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MEETING OF THE

REGIONAL TRANSIT  
TECHNICAL ADVISORY  
COMMITTEE

*Monday, March 30, 2020*  
*10:00 a.m. – 12:00 Noon*

**\*\*\*ZOOM MEETING AND TELECONFERENCE ONLY\*\*\***

**VIDEOCONFERENCE AVAILABLE**

**\*\*\*Zoom Meeting and  
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**TELECONFERENCE IS AVAILABLE**

TO JOIN THE MEETING: <https://scag.zoom.us/j/220315897>  
CONFERENCE NUMBER: 1 669 900 6833 US Toll (West Coast)  
Meeting ID: 220 315 897

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

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**REGIONAL TRANSIT TECHNICAL ADVISORY COMMITTEE  
AGENDA  
Monday, March 30, 2020**

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*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**  
*(Gary Hewitt, OCTA, Regional Transit TAC Chair)*

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

<b>3.0 <u>RECEIVE AND FILE</u></b>	<b><u>Time</u></b>	<b><u>Page</u></b>
3.1 <u>Minutes of the Jan. 29, 2019 RTTAC Meeting</u>		3
3.2 <u>Transit Ridership Update</u> <i>(Philip Law, Manager, Transit/Rail, SCAG)</i>		7

<b>4.0 <u>INFORMATIONAL ITEMS</u></b>	<b><u>Time</u></b>	<b><u>Page</u></b>
4.1 <u>Regional Microtransit Update – OC Flex</u> <i>(Johnny Dunning, OCTA)</i>	20	12
4.2 <u>Regional Microtransit Update – Metro</u> <i>(Julia Brown, Metro)</i>	20	27
4.3 <u>Public Transportation Agency Safety Plan (PTASP) and Safety Targets</u> <i>(LaShawn Gillespie, Foothill Transit)</i>	20	35
4.4 <u>TAM and Performance Monitoring/Reporting Update</u> <i>(Herb Higginbotham, Cambridge Systematics)</i>	20	46
4.5 <u>Draft Connect SoCal Comments and Responses</u> <i>(Nancy Lo, Assistant Regional Planner, SCAG)</i>	10	64



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Regional Transit Technical Advisory Committee (RTTAC)  
of the  
Southern California Association of Governments

Wednesday, January 29, 2020

**Minutes**

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**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 at SCAG's Downtown Los Angeles Office. The meeting was called to order by Chair, Gary Hewitt, OCTA.

**Members Present:**

Gary Hewitt (Chair)	Orange County Transportation Authority
Joyce Rooney (Vice Chair)	Redondo Beach Transit
Lori Huddleston	LACMTA
Fayma Ishaq	LACMTA
Ben Alcazar	LACMTA
Randy Johnson	Access Services
William Tsuei	Access Services
Matthew Avancena	Access Services
Bruno Penet	HDR
Mark MacDougall	Torrance Transit
Rory Vaughn	Metrolink
Aubrey Smith	Metrolink
Tracy Beidleman	Long Beach Transit
Ruby LeFlorc	SunLine Transit
Dennis Brooks	AMMA Transit Planning
Valerie Mackintosh	AMMA Transit Planning
Josh Landis	Foothill Transit
Lourdes Alvarez	Foothill Transit

**Videoconference:**

Kevin Kane	Victor Valley Transit
Nancy Strickert	SBCTA

**Teleconference and Web Meeting:**

Eric Daheed	Riverside County Transportation Commission
Heather Miller	Ventura County Transportation commission
Claire Grasty	Ventura County Transportation Commission
Rolando Cruz	Culver City Transit
Francisco Harp	Riverside Transit Agency

**SCAG Staff:**

Philip Law	Stephen Fox
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## **1.0 CALL TO ORDER**

Gary Hewitt, OCTA, called the meeting to order at 10:03 a.m.

## **2.0 PUBLIC COMMENT PERIOD**

No members of the public requested to comment.

## **3.0 RECEIVE AND FILE**

- 3.1 Minutes of the September 30, 2019 RTTAC Meeting
- 3.2 Development of Transactional Data Specification for Demand-Responsive Transportation
- 3.3 Regional Transit Safety Performance Targets
- 3.4 Transit Ridership Update – 2018 Annual Data
- 3.5 FTA Accelerating Innovative Mobility (AIM) Grant Opportunity
- 3.6 California Air Resources Board (CARB) Innovative Clean Transit (ICT) Guidance Update
- 3.7 Preparing to Plug In Your Bus Fleet: 10 Things to Consider

## **4.0 INFORMATION ITEMS**

### **4.1 Access Services Accessible Autonomous Vehicles**

William Tsuei, Access Services, reported on accessible autonomous vehicles. Mr. Tsuei stated this is one of the first pilots in the autonomous space to focus on paratransit and it is hoped it will influence its technology and policy development. In addition, it holds the potential to create options for people with disabilities and encourage the tech world to focus on the disability community. He noted the project's phases including vehicle creation phase, smart infrastructure implementation, testing and tuning, operations and project wrap-up. He noted vehicle design involves retrofitting two vehicle types, the Chrysler Pacifica Electric Plug-in hybrid and the Dodge ProMaster CNG. Further, once complete the pilot vehicles will be forwarded to the UC Berkeley Richmond Station for further testing.

Mr. Tsuei reviewed the post test activity and a proposed project on Westwood Blvd. in West Los Angeles along a 2.9-mile corridor connecting the Westwood/Rancho Park Metro Rail Station to the VA Healthcare Center. He noted that smart infrastructure will be installed along the route which will connect the vehicles for better safety and operation. Actual operation of the pilot vehicles will start with first/last mile connector services. Further operation will provide on-demand service within a geo-fenced area with service provided within 25-30 minutes of request.

Gary Hewitt, OCTA, asked about the type of license needed to operate on a public street. Mr. Tsuei responded that an autonomous vehicle license is needed from the California Department of Motor Vehicles.

Joyce Rooney, Redondo Beach Transit, asked how many vehicles would be tested and for what length. Mr. Tsuei responded that 8 vehicles would be tested for an anticipated 12-month period. Ms. Rooney asked about the time needed to install the infrastructure and Mr. Tsuei responded 30-months would be needed.

#### 4.2 ADA Paratransit Demand Forecasting Tool

Bruno Penet, HDR, Project Manager, provided an update on the ADA Paratransit Demand Forecasting Tool. He stated the study objectives include developing a regional user-friendly spreadsheet-based tool to forecast ADA paratransit demand through 2040. He noted efforts include a literature review, and interviews with selected ADA paratransit providers and transit agencies. Further, it is anticipated the tool will support ADA paratransit providers in managing demand and selecting the most cost-effective investments.

Mr. Penet reviewed the tasks completed and noted stakeholder interviews have been conducted, demographic data collected and ADA paratransit demand forecast methodologies reviewed. Valerie Mackintosh, AMMA Transit Planning, reviewed the agencies interviewed and ADA certifications. She noted key findings from interviews indicate there is regional diversity among paratransit providers as size and operating environments differ. These differences are reflected in performance metrics. Mr. Penet continued the presentation and noted the forecasting tool will benefit SCAG with market analysis, policy scenario analysis, planning and budgeting. He noted regional diversity remains a challenge but the goal is to create a tool that is credible, reliable, user-friendly, practical, flexible and scalable.

Gary Hewitt, OCTA, asked about data on future population growth and how it will be incorporated into the tool Mr. Penet responded that the tool would be populated with all the data needed to forecast including historical data.

#### 4.3 Bus Rapid Transit in the SCAG Region

Steve Fox, SCAG staff, reported on regional Bus Rapid Transit. Mr. Fox stated BRT is a service that reduces travel time by using transit signal priority (TSP), automatic vehicle location, dedicated bus lanes, limited-stop service and pre-boarding fare payment. Regionally, LA Metro, Santa Monica's Big Blue Bus, Culver City Bus, Omnitrans, Riverside Transit Agency and Torrance Transit operate varying levels of BRT service. Metro's Rapid Bus network began in 2000 and Metro currently operates 18 lines. However, Metro's NextGen, if implemented, will reduce the Rapid network to just three corridors. He noted Metro's Orange Line is a "true" BRT as it operates exclusively on its own right-of-way.

Mr. Fox reviewed different BRT services in the region including OCTA's Bravo!, Riverside Transit Agency's RapidLink, Sunline Transit Agency's Line 111 corridor, Omnitrans' sbX, as well as a proposed line by Gold Coast Transit connecting Oxnard to Ventura.

4.4 AB 1560, Friedman. California Environmental Quality Act: Transportation: Major Transit Stop

Philip Law, SCAG staff, reported on Assembly Bill 1560. Mr. Law stated that on January 1, 2020, AB 1560 went into effect which revised the definition of major transit stops to include a bus rapid transit (BRT) station. Mr. Law reviewed the different options for identifying which BRT stations should be considered major transit stops. He noted based on analysis, staff recommends adding 20 additional BRT stations regionwide as major transit stops. Once input is received from the committee, staff will update the methodology for major transit stops as documented in the Transit Technical Report for Connect SoCal, the 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

Rory Vaughn, Metrolink, asked if there was a determination on the size of the dedicated lane or its alignment to the station. Philip Law responded that the requirements of a dedicated lane have not been evaluated.

Based on the RTTAC discussion, Mr. Law stated that staff will proceed with the staff recommendation and update the methodology for major transit stops in the Transit Technical Report accordingly.

**5.0 STAFF REPORTS**

5.1 Connect SoCal Update

Philip Law, SCAG staff, updated the committee on Connect SoCal. Mr. Law stated that the public comment period for Connect SoCal concluded in the past week and staff continues to process the many comments and more particularly those regarding transit. He noted many of the comments relate to High Quality Transit Corridors because of their connection to the Regional Housing Needs Assessment. Further, staff will provide responses to the comments in the March 5<sup>th</sup> policy and Regional Council meetings.

**6.0 ADJOURNMENT**

Gary Hewitt, OCTA, adjourned the meeting at 11:16 a.m.

Southern California Association of Governments  
900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017

**Agenda Item No. 3.2**  
**March 30, 2020**

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**To:** Regional Transit Technical Advisory Committee (RTTAC)

**From:** Philip Law, Transit/Rail Manager, 213-236-1841,  
law@scag.ca.gov

**Subject:** Transit Ridership Update

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**DISCUSSION:**

At the January 2020 RTTAC meeting, SCAG staff provided an update on transit ridership trends using the recently released National Transit Database (NTD) Fiscal Year (FY) 2018 Annual data. For this report, staff prepared information using the latest available data for 2019, for unlinked passenger trips (UPT) reported in the December 2019 Adjusted Database available at <https://www.transit.dot.gov/ntd/data-product/monthly-module-adjusted-data-release>. Note that this monthly data is “unaudited” and may not be comparable with the FY 2018 Annual data.

The data summarized in this report show that bus ridership continued to decline in 2019 for almost all of the largest transit providers in the region (see Table 1), with some notable exceptions. For the first time in six years, Metro experienced an increase in bus ridership, growing by 0.6% over 2018. SunLine and Victor Valley Transit Authority posted increases of 2.3% and 4.5%, respectively. Other agencies showing small gains include Antelope Valley Transit Authority, Beach Cities Transit, and Torrance Transit.

Overall, total regional bus ridership experienced a sixth consecutive year of decline in 2019, down by 1.3% from 2018 (see Figure 1). The rate of decline has slowed for a third consecutive year, from a peak rate of decline of 9.2% in 2016, to 6.4% in 2017, and 2.7% in 2018.

Last year, staff reported the first year of decline in the region’s urban rail ridership. This continues into 2019, with the caveat that the decline is heavily impacted by the Metro Blue Line closures that occurred from January to November 2019 (see Table 2). Between 2018 and 2019, Metro heavy rail ridership dropped by 3.5%, the same rate that occurred between 2017 and 2018. Metro light rail ridership declined overall by 20.6%. While the magnitude of the drop is distorted by the Blue Line closures, the overall trend among the light rail lines is consistently one of declining ridership.

According to Metro’s line-level estimates of weekday ridership (see Figure 2), the Gold Line and Green Line continued to see ridership losses in 2019 (5.7% and 5.0%, respectively), while the Expo Line lost ridership for the first time since it opened in 2012, dropping 5.0%. Expo ridership was likely impacted by the closure of two stations in Downtown Los Angeles for two months, related to the Blue Line closures. Blue Line ridership declined by 57.4% compared to 2018.

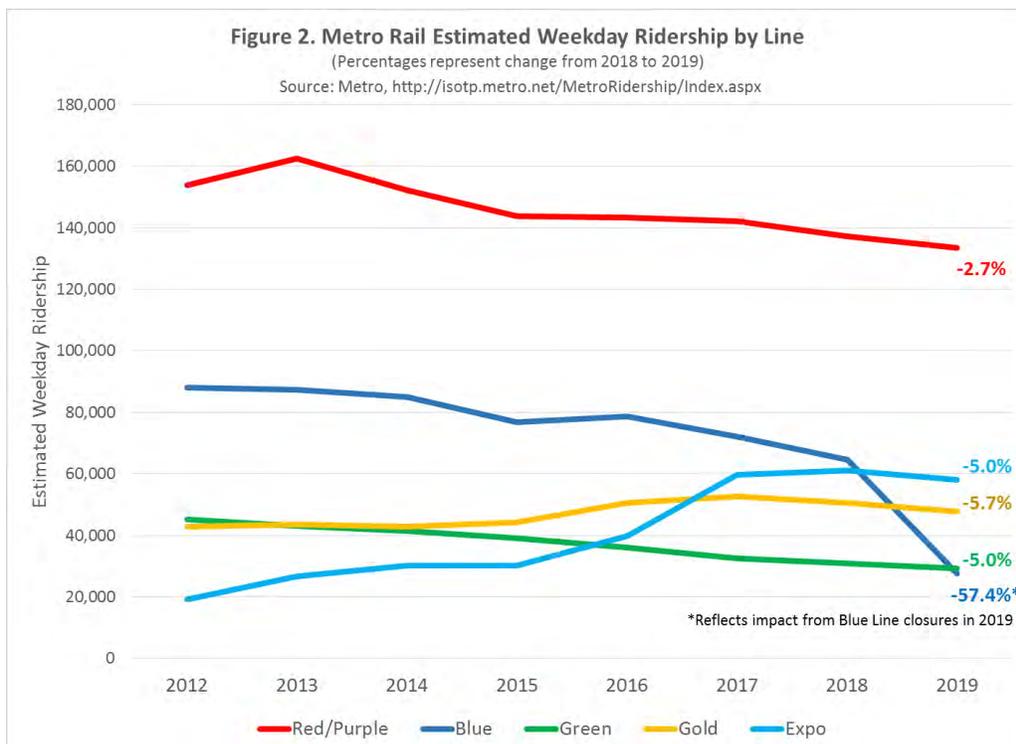
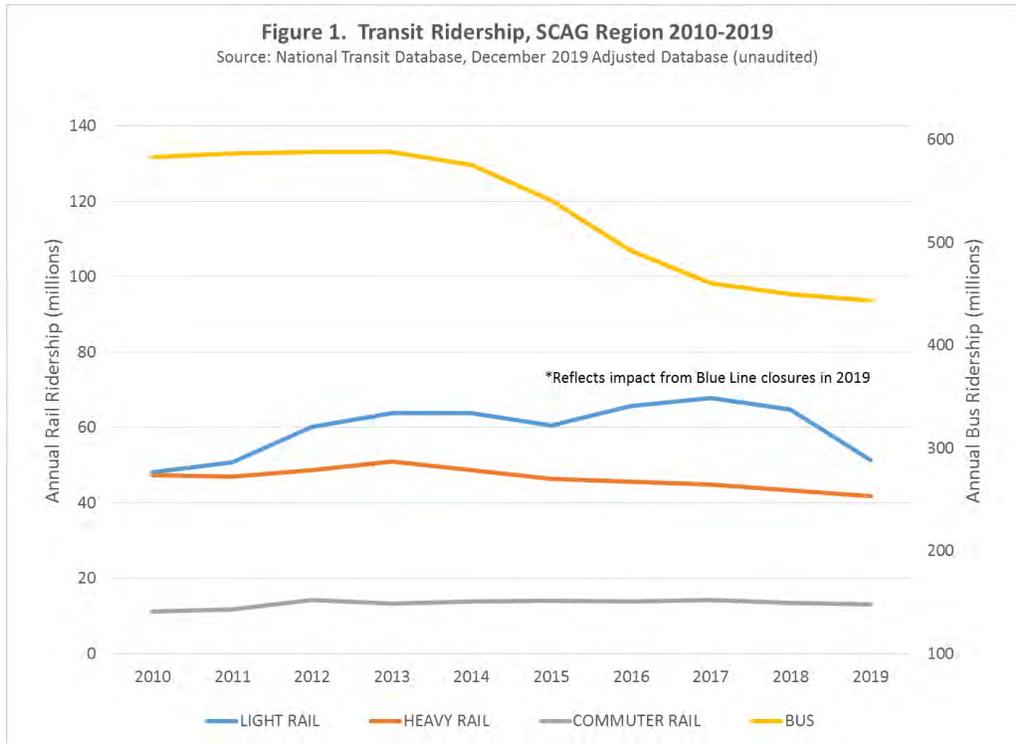
**Table 1. Change in Unlinked Passenger Trips (UPT) – SCAG Region (Bus)**

BUS OPERATOR/SYSTEM	TOTAL UPT (000s)		YEAR-TO-YEAR CHANGE				
	2018	2019	Annual	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Anaheim Transp. Network	9,794	8,418	-14.1%	-2.2%	-11.6%	-21.3%	-20.1%
Antelope Valley Transit Authority	2,356	2,375	0.8%	-10.7%	1.9%	9.1%	3.8%
Beach Cities Transit	357	360	0.8%	-4.7%	0.3%	7.1%	0.4%
City of Los Angeles (LADOT)	18,782	16,636	-11.4%	2.3%	3.2%	-23.2%	-26.1%
Culver CityBus	4,756	4,624	-2.8%	-7.3%	-5.6%	-1.8%	3.7%
Foothill Transit	12,453	11,752	-5.6%	-7.5%	-5.4%	-1.8%	-7.8%
Gold Coast Transit	3,538	3,481	-1.6%	-2.3%	0.6%	-2.0%	-2.8%
GTrans (City of Gardena)	3,023	2,956	-2.2%	-8.3%	-4.9%	3.1%	1.6%
Imperial Valley Transit	770	736	-4.4%	-7.4%	-3.7%	-2.3%	-4.1%
Laguna Beach Transit	825	770	-6.6%	-8.2%	1.3%	-9.6%	0.8%
Long Beach Transit	23,533	23,133	-1.7%	-5.5%	0.3%	-0.1%	-1.2%
Metro	275,778	277,308	0.6%	-3.2%	0.2%	4.8%	0.4%
Montebello Bus Lines	5,502	5,180	-5.8%	-11.5%	-6.0%	-3.5%	-2.3%
Norwalk Transit System	1,444	1,432	-0.8%	-2.8%	-1.7%	0.2%	1.0%
Omnitrans	10,618	10,541	-0.7%	-5.6%	1.3%	3.3%	-1.7%
Orange County Transp. Authority	38,898	37,288	-4.1%	-7.1%	-3.8%	-2.6%	-3.1%
Riverside Transit Agency	8,287	8,223	-0.8%	-1.2%	1.4%	0.1%	-3.2%
Santa Clarita Transit	2,622	2,485	-5.2%	-8.6%	0.3%	-0.1%	-12.0%
Santa Monica's Big Blue Bus	12,846	12,824	-0.2%	-4.9%	-4.7%	6.2%	2.9%
SunLine Transit	3,959	4,049	2.3%	2.6%	5.5%	2.2%	-1.0%
Torrance Transit Agency	3,668	3,681	0.4%	-4.9%	-3.0%	1.0%	8.4%
Ventura Intercity Service Transit Auth.	698	616	-11.8%	4.2%	-0.5%	-19.3%	-29.0%
Victor Valley Transit Authority	1,474	1,539	4.5%	-1.5%	2.8%	16.1%	1.3%

**Table 2. Change in Unlinked Passenger Trips (UPT) – SCAG Region (Rail)**

RAIL OPERATOR/SYSTEM	TOTAL UPT (000s)		YEAR-TO-YEAR CHANGE				
	2018	2019	Annual	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Metro (heavy rail)	43,301	41,775	-3.5%	-0.4%	-1.7%	-5.4%	-6.5%
Metro (light rail)*	64,716	51,396	-20.6%	-11.7%	-19.8%	-29.2%	-21.8%
Metrolink (commuter rail)	13,572	13,171	-3.0%	-11.5%	-9.3%	2.4%	8.6%

\* Light rail UPT is heavily impacted by the Metro Blue Line closures from January to November 2019.



In 2019, the experience of operators in the rest of California was mixed (see Table 3). In the Bay Area, San Francisco and San Jose (Santa Clara Valley) saw their bus ridership decrease, while Alameda-Contra Costa Transit grew by 2.9%. Sacramento’s bus ridership dropped slightly, while in San Diego, North County Transit District lost 2.7% and the Metropolitan Transit System gained slightly.

**Table 3. Change in Unlinked Passenger Trips (UPT) – Other California (Bus)**

BUS OPERATOR/SYSTEM	Total UPT (000s)		Year-to-Year Change				
	2018	2019	Annual	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Alameda-Contra Costa Transit	52,568	54,102	2.9%	2.5%	3.2%	3.6%	2.3%
North County Transit District	6,497	6,320	-2.7%	-3.5%	-2.2%	-2.4%	-2.9%
Sacramento Regional Transit	10,130	10,123	-0.1%	-8.3%	-0.1%	1.6%	6.7%
San Diego Metropol. Transit System	47,621	47,948	0.7%	-2.0%	0.8%	2.6%	1.3%
San Francisco Muni*	160,744	158,379	-1.5%	-1.2%	-0.6%	-0.9%	-3.2%
Santa Clara Valley Transp. Authority	28,028	27,367	-2.4%	-4.4%	-3.5%	-0.2%	-1.3%

\*Includes trolley bus

On rail (see Table 4), the Bay Area Rapid Transit (BART) lost ridership for the third consecutive year, Caltrain fell by 5.3% and Altamont Corridor Express increased by 0.7%. Commuter rail ridership in San Diego dropped 5.0%. Light rail ridership grew on all systems between 2018 and 2019, except for San Jose (Santa Clara Valley), which declined by 2.3% in its fourth consecutive year of ridership loss.

**Table 4. Change in Unlinked Passenger Trips (UPT) – Other California (Rail)**

RAIL OPERATOR/SYSTEM	Total UPT (000s)		Year-to-Year Change				
	2018	2019	Annual	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Altamont Corridor Express	1,479	1,490	0.7%	5.1%	2.4%	0.3%	-4.7%
Bay Area Rapid Transit (BART)	126,415	124,357	-1.6%	-3.0%	-1.2%	-1.1%	-1.3%
Caltrain	18,607	17,621	-5.3%	-6.3%	-12.2%	-12.9%	10.5%
East Contra Costa Co. BART (eBART)	1,109	2,292	n/a	n/a	n/a	8.5%	3.7%
North Co. Transit District (Coaster)	1,435	1,363	-5.0%	-6.3%	-1.4%	-4.4%	-8.7%
North Co. Transit District (Sprinter)	2,403	2,476	3.0%	-3.2%	4.1%	5.2%	6.2%
Sacramento Regional Transit	9,802	10,751	9.7%	9.0%	-1.6%	12.5%	19.3%
San Diego Metropol. Transit System	37,140	38,047	2.4%	0.1%	1.6%	6.4%	1.4%
San Francisco Muni (light rail)	49,902	50,948	2.1%	-0.9%	0.0%	7.7%	1.5%
San Francisco Muni (streetcar)	7,434	8,123	9.3%	-1.4%	-1.1%	25.0%	14.5%
Santa Clara Valley Transp. Authority	8,536	8,339	-2.3%	-0.3%	-4.3%	-2.2%	-2.4%
Sonoma-Marín Area Rail Transit	717	718	0.1%	-1.4%	1.2%	-4.7%	6.1%

Last year, staff began reporting on operators around the country that have gained attention in defying the national trend of ridership decline, including in Seattle, Houston, Las Vegas, Denver and Minneapolis/St. Paul. Analysis of the NTD monthly data suggest that conditions have worsened somewhat in these locations in 2019 (see Tables 5 and 6).

With respect to bus systems, Seattle lost ridership, albeit slightly at 0.3%. Houston and Las Vegas gained ridership, but at lower rates of increase than they experienced in 2018. Denver and Minneapolis continued to lose bus ridership, falling by 1.0% and 5.6%, respectively.

In terms of light rail, Seattle grew its ridership by 2.5% in 2019, which is less than the 6.1% increase it saw in 2018. Minneapolis had a similar experience, increasing by 1.4% in 2019 versus 4.8% in 2018. Houston and Denver both saw declines in light rail ridership, a reversal of trend from the previous year.

**Table 5. Change in Unlinked Passenger Trips (UPT) – Other American (Bus)**

BUS OPERATOR/SYSTEM	Total UPT (000s)		Year-to-Year Change				
	2018	2019	Annual	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Seattle - King County Metro	104,262	103,933	-0.3%	-3.8%	0.3%	0.8%	1.3%
Houston - MTA	67,195	67,904	1.1%	1.4%	-0.5%	1.0%	2.4%
Las Vegas - RTC	64,862	65,529	1.0%	-3.0%	0.6%	2.9%	3.5%
Denver - RTD	70,541	69,870	-1.0%	-6.8%	-1.0%	2.8%	1.3%
Minneapolis/St. Paul - Metro	54,910	51,860	-5.6%	-9.3%	-4.8%	-3.5%	-4.8%

**Table 6. Change in Unlinked Passenger Trips (UPT) – Other American (Light Rail)**

LIGHT RAIL OPERATOR/SYSTEM	Total UPT (000s)		Year-to-Year Change				
	2018	2019	Annual	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Seattle - Central Puget Sound RTA	24,470	25,076	2.5%	5.6%	2.3%	-0.6%	3.3%
Houston - MTA	18,806	18,409	-2.1%	1.3%	-6.3%	-0.4%	-3.2%
Denver - RTD	25,322	24,585	-2.9%	-13.2%	-0.3%	2.5%	-0.6%
Minneapolis/St. Paul - Metro	24,956	25,299	1.4%	-3.7%	8.6%	4.0%	-3.8%



**OC FLEX**  
OCTA's Microtransit Pilot Project

March 30, 2020

# Service Background

- An *on-demand* service offered as a one-year pilot in two select areas
- A service operated under contract
- A service operated with a new vehicle type
  - Two per zone; three during the peak period
- A service that is testing new rider markets
- A part of the OC Bus 360° Program
  - Identify opportunities to improve productivity by matching resources to demand
  - Filling a service gap between regular fixed-route service and ride-hailing options (TNCs)

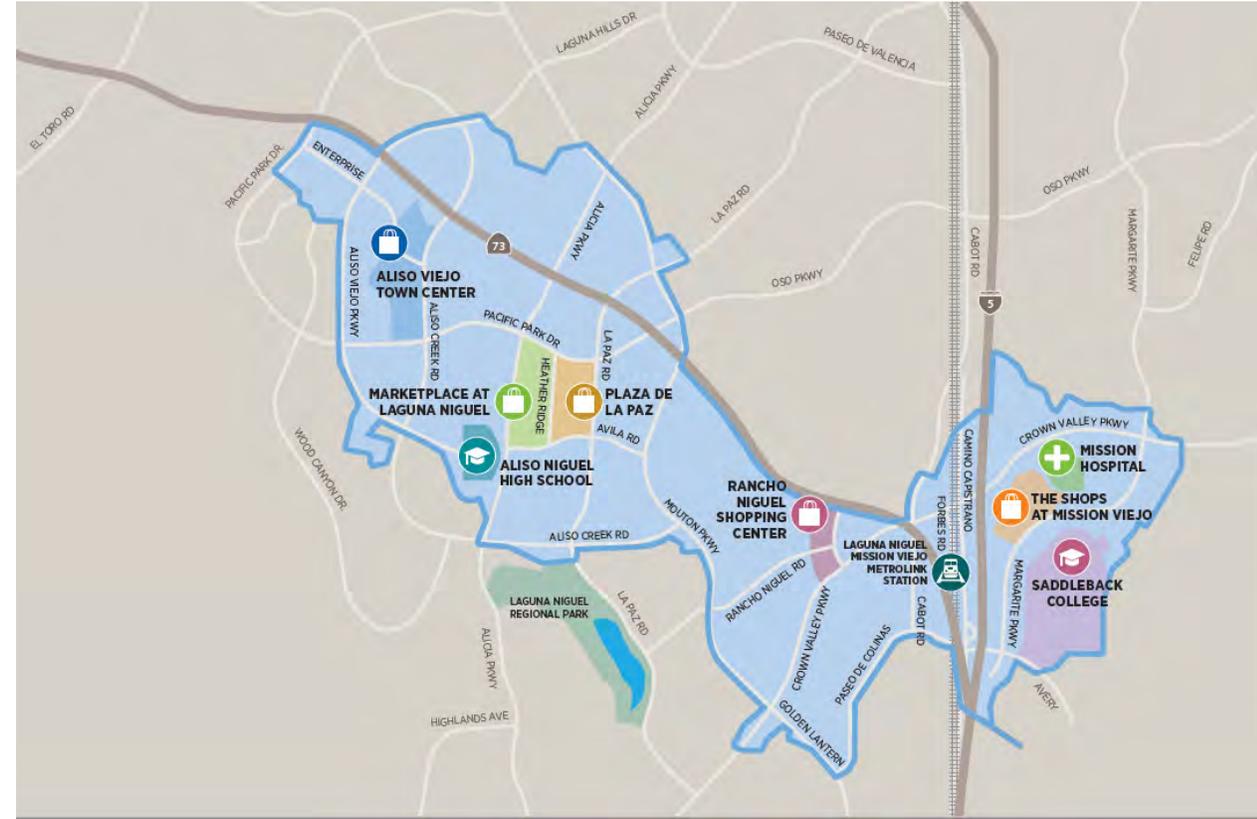


# Pilot Zones

## Huntington Beach – Westminster (HB-WM)



## Aliso Viejo-Laguna Niguel-Mission Viejo (AV-LN-MV)



# Service Characteristics

- Operates on:
  - Monday – Thursday: 6am – 9pm (11pm on Fridays)
  - Saturdays: 9am – 11pm
  - Sundays: 9am – 9pm
- Allows customers to request rides to/from anywhere inside the zone
  - Will serve key destinations within zones (hubs)
- Offers first/last mile connections for riders entering or leaving zones

# Fares

- Cost \$4.50 for pre-paid fare media (mobile app)
- Cost \$5.00 for onboard cash paying customers
- Consistent with the cost of a Day Pass for fixed-route service and OCTA policy
  - Allows up to three children under 5 years of age to ride for free with a fare-paying passenger
- Allows free transfers to/from an OC Bus stop or Metrolink Station with a valid full fare OC Bus Day Pass, Metrolink ticket, or Amtrak ticket

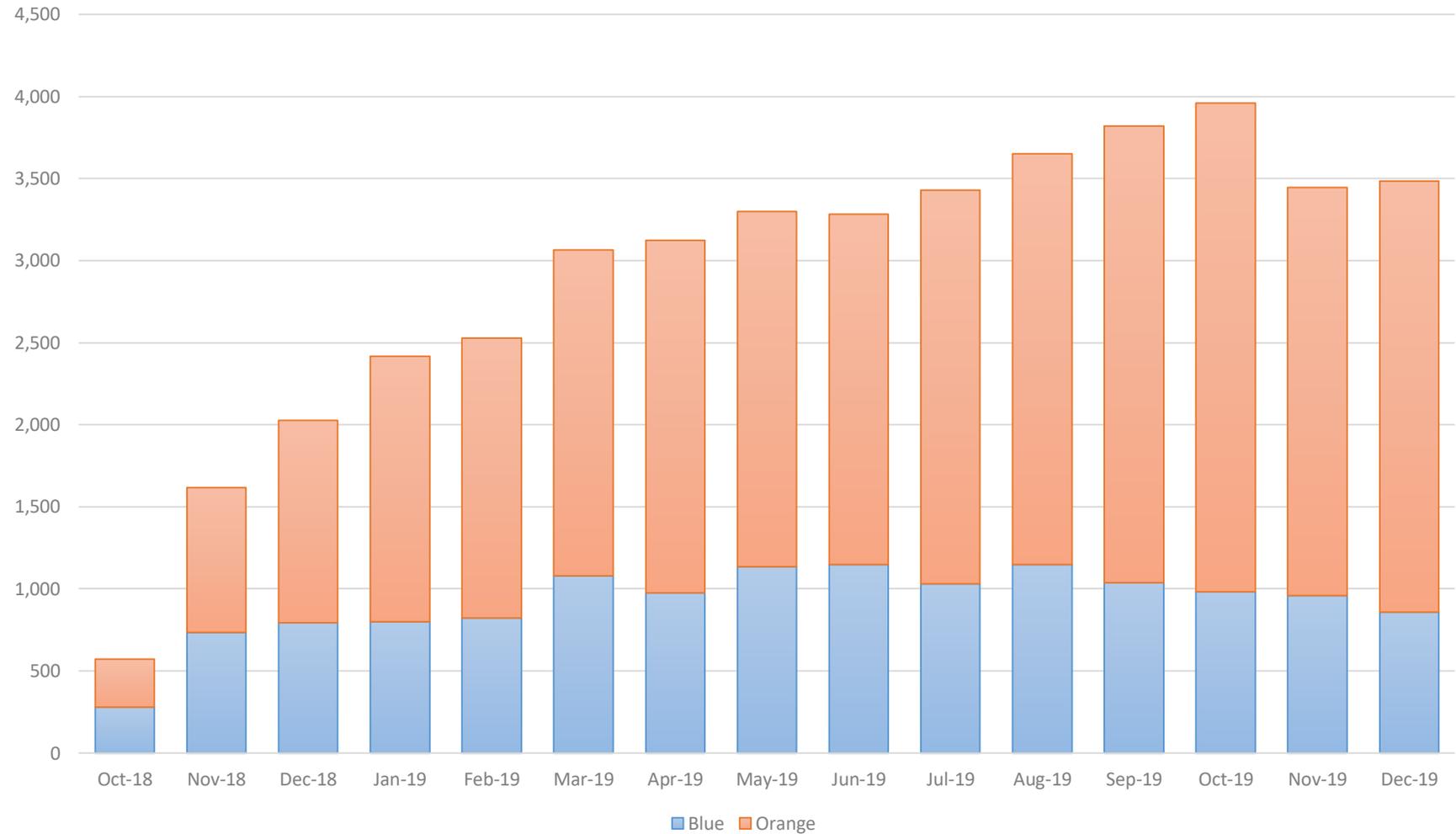


# Board Adopted Goals/Measures

- Provide public transit mobility in lower-demand areas
  - *As measured by boardings per revenue vehicle hour (b/rvh): **6 b/rvh***
- Reduce total operating and capital costs
  - *As measured by subsidy per boarding: **\$9.00 per boarding***
- Reduce Vehicle Miles Travelled (VMT)
  - *As measured by percent of bookings sharing a vehicle: **25% Shared Rides***
- Extend reach of OC Bus and Metrolink services
  - *As measured by percent of trips to/from transit hubs: **25% transfer trips***
- Meet customer needs
  - *As measured by customer satisfaction: **85% of riders “likely”/“very likely” to recommend OC Flex***

# Monthly Boardings

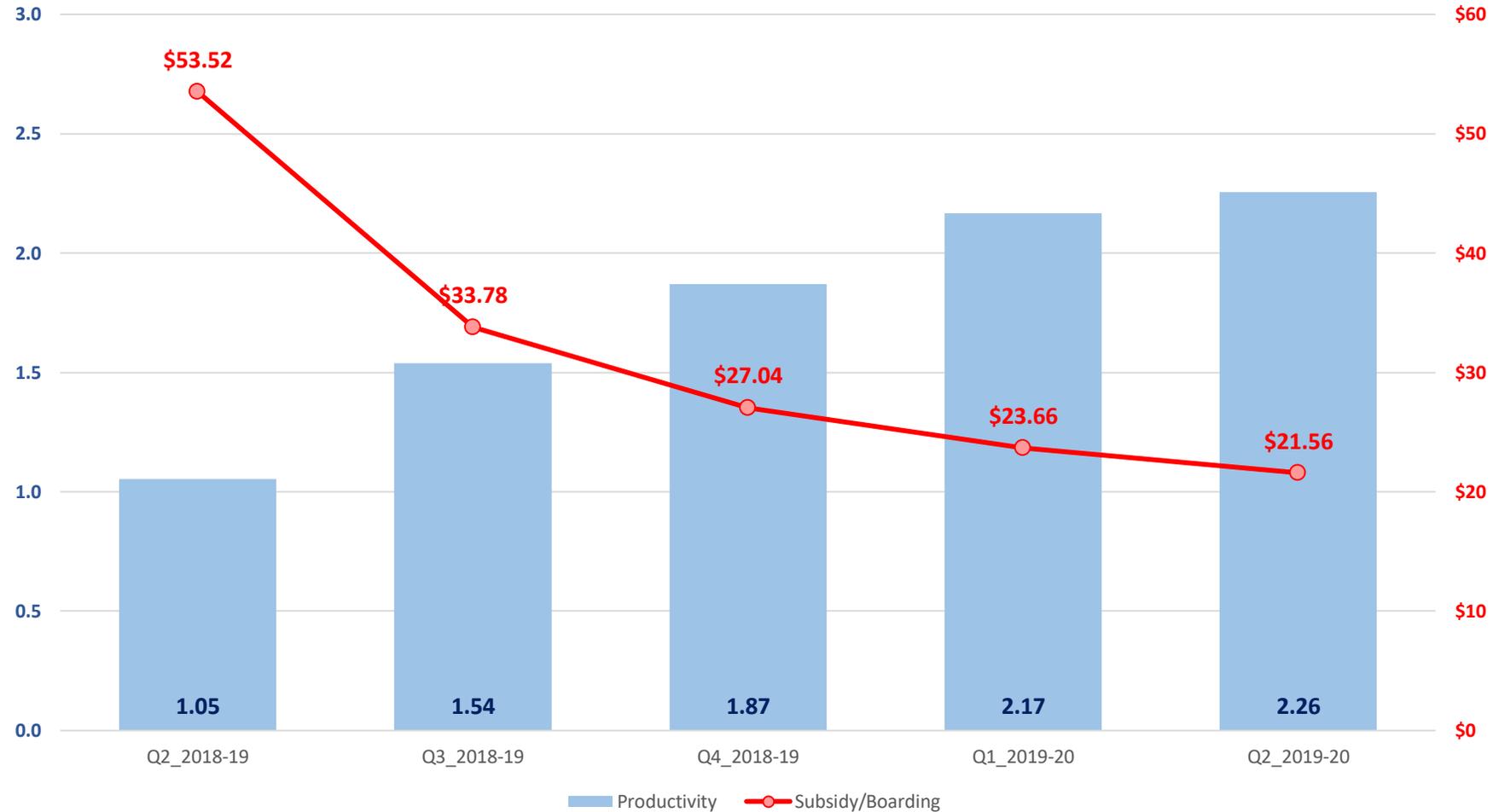
- Total Boardings: **43,721\***
- 850+ weekly boardings
  - Highest daily ridership: 178
- Zone trends
  - **Blue:** Steady
  - **Orange:** Increasing month over month
  - High peak demand
    - **First/Last mile connections to transit hubs, town centers/employers, and shopping**



\* As of December 2019

# Productivity-Subsidy/Boarding

- B/RVH: **2.26**
  - Blue: 1.77 B/RVH
  - Orange: 2.49 B/RVH
- Subsidy/Boarding: **\$21.56**
  - Blue: \$28.75
  - Orange: \$19.08 B/RVH
- Trend: slow but favorable



# Trip Sharing

- Shared Rides: **34.8%**

- Blue: 21.9%

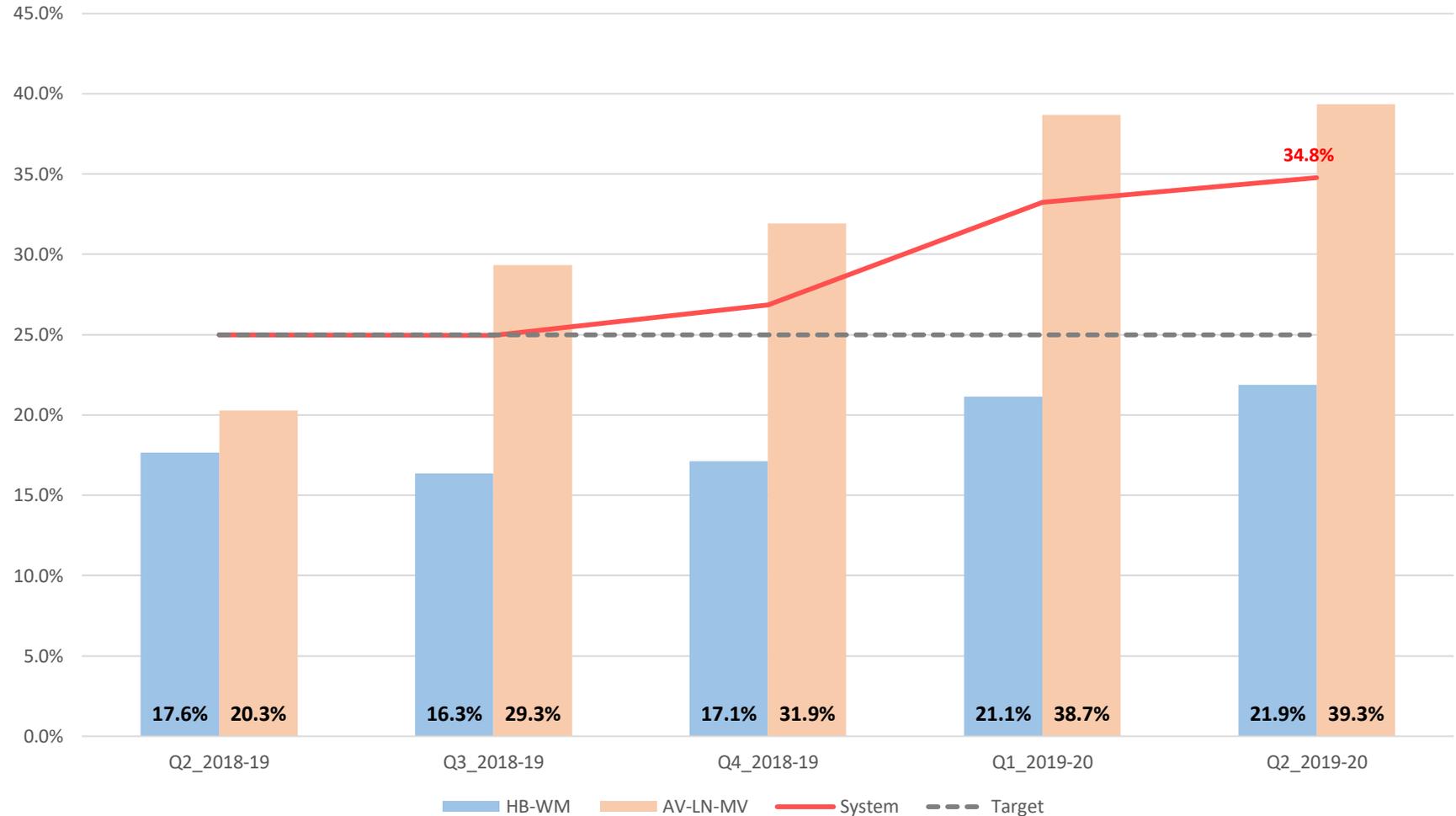
- Orange: 39.3%

- Trends:

- Blue: Below target

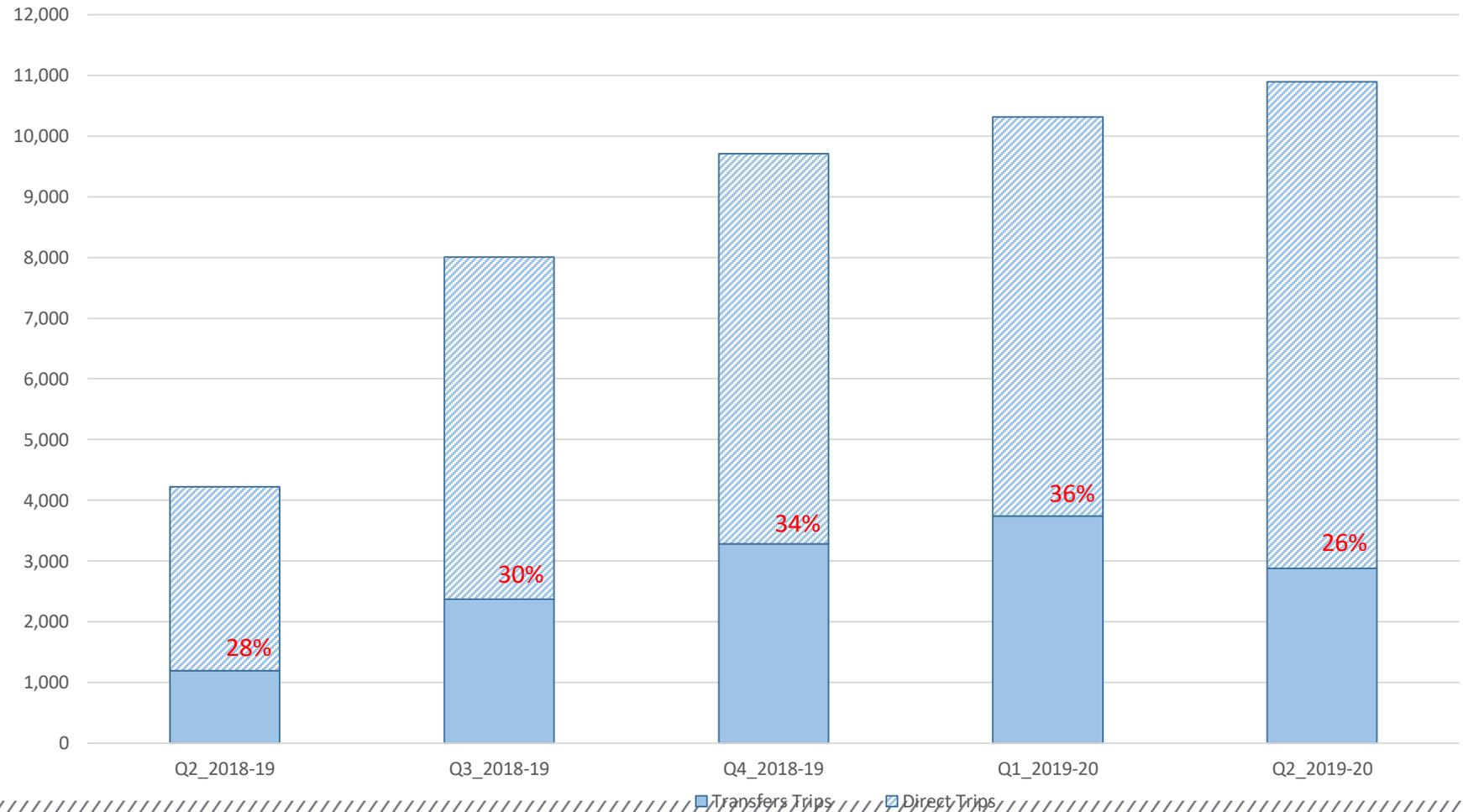
- Orange: Exceeded target every month since January (Q3\_FY19)

- High volume of trips to/from Metrolink station



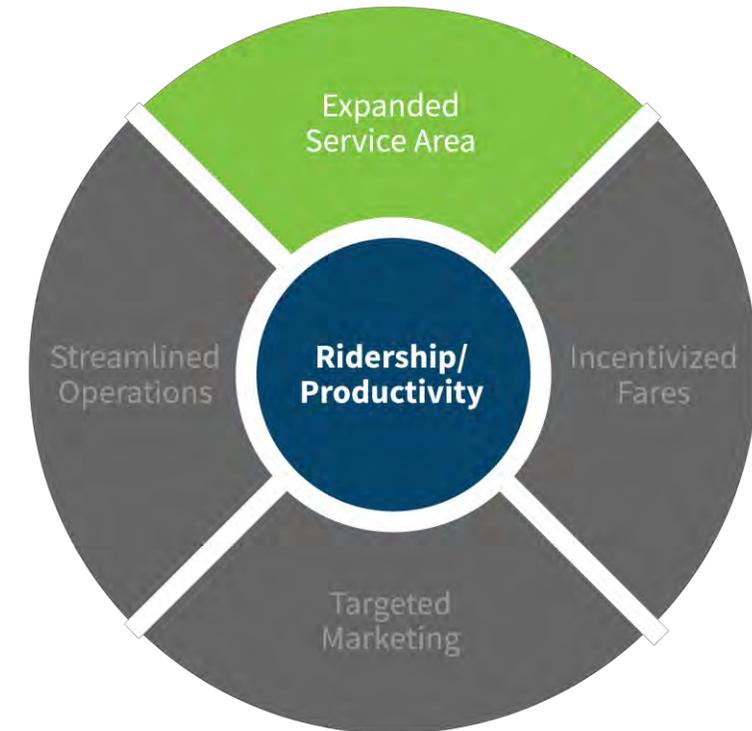
# Connecting to Transit

- Transfer Trips: **32%**
- Favorable trend:
  - Above 25% target for transfers
  - High transfer rate in the Orange Zone is due to high volume of trips to and from the LN-MV [Metrolink](#) Station



# Expand Service Areas

- GIS Zone Travel Analysis
  - Trip Activity
  - Home-Work Trips
- Added Adjacent High Demand Areas
- Removed Some Lower Demand Areas
- Anticipate Increase in Demand and Wait Time

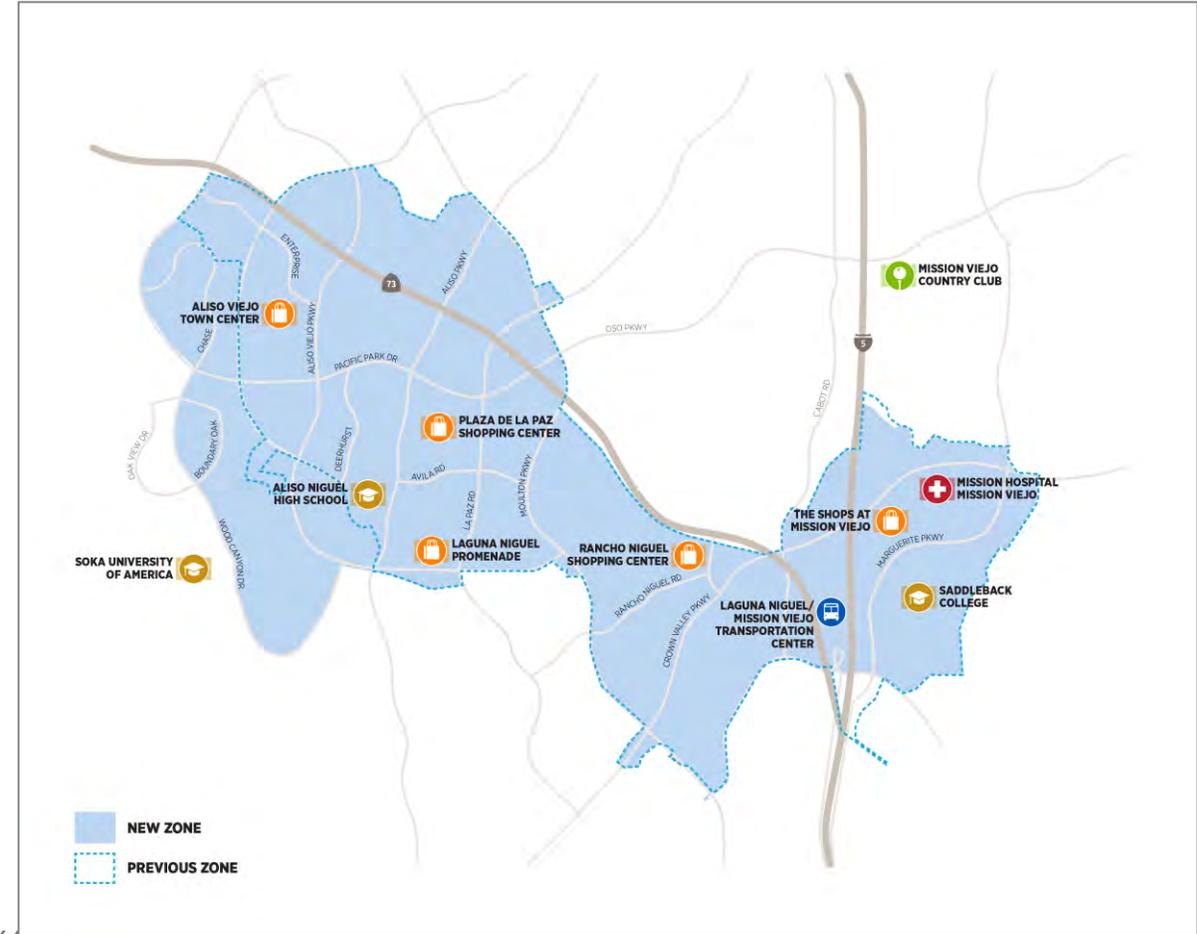


# Modified Pilot Zones

## Huntington Beach – Westminster (HB-WM)

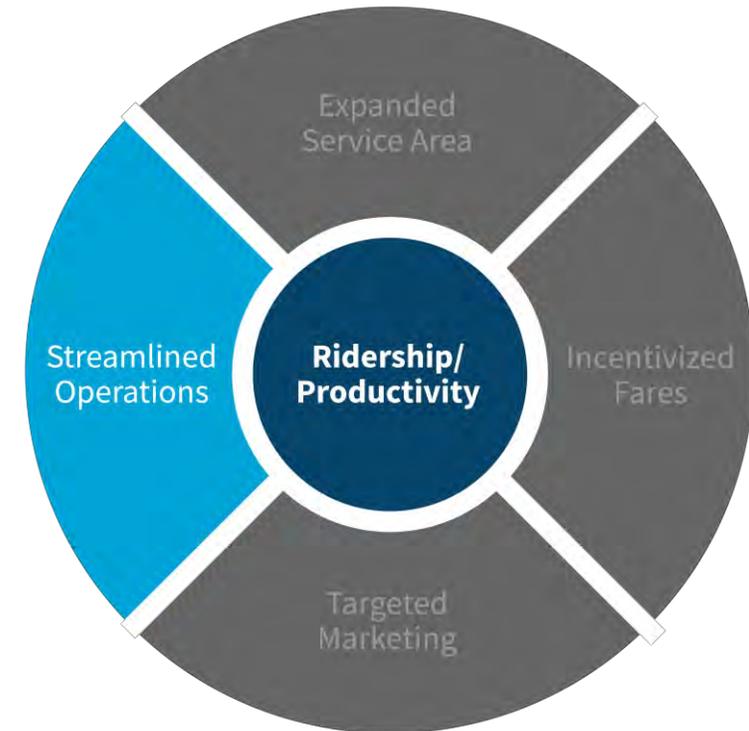


## Aliso Viejo-Laguna Niguel-Mission Viejo (AV-LN-MV)



# Streamlined Operations

- Goals
  - Improve productivity
  - Maintain quality of service
- Proposed Changes
  - Reduce span of service hours due to low ridership (stop earlier)
    - **Monday thru Friday: 6 AM to 9 PM**
    - **Saturday and Sunday: 9 AM to 9 PM**
  - Increase the number of Virtual Stops to maintain and/or improve service response time
  - Increase revenue vehicle hours in the Blue Zone during anticipated peak hours of service to accommodate zone changes and other efforts



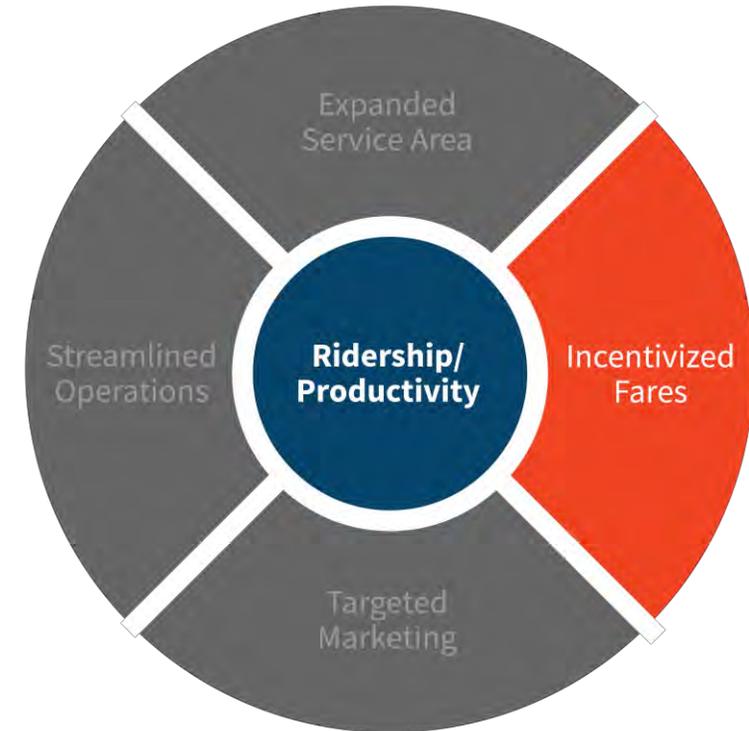
# Pass Considerations

- Goals:

- Increase ridership
- Encourage shared rides

- Proposed Changes

- Introduce “Train Buddies” program
  - **Metrolink riders to use transfer passes so multiple riders can be scheduled together**
- Expand current weekend BOGO program to all days
- Allow free transfers for OC Bus 30-day passholders



# Next Steps

- Pilot extended through October 2020
  - Maintain service continuity
  - Test strategies considered to improve performance
- Track Performance of Feb2020 Changes
  - Quarterly Performance Update

# MicroTransit Pilot Project

# What is MicroTransit?

- More than 50% of all trips in Los Angeles County are short (1-5 mile), solo trips using a private car service or driven alone.
- Metro captures few of these trips today.
- To increase ridership, Metro seeks to pair the best of public operations with the best of private technology.
- This new service will maximize new technology to improve the customer experience of Metro's current customers and support the use of Metro's existing suite of services.

		
On-demand Ridesharing	✓	✓
Mobile Application	✓	✓
First/Last Mile	✓	✓
End to End Trips		✓
Metro Call Center		✓
40% Wheelchair Accessible Vehicles		✓
TAP Integration		✓
Transit Watch Integration		✓
Feasibility Studies Completed		✓
SMART Operators with Specialized Training		✓
Staff On-Location		✓

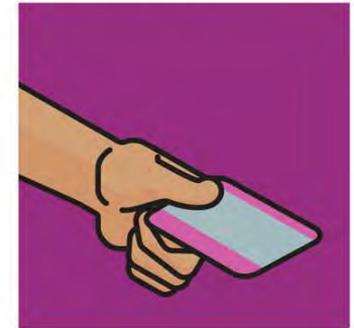
# How does MicroTransit Work?

- Shared rides ordered through a regional call center, booked with a mobile application, and/or arranged using an internet browser.
- All MicroTransit operators are Metro employees.
- Service supplements the NextGen Bus Plan.
- Offers quick boards at priority transit stations and stops.
- Five types of vehicles are featured in mixed fleet: Transit 150, Transit 350 (electric), Grand Caravan, Metris and Sprinter.

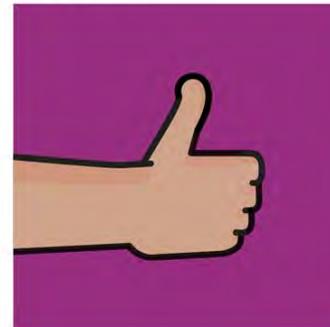
It's reliable.



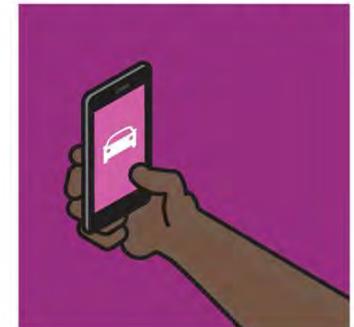
It's affordable.



It's safe.

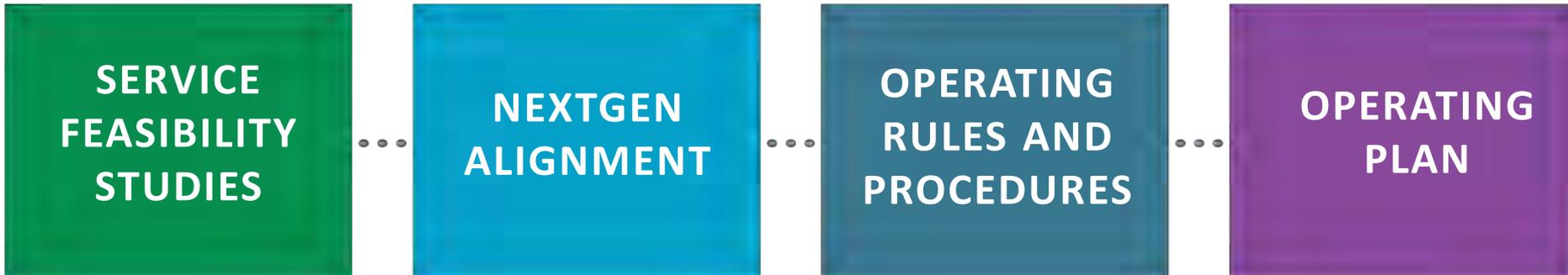


It's customer-driven  
and customer-focused.



-  Provides customized features for individuals and families with all levels of mobility.

# MicroTransit Roadmap



# Prioritizing Safety First



- Metro employee operators will be vetted and trained with an emphasis on customer service and security.
- Up to 10 weeks of in-person operator training created in coordination with:
  - Women & Girls Governing Council
  - Government Alliance on Racial Equity
  - Office of Civil Rights
  - Access Services
  - Understanding How Women Travel Study Team
  - The Equity Platform Project Leads
- Real-time data on vehicle locations, drop offs and pick-up times.
- Security technology with live monitoring of vehicles.

# Factors for Identifying Pilot Locations

## Network Connectivity:

- up to 2/3 of trips will be transfers to other public operations

## Economic Mobility:

- increases access to jobs, educational resources/institutions

## Major Trip Generators:

- supports employment centers, hospitals, universities, schools

## Priority Use Cases:

- medical, students, retail, commuting, child care pick-ups

## Customer Demand:

- can achieve moving 10 people an hour per vehicle

## Shared Usage:

- can achieve 70% shared rides

## Geographic Equity:

- tests variety of unique neighborhoods, communities

## Vehicle Miles Traveled:

- reduces solo occupancy short trips within the County

## Community Partnerships:

- has engaged businesses, cities, community based organizations

# MicroTransit Operated by Metro

Service available 7 days a week  
Initial soft launch (60 days) at 12 hour service span per day

Summer 2020	• Watts/Willowbrook
Fall 2020	• Northwest San Fernando Valley
Winter 2020	• LAWA/Inglewood
Spring 2021	• Highland Park/Eagle Rock/Glendale
Summer 2021	• Altadena/Pasadena/Sierra Madre
Fall 2021	• UCLA/VA Medical Center/Century City

Pilot recommendation allows for three years of Revenue Service Operations. The zones as identified on the map in pink are the anticipated maximum scale of the six service areas.

# Metro MicroTransit Service Zones



# Foothill Transit

Public Transportation Agency Safety Plan

SCAG Regional Transportation TAC | March 30,  
2020



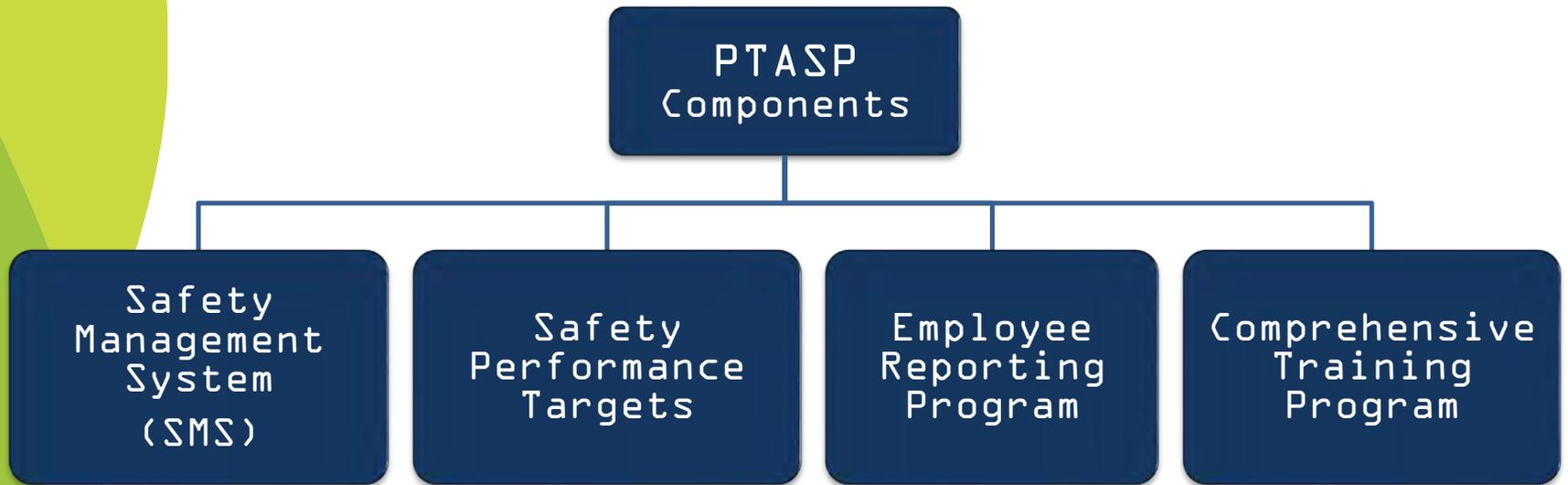
# Public Transportation Agency Safety Plan



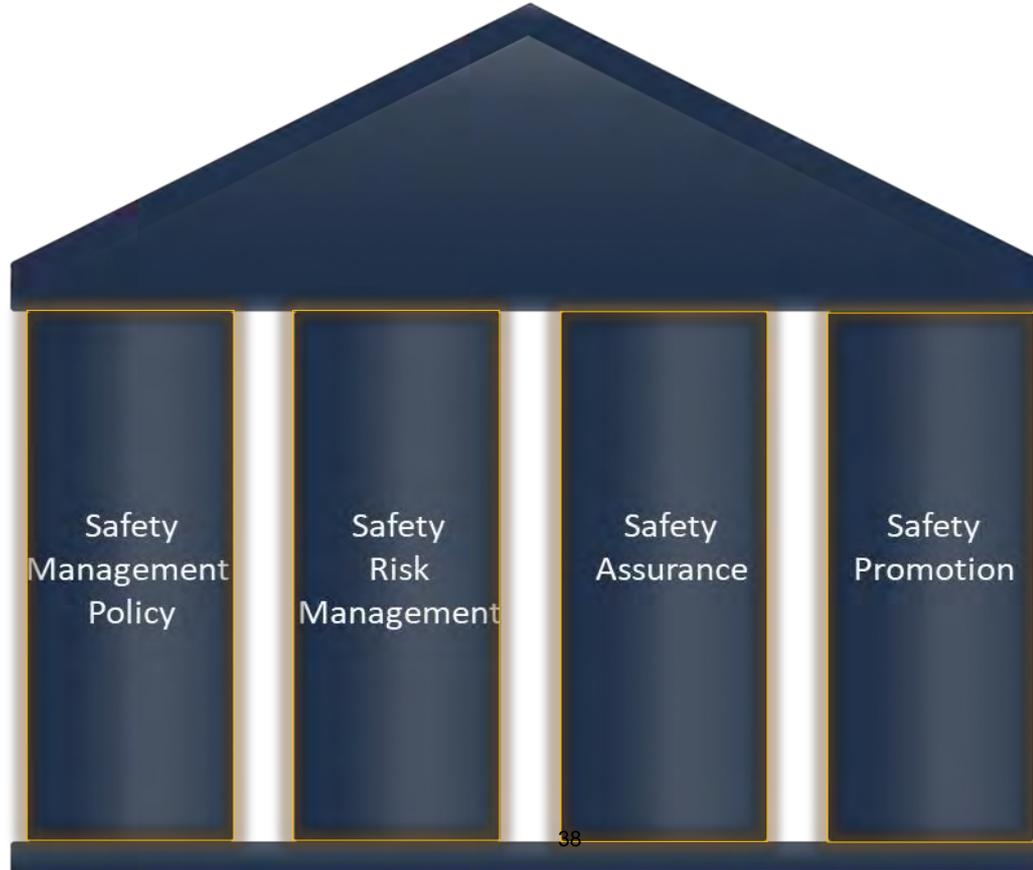
**Federal Transit  
Administration**

- What is PTASP?
- July 19, 2019 - effective date
- July 20, 2020 - compliance deadline

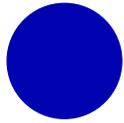
# Public Transportation Agency Safety Plan (PTASP)



# SMS Agency Safety Plan



# Safety Management Policy



## Commitment

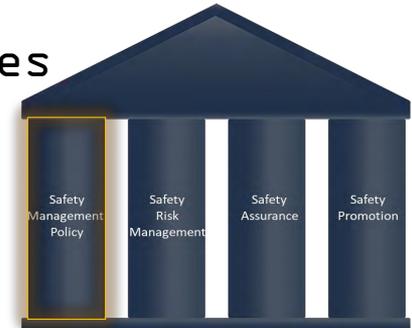
*"We educate, encourage and endorse a strong culture of safety at all levels of the organization valuing the responsibility entrusted in us by the communities we serve."  
-Foothill Transit*



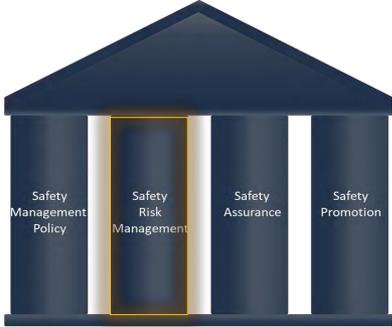
## Accountability and Responsibilities



## Objectives



# Safety Risk Management



Hazard  
Identificat  
ion and  
Analysis



Safety  
Teams



LASD  
Contract



Drug and  
Alcohol  
Oversight

# Safety Assurance

## FY2020-2021 Safety Performance

		FY2018-2019 Actual	FY2019-2020 Estimate	FY2020-2021 Target
Preventable Collisions	Rate per 100,000 Total Miles	0.80	1.00	< 0.80
Fatalities	Target	-	-	0
	Rate per 100,000 Revenue Miles	0	0	0
Injuries	Target	-	-	< 6
	Rate per 100,000 Revenue Miles	0.05	0.05	< 0.05
Safety Events	Target	-	-	< 25
	Rate per 100,000 Revenue Miles	0.13	0.20	< 0.20
System Reliability	Miles between Major Mechanical Failures	10,938	11,250	> 11,250



# Safety Promotion Employee Reporting Program



Organization wide



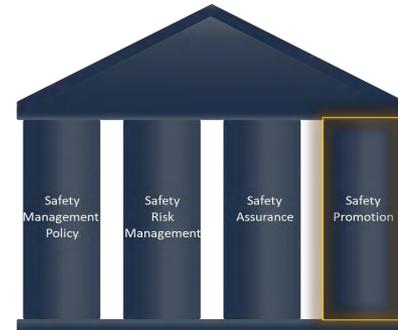
Various methods of communication



Analysis and Assessment



Resolution and Feedback

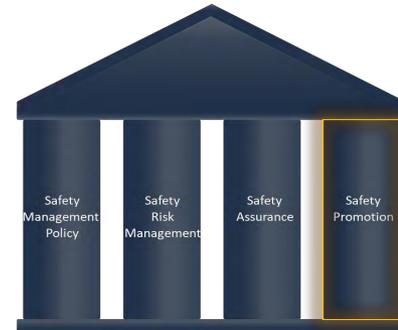


# Safety Promotion Comprehensive Training Program

● | Front Line Staff and Management Training

● | Operator Training

● | Instructor Qualifications



# PTASP Requirements

- Approval by the Accountable Executive
- Designation of a Chief Safety Officer
- Adoption by Board of Directors



# Questions

LaShawn King Gillespie | Director of Customer Service and  
Operations



Foothill Transit



# SCAG Region Transit Asset Management Target Setting

*RTTAC Meeting*

*presented to  
SCAG Region Transit Operators*

*presented by  
Cambridge Systematics, Inc.*



Think  Forward

# Agenda

---

- Project Recap
- Future TAM Reporting Processes
  - » FTIP
  - » RTP
  - » Operator Reporting
    - NTD Asset Inventory Module (AIM)
    - TAM Capital Planning
- Next Steps

# Project Recap

## From these Inputs

### Operators:

- Asset Inventories
- Planned Investments
- Performance Targets

### SCAG:

- 25-Year Funding Scenarios

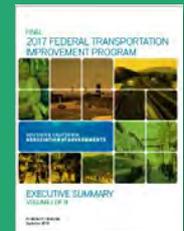
## Applied with these Decision Steps

- Asset Replacement Forecasts
- Performance Targets
  - Regional Aggregation
  - 25-Year Forecast Horizon
- Scenario Analysis
  - Baseline (Maintain Targets)
  - Constrained (Maintain Funding)
  - Unconstrained (Improve Targets)

## We get to these Outputs

### For Each Scenario:

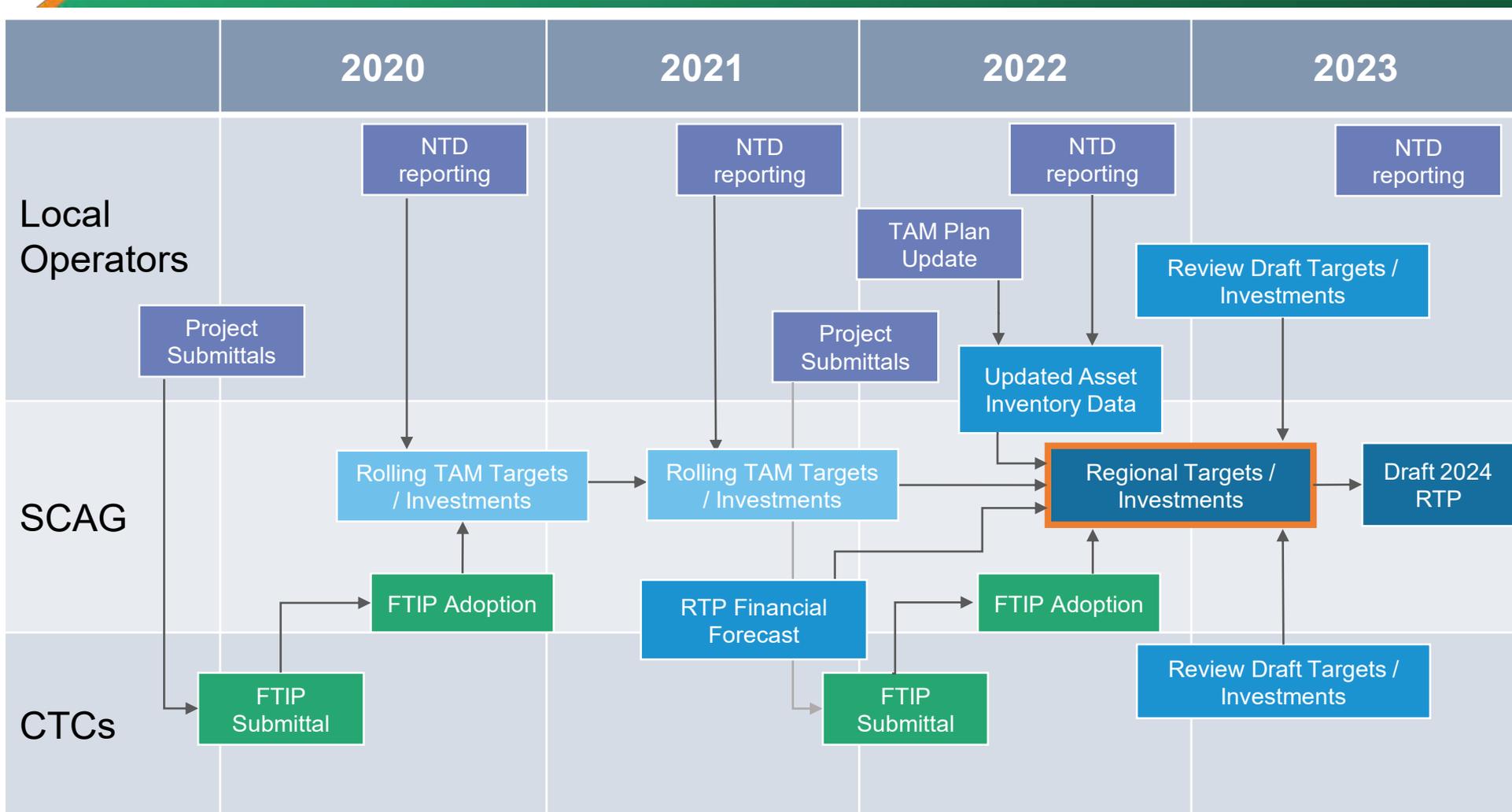
- 25-Year County & Region Performance Targets
- 25-Year County & Region Forecast Investments
- Feeds into RTP



# TAM Reporting

- **Every year:** NTD Asset Inventory Module (AIM) reporting including performance targets
- **Every two years:** TAM and FTIP project alignment
- **Every four years:** TAM plan updates and Asset Investment Forecasts and Regional Target Setting for RTP

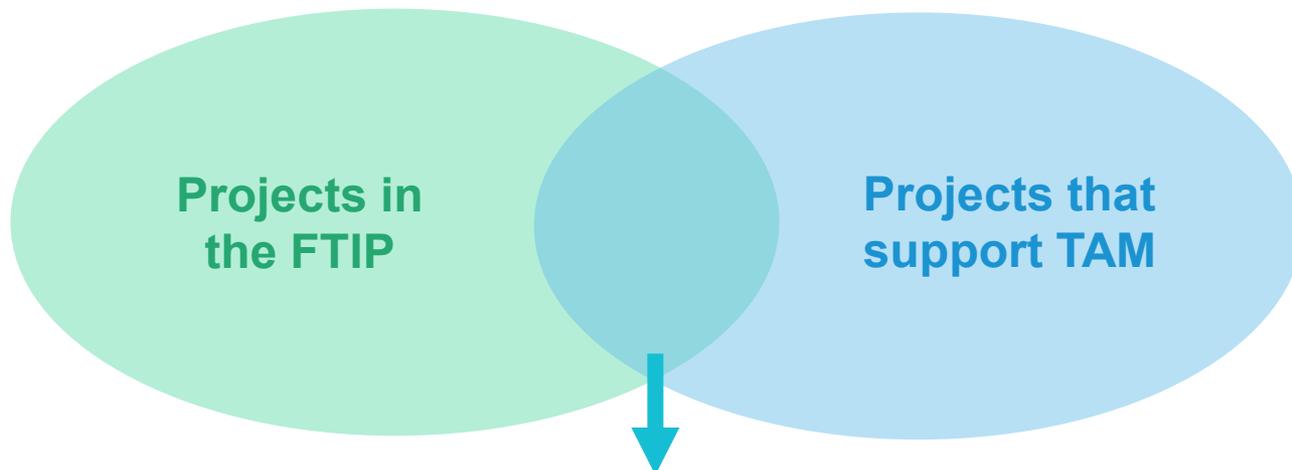
# Four Year TAM Alignment Process



# TAM / FTIP Alignment

# FTIP TAM Requirements

- Beginning with FY21 FTIP, MPOs are required to report on progress towards meeting performance-based planning targets, including TAM. ***FY21 FTIP to be adopted December 2020***
- SCAG will require additional information from project sponsors to link their FTIP projects with their TAM Plans and strategies



What level of TAM investment (\$) is represented?  
How is the investment expected to improve TAM performance targets?

# Example Project for FTIP

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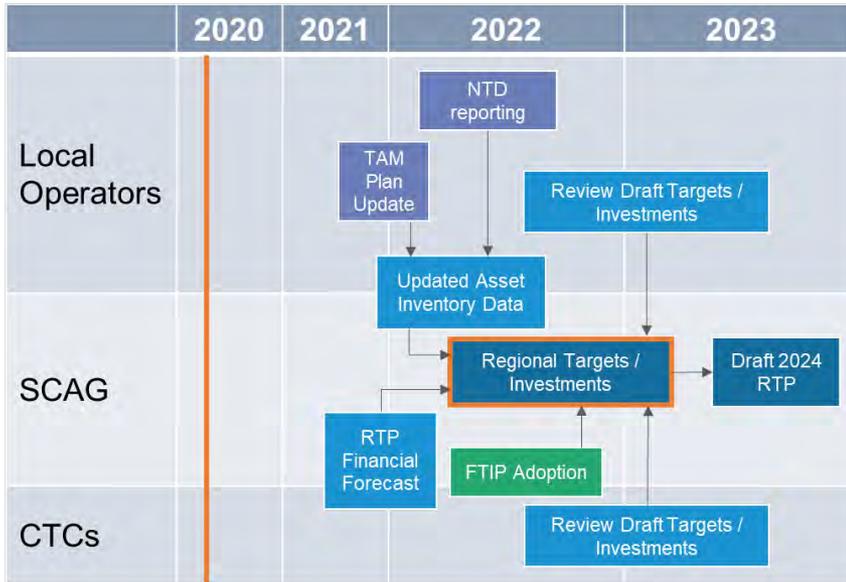
- **Description:** Purchase of (10) 40-ft electric buses to replace (8) 40-ft diesel buses
- **Cost:** \$7.5 million
- **Funding sources:** CMAQ, Local Return, FTA Section 5307

# FY21 FTIP - Questions for Project Sponsors

Question	Response
This project affects transit assets, such as vehicles, facilities or track.	<b>Yes</b>
Is this project consistent with the operator's adopted TAM Plan?	<b>Yes</b>
What percentage of the total project cost is TAM related?	<b>80%</b>
How many revenue vehicles currently past your agency's useful life benchmark will this project replace with new vehicles or rehabilitated vehicles?	<b>8 New Vehicles</b>
How many non-replacement revenue vehicles will this project add to your agency fleet?	<b>2 New Vehicles</b>
How many non-revenue vehicles past your agency's useful life benchmark will this project replace with new vehicles or rehabilitated vehicles?	<b>0 New Vehicles 0 Rehab Vehicles</b>
How many non-replacement non-revenue vehicles will this project add to your agency fleet?	<b>0 non-revenue vehicles</b>
How many facilities will be upgraded from poor or marginal conditions to adequate or better conditions?	<b>0 facilities</b>
How many directional route-miles of track that currently have performance restrictions (e.g. slow zones) will be improved as a result of this project to an extent that eliminates aforementioned performance restrictions?	<b>0 miles</b>
How many new (i.e., non-replacement) directional route-miles of rail track will be constructed?	<b>0 miles</b>

# TAM / 2024 RTP Alignment

# Four Year TAM Alignment Process



## ➤ 2023

- » JAN: SCAG and operators update operator asset inventory and TAM performance targets
- » MAR: SCAG calculates regional TAM performance targets and long-term asset investment needs and funding
- » MAY: CTCs and Operators review and comment on regional TAM targets and scenarios
- » JUL: SCAG writes RTP narrative describing targets, investments, and changes from 2020 RTP
- » SEP: TAM RTP narrative is included in d2024 Draft RTP

## ➤ 2024

- » Public review and comment on Draft RTP, and adoption of Final 2024 RTP

## ➤ 2022

- » Ongoing: Working with CTCs, SCAG develops RTP financial forecasts
- » OCT: Operators complete updates to TAM Plans and NTD AIM Reporting
- » DEC: SCAG adopts FY23 FTIP

# Operator TAM Reporting

# NTD AIM Reporting

- TAM Facilities Inventory (A-15)
- Transit Way Mileage (A-20)
- Revenue Vehicle Inventory (A-30)
- Service Vehicle Inventory (A-35)
- TAM Performance Measure Targets (A-90)

## TAM Policy

Group Management
Group Metrics
Performance Measures

Filters

\* Policy Year: 2018 1      Period: July - June      \* Group Name: 3 Agency Group View

Distribute

Group Metrics : 2018 : July - June : 3 Agency Group

Asset Category	Group Name	Group Status	Organizations	Copied From Previous Year
Revenue Vehicles	3 Agency Group	In Development	View	No

Revenue Vehicles

Percentage of revenue vehicles that exceed the Useful Life Benchmark (ULB)

Asset Class/Type	ULB	Editable/Locked	Goal Pcnt	Editable/Locked
AB-Articulated Bus	14	Editable <input type="checkbox"/>	5	Editable <input type="checkbox"/>
AO-Automobile	8	Editable <input type="checkbox"/>	0	Editable <input type="checkbox"/>
BU-Bus	14	Locked <input type="checkbox"/>	15	Locked <input type="checkbox"/>
RL-Commuter Rail Locomotive	39	Editable <input type="checkbox"/>	10	Editable <input type="checkbox"/>

# Asset Capital Planning

- Asset Inventory and Condition Data
- Project Planning and Forecasting
- Service Life Reporting



# On-going TransAM Updates

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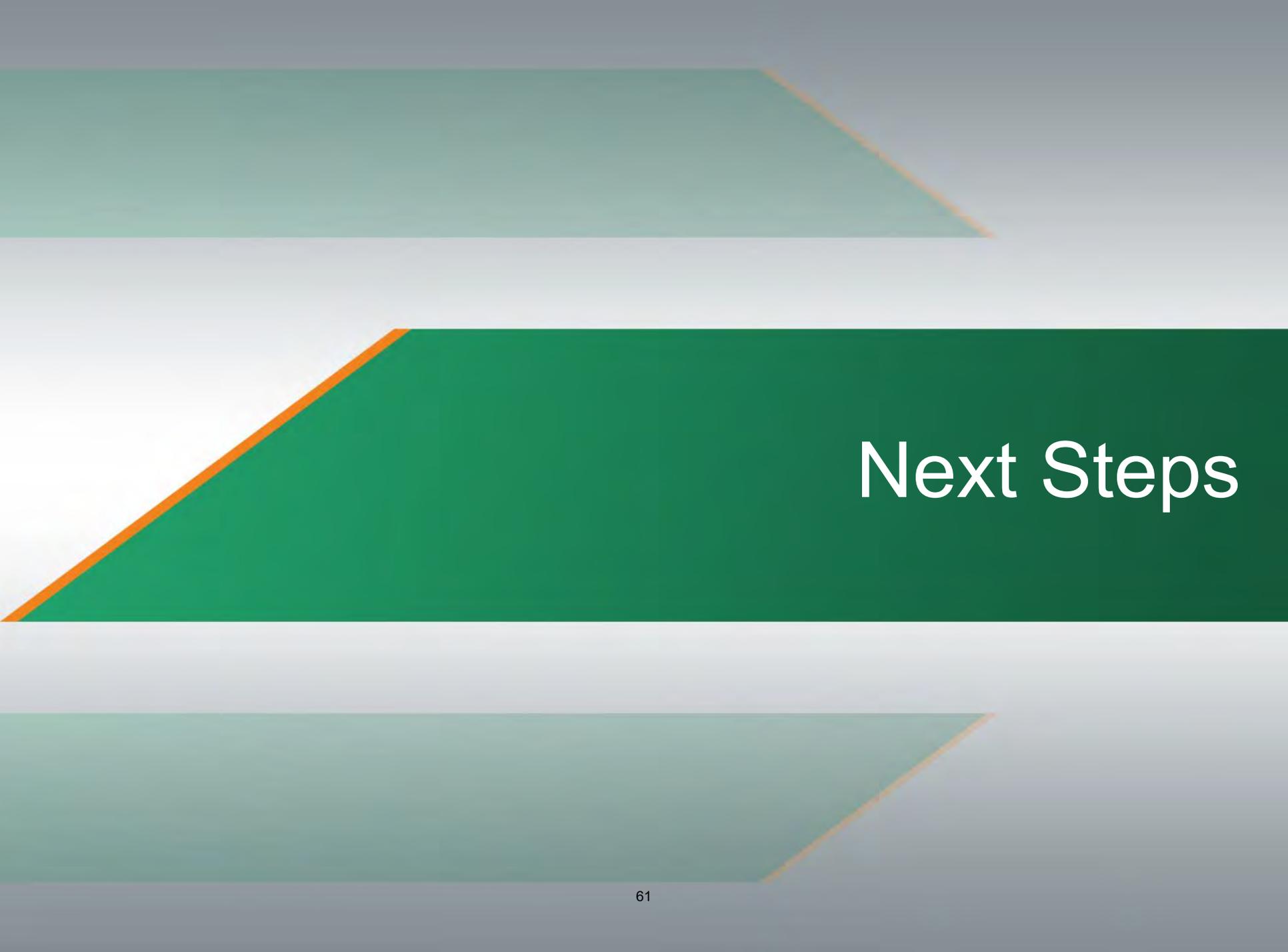
## ➤ **Summer: NTD Reporting**

- » Reporting Form Updates

## ➤ **Fall: Project Planning**

- » Existing Feature Overhaul
- » Project Funding Updates
- » Project Prioritization Module
- » New Annual Budget Features

Watch the recent training here: <https://tinyurl.com/SCAGdatabase>

The slide features a central dark green horizontal band. Above and below this band are teal-colored horizontal bars with orange-tipped corners. The text 'Next Steps' is centered in white on the green band.

# Next Steps

# Next Steps

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- Spring: SCAG Regional TAM Target Setting Final Report
- Spring: SCAG TransAM Database available for use by all operators
- Summer (TBD): SCAG extends availability to SCAG TransAM Database through June 2021
- Fall (TBD): SCAG hosts operator training to use SCAG TransAM Database for NTD reporting

# Questions?

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- ➔ Priscilla Freduah-Agyemang, SCAG Project Manager  
[agyemang@scag.ca.gov](mailto:agyemang@scag.ca.gov) / 213-236-1973
- ➔ Philip Law, SCAG Transit Manager  
[law@scag.ca.gov](mailto:law@scag.ca.gov) / 213-236-1841
- ➔ Herb Higginbotham, CS Project Manager  
[hhigginbotham@camsys.com](mailto:hhigginbotham@camsys.com) / 213-372-3029



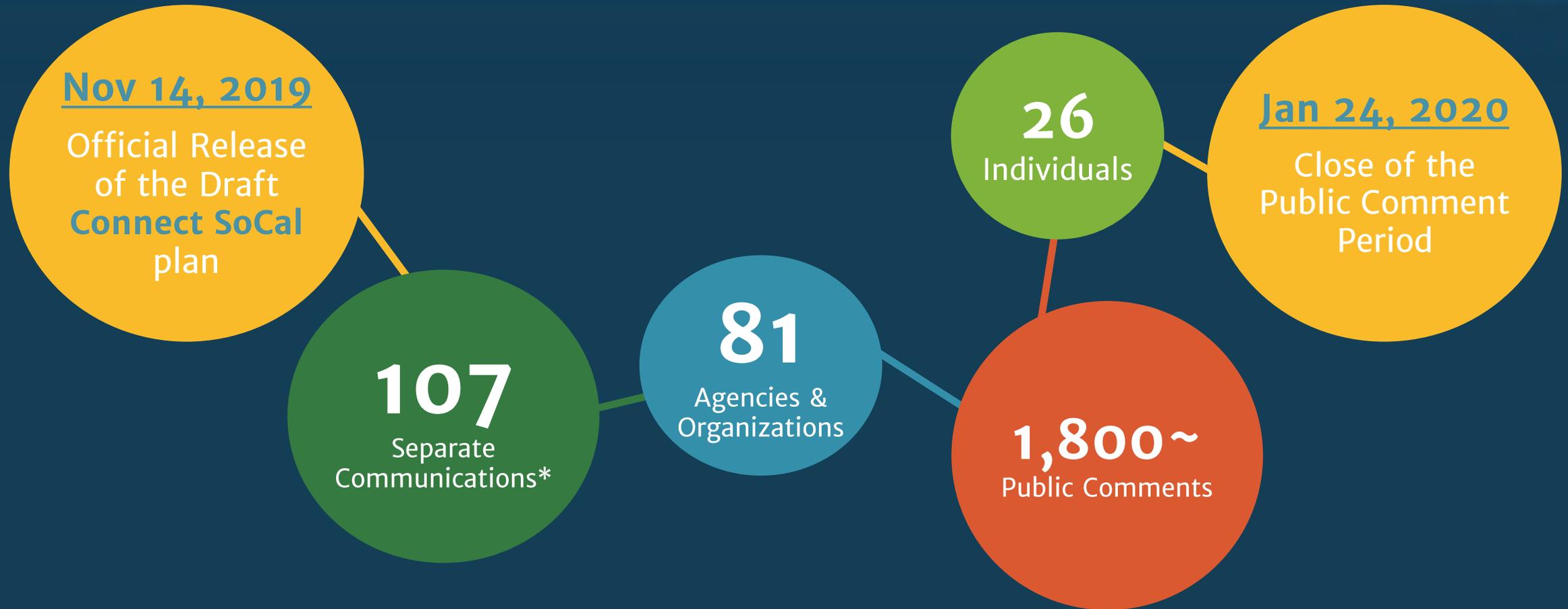
# Draft Connect SoCal Public Comments & Revision Approach

Nancy Lo  
Planning & Programs  
March 30, 2020

[www.scag.ca.gov](http://www.scag.ca.gov)



# Draft Connect SoCal Public Comments



**Most comments were supportive of Connect SoCal**

# 16 Major Categories of Public Comments



Active  
Transportation



Aviation &  
Airport  
Ground  
Access



Emerging  
Technology



Environmental  
Justice



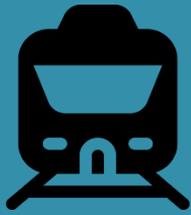
Goods  
Movement



Natural &  
Farm Lands  
Conservation



Other



Passenger  
Rail



Public Health



Public  
Participation &  
Consultation



Project List



Relationship  
between  
Connect SoCal  
& RHNA



Sustainable  
Communities  
Strategy



Transportation  
Conformity  
Analysis



Transit



Transportation  
Finance

# Regional Transit TAC- Related Public Comment Topics



Active  
Transportation



Aviation &  
Airport  
Ground  
Access



Emerging  
Technology



Goods  
Movement



Passenger Rail



Relationship  
between  
Connect SoCal  
& RHNA



Sustainable  
Communities  
Strategy



Transit



Transportation  
Finance

## Overview

- Metrolink SCORE expands commuter rail service across the region
- California High Speed Rail Phase 1 connects the Central Valley to Los Angeles and Anaheim
- Link Union Station improvements will significantly reduce delays and allow one-seat rides to many more destinations
- XpressWest provides high-speed rail connection from Southern California to Las Vegas

## Comments Received

- Project updates or clarifications
- Updates from the California High Speed Rail Authority

## Overview

- Major capital projects include more frequent and reliable bus service, new Bus Rapid Transit corridors, Metro Rail expansion, and new rail service in Orange and San Bernardino Counties.
- Strategies include leveraging technology innovation to improve first/last mile connections, provide shared on-demand service where cost-effective, and support the integration of trip planning and fare payment systems.
- Other transit-supportive strategies include parking and curb space management, congestion pricing, dedicated transit lanes, transit-oriented growth, and clean transportation fueling infrastructure.

## Comments Received

- Freeway High Quality Transit Areas (HQTAs)
- Regional Housing Needs Assessment (RHNA) and High Quality Transit Corridors (HQTCs)

## Overview

- Describes the system as well as current and future needs
- Improve mobility equitably
- Plan nearly doubles investments in Active Transportation
- Focus on safety using tools and resources such as HIN, Go Human Safety Campaign
- Continued focus on supporting 'First Mile/Last Mile' challenges

- Comments Received
- Supportive of active transportation
- Supportive of Complete Streets
- Increase funding for active transportation projects

## Overview

- Description of regional aviation demand and airport assets
- Regional air passenger and cargo activity and forecast
- Airport related ground access improvements

## Comments Received

- SCAG's role in aviation system planning
- Aviation demand forecast process, assumptions and results
- Explore additional opportunities to connect airports, particularly Ontario International Airport, with high quality transit options

## Overview

- Describes region's Goods Movement System as well as current and future needs
- Truck Bottleneck Relief Strategy
- Last Mile Delivery Strategy
- Goods Movement Environmental Strategy

## Comments Received

- Electrification of the regional freight rail system
- Strategies to reach a zero-emission freight system
- Funding to deploy zero-emission cargo movement system(s)

## Overview

- Summary of Revenue Sources and Expenditures
- Revenue Source Availability and Risk Assessment
- Capital and other program Investments

## Comments Received

- Financial model assumptions
- Guiding principles for the implementation of new revenues
- Suggested further areas of research

## Overview

- Focus growth near destinations and mobility options
- Promote diverse housing choices
- Leverage technology innovations
- Support implementation of sustainability policies
- Promote a “green region”

## Comments Received

- Housing affordability– varied between requests for more explicit housing policies to a change in strategies.
- Requests for clarification on growth vision and GHG reduction strategies.
- Requests for more climate data and polices to address climate change.

# Relationship between Connect SoCal & RHNA



## Overview

- Expanded housing choices for all income levels in areas with a range of transportation choices and economic opportunities
- Production of affordable housing has remained well below the region's needs
- AB 101 Legislation
- Regional Housing Strategy Framework

## Comments Received

- Connect SoCal–RHNA link and how the 6th Cycle has been considered.
- SB 375 requirements to identify areas within the region sufficient to house an eight year projection of the regional housing need.

## Overview

- Provide options for local and regional trips
- Increase system efficiency
- Shift trips to less environmentally damaging modes
- Minimize negative environmental externalities
- Improve safety

## Comments Received

- Importance of transitioning to zero-emissions vehicles in various sectors including passenger, transit and goods movement vehicles.
- SCAG should remain technology-neutral with regards to vehicle fuel and power technology.
- Importance of micro-mobility and other "slow-speed" modes in achieving Connect SoCal goals.

## Next Steps

<b>Joint Policy Committee</b> Consider recommending adoption of the Final Connect SoCal by RC	Tentatively late April 2020
<b>Energy &amp; Environment Committee</b> Consider recommending Certification of the PEIR of the Final Connect SoCal	Tentatively late April 2020
<b>Regional Council</b> Consider Certification of Final PEIR and adoption of Final Connect SoCal	Tentatively late April 2020
<b>California Air Resources Board</b> Review SCAG's SCS for adequacy to meet established GHG reduction targets	June 2020
<b>FHWA and FTA, in consultation with EPA</b> Consider certifying Connect SoCal for conformity	June 1, 2020



Thank you!  
Questions?

[ConnectSoCal.org](http://ConnectSoCal.org)

[www.scag.ca.gov](http://www.scag.ca.gov)

