/expertise

The Program

Procure a consultant to directly support jurisdictions by soliciting transportation planning and policy questions

Desired Program Outcomes & Objectives

Encourage a culture of data-driven decision making

Bridge traditional and emerging planning approaches

Refine complex transportation research questions

Empower local partners with technical guidance and data access

Promote crossplatform validation to enhance data literacy and reliability Document best practices for leveraging big data in transportation to support the development of a regional community of practice

Equitably deliver data and guidance to agencies

Program Structure Overview



GOAI

• SCAG procures a consultant to provide hands-on technical assistance to public agencies



OPE OF WORK

- Tailored support based on local needs
- Deliverables include whitepapers and memos



RESEARCH FOCUS

• SCAG solicits transportation planning and policy questions related to multimodal travel behavior

What This Program Can Offer You.....



Tailored Analyses

White Papers: in-depth (5-7 pg.) reports on regional, complex topics

Memos: concise (1-3 pg.) evaluations for localized issues



Reusable Tools & Templates

Scripts, methodologies, templates for future use



Data Products

Tables, figures, and visualizations derived

116

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Getting Involved

3 Easy Steps to Tap Into Support:



For more information, please visit:



8



THANK YOU! ANY QUESTIONS?

Isabelle Legare, Regional Planner, legare@scag.ca.gov

Sean Reseigh, Associate, s.reseigh@fehrandpeers.com

