

2021 San Francisco Congestion Management Program

Community Advisory Committee



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County Transportation
Authority

Agenda Item 9

December 1, 2021

CMP Purpose and Requirements



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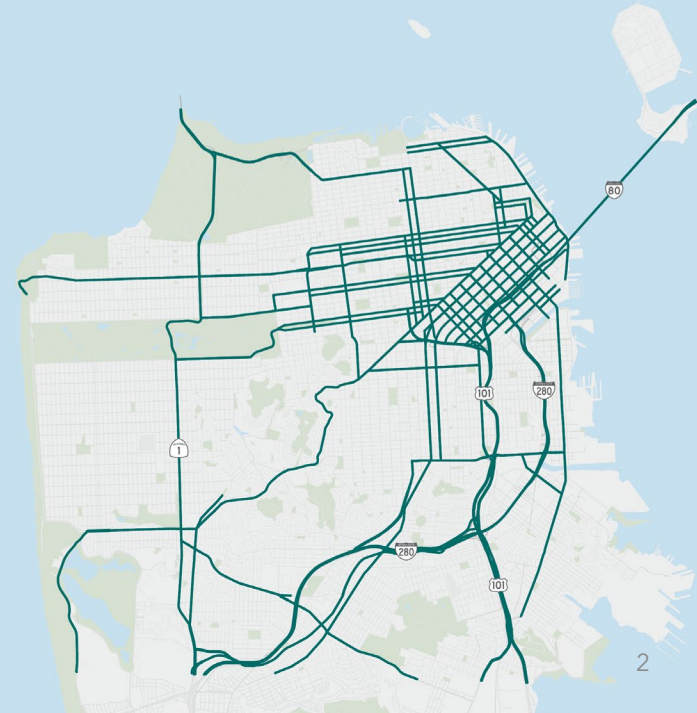
Purpose

- Report performance measures for congestion management
- Describe congestion management strategies and efforts
- Approval of CMP maintains city's eligibility for state gas tax and other revenues

Requirements

- Designated CMA updates every two years
- Auto LOS and multimodal performance measures
- Travel Demand Management (TDM) and Land use impact analysis
- Capital Improvement Program (CIP)

CMP Monitoring Network 2021



Performance Monitoring Outline










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- **Congestion metrics**
 - Speeds (auto and transit/bus)
 - Transit reliability
 - Auto reliability (*new*)
 - Auto-Transit speed ratio
- **Other indicators**
 - Multimodal counts
 - Bike and pedestrian collisions
 - Transit ridership
 - Transit coverage (*new*)
 - Highway volumes (*new*)
 - Mode Share

Key Findings - 2021 vs. 2019

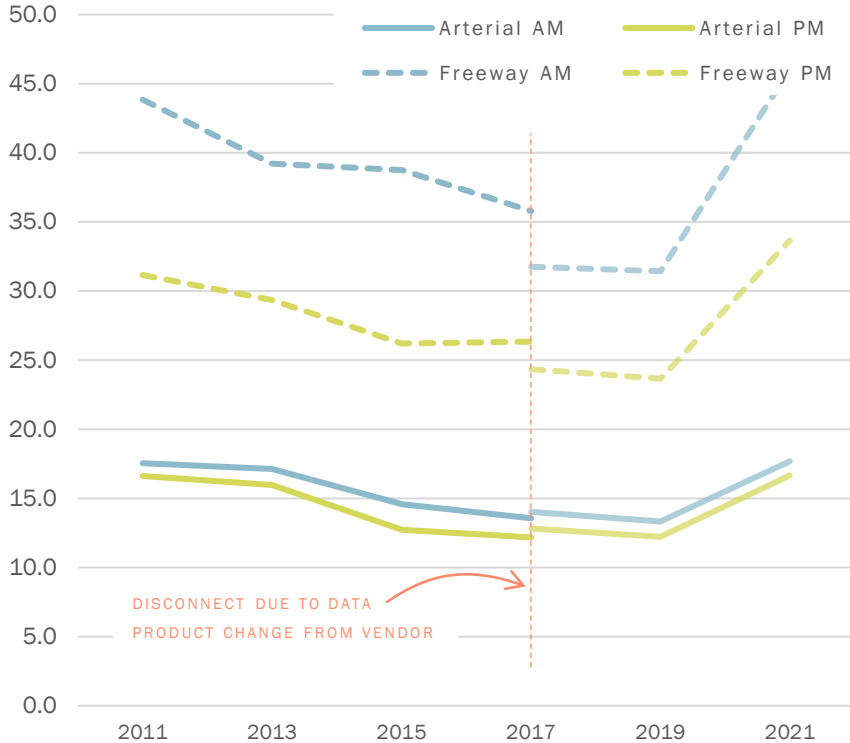


- COVID-19 has significantly impacted all metrics
- Auto speeds  30%-45%
- Transit speeds  15%-25%
- Auto travel time reliability  5%-15%
- Bicycle and pedestrian collisions  35%
- Bicycle and pedestrian volumes  70%
- Transit reliability  2%-4%
- Transit ridership  65%-85%

Speed

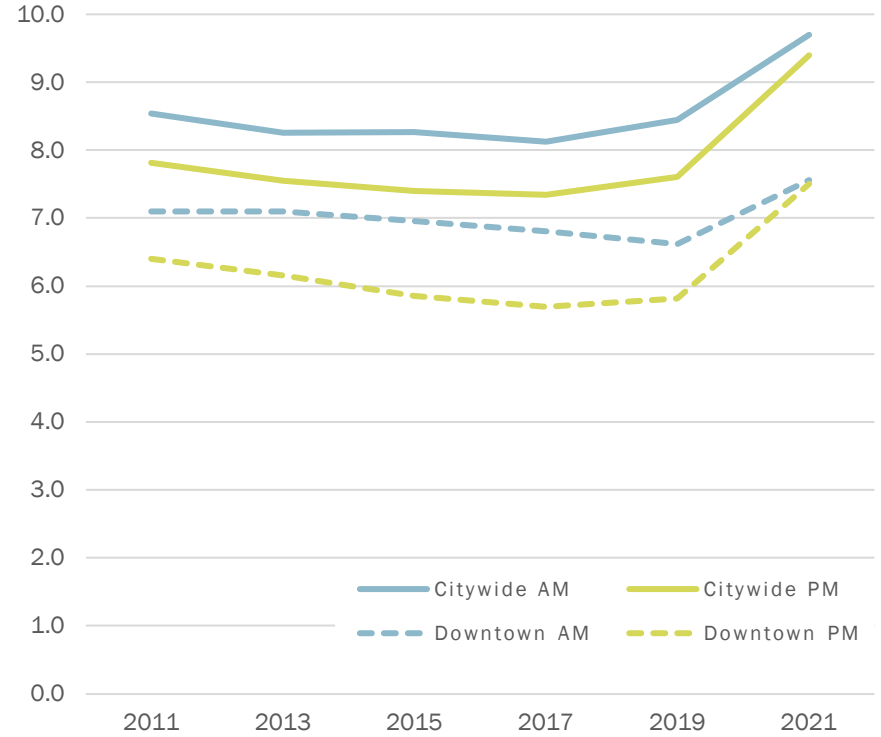


Auto Speeds



AM: 7AM – 9AM, PM: 4:30PM – 6:30PM

Transit (Bus) Speeds

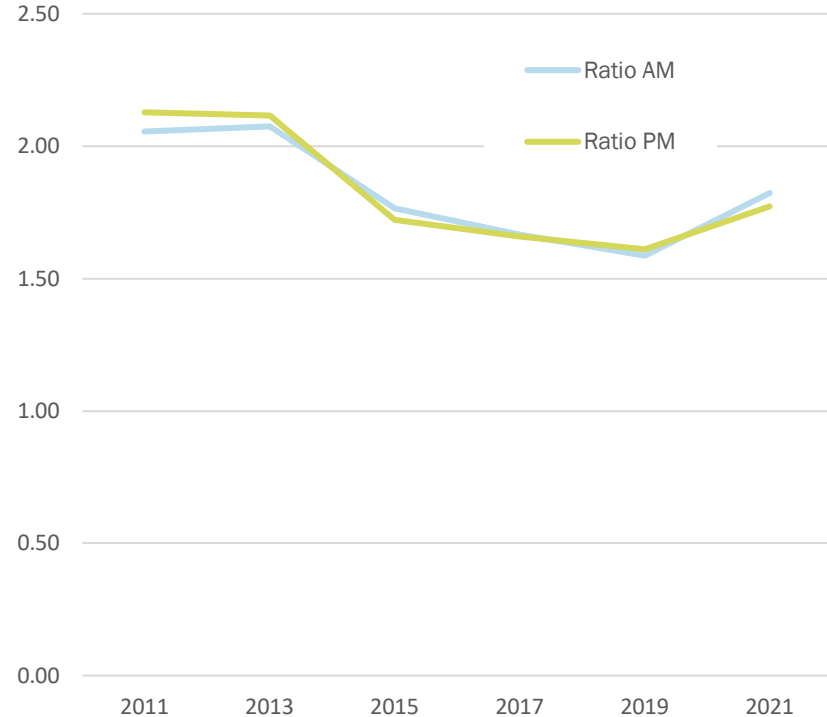


Auto-Transit (Bus) Speed Ratio



- Indicates how competitive transit is relative to auto
- A ratio of 2 implies that auto is twice as fast as transit

AUTO-TRANSIT SPEED RATIO



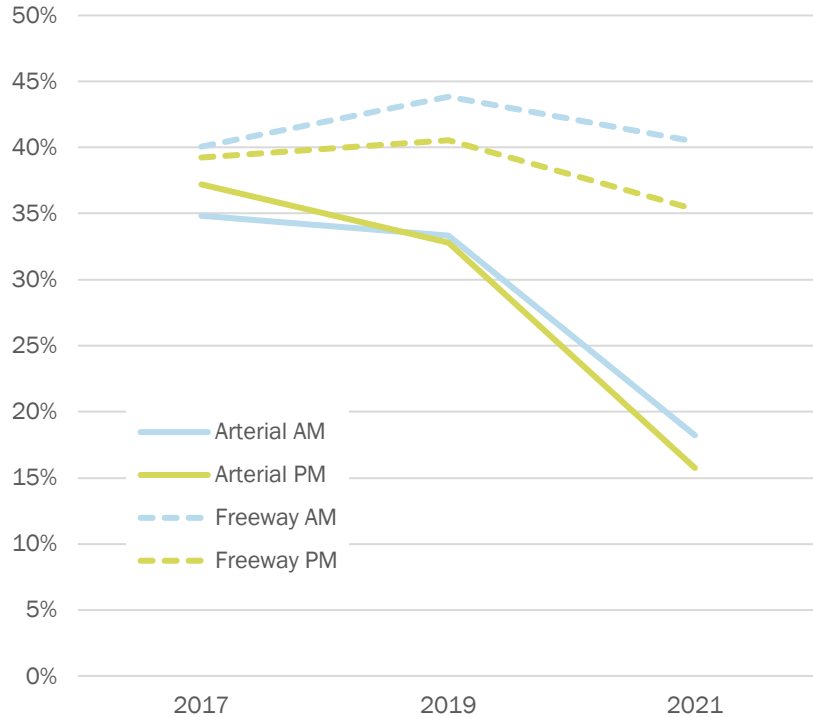
AM: 7AM – 9AM, PM: 4:30PM – 6:30PM

Reliability

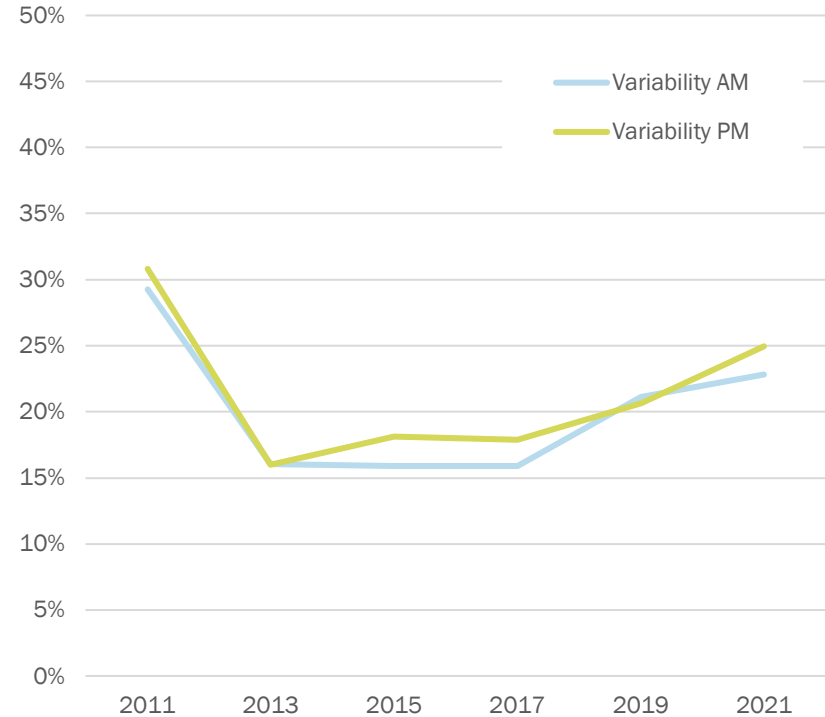


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AUTO BUFFER TIME INDEX (BTI)

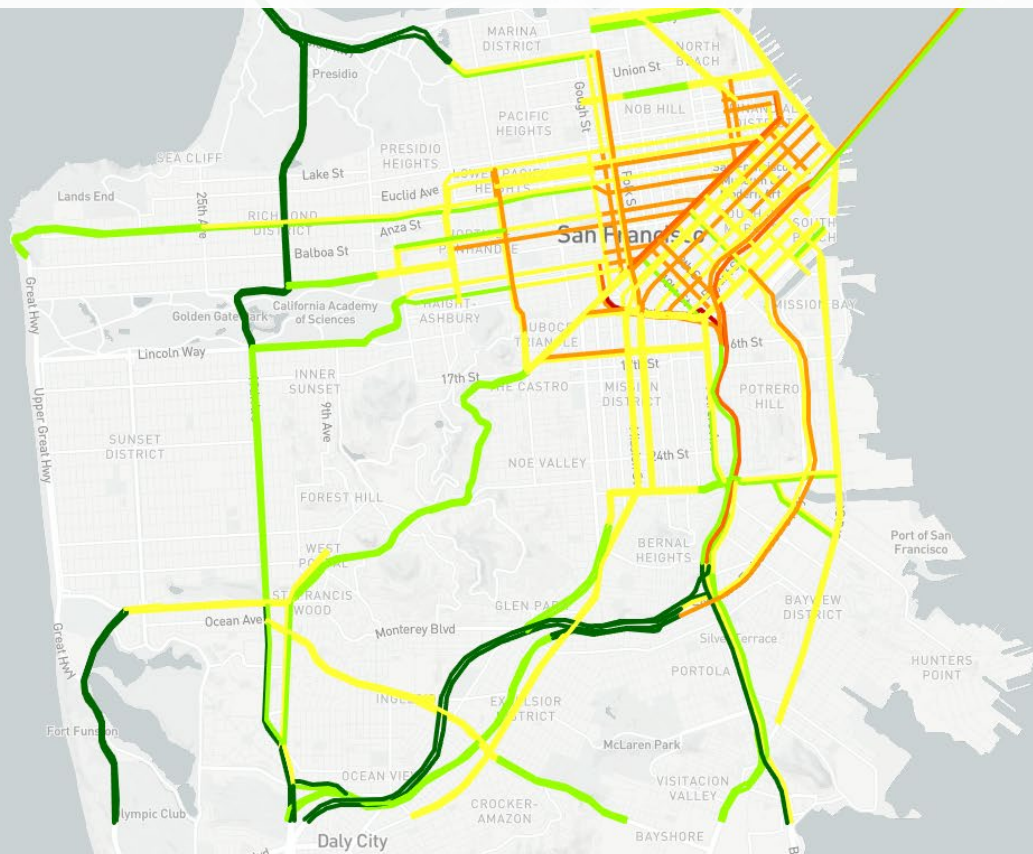


TRANSIT COEFFICIENT OF VARIATION



Long-Term Congestion Tracker

<https://congestion.sfcta.org/>



CONGESTION EXPLORER

What is this?

Learn More →

Auto Level-of-Service (LOS)

Auto Buffer Time Index

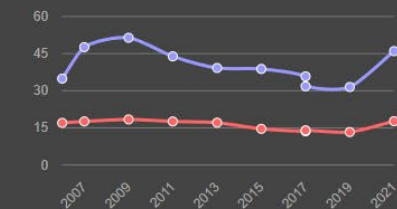
Transit Speed

Transit Reliability

Auto-Transit Speed Ratio

AUTO SPEED TREND (MPH):

All Segments Combined



CHOOSE YEAR:

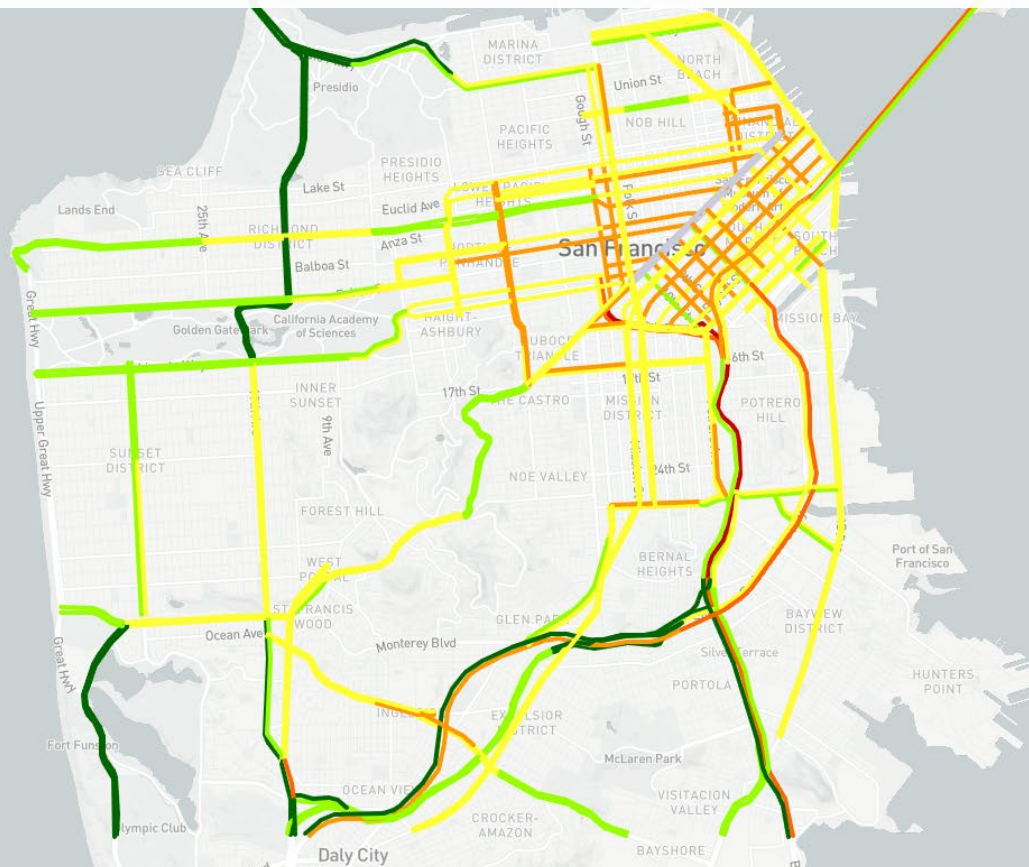


CHOOSE TIME PERIOD:



COVID-Era Congestion Tracker

<https://covid-congestion.sfcta.org/>



Level of Service

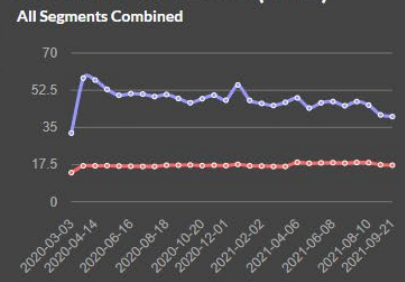
- A
- B
- C
- D
- E
- F

COVID-ERA CONGESTION TRACKER

[What is this?](#) [Learn More](#)

- Auto Level-of-Service (LOS)
- Speed Change Relative to Pre-COVID
- Vehicle Miles Traveled (VMT)
- VMT Change Relative to Pre-COVID

AUTO SPEED TREND (MPH):



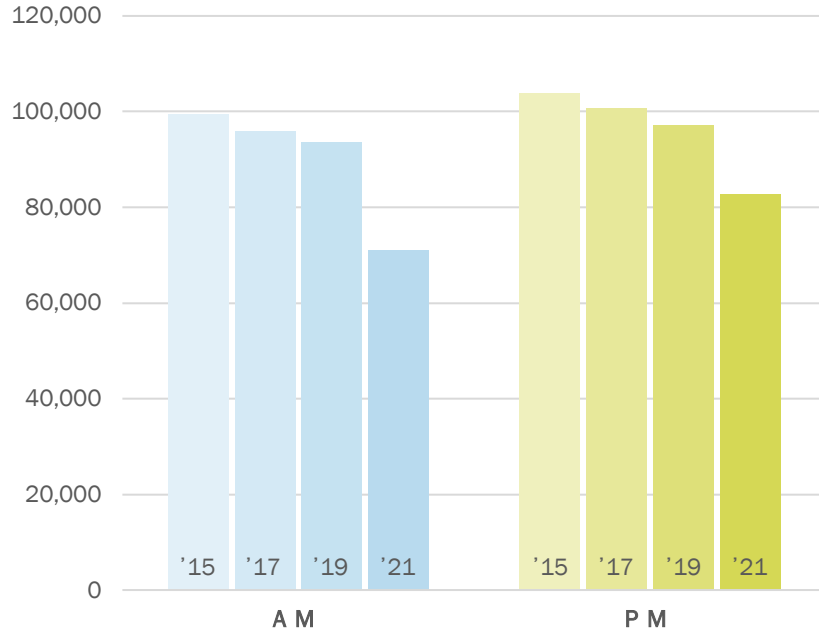
CHOOSE WEEK: 2021-09-10

CHOOSE TIME PERIOD: AM PM

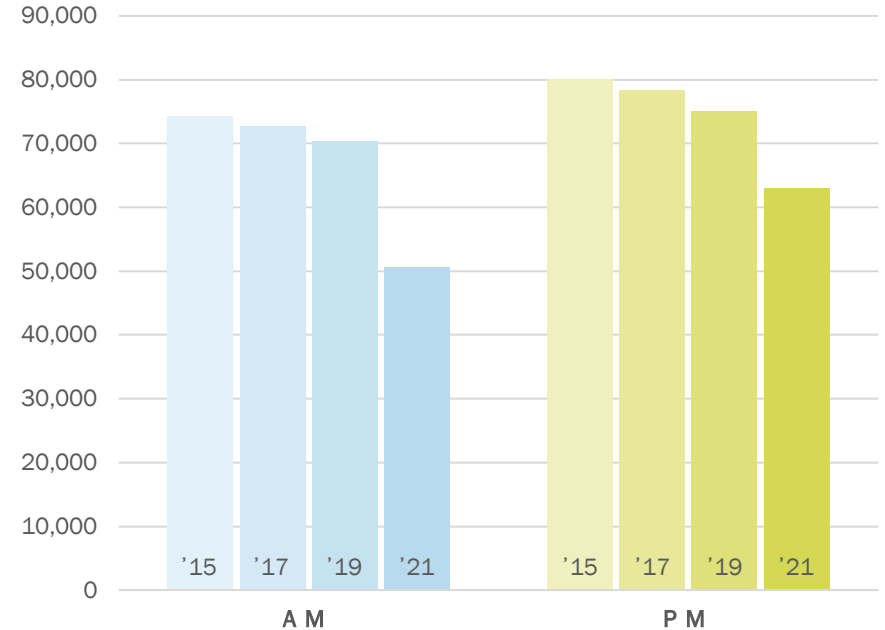


Vehicle Counts

ADT* (MID-BLOCK) COUNTS (37 LOCATIONS)



INTERSECTION COUNTS (14 LOCATIONS)



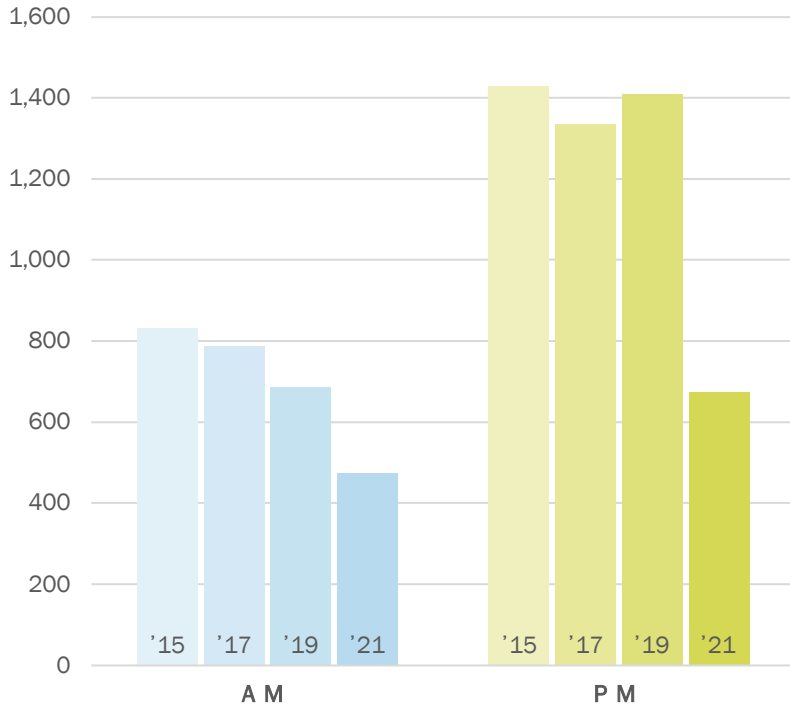
*ADT is Average Daily Traffic

Bike-Ped Counts (14 Intersections)

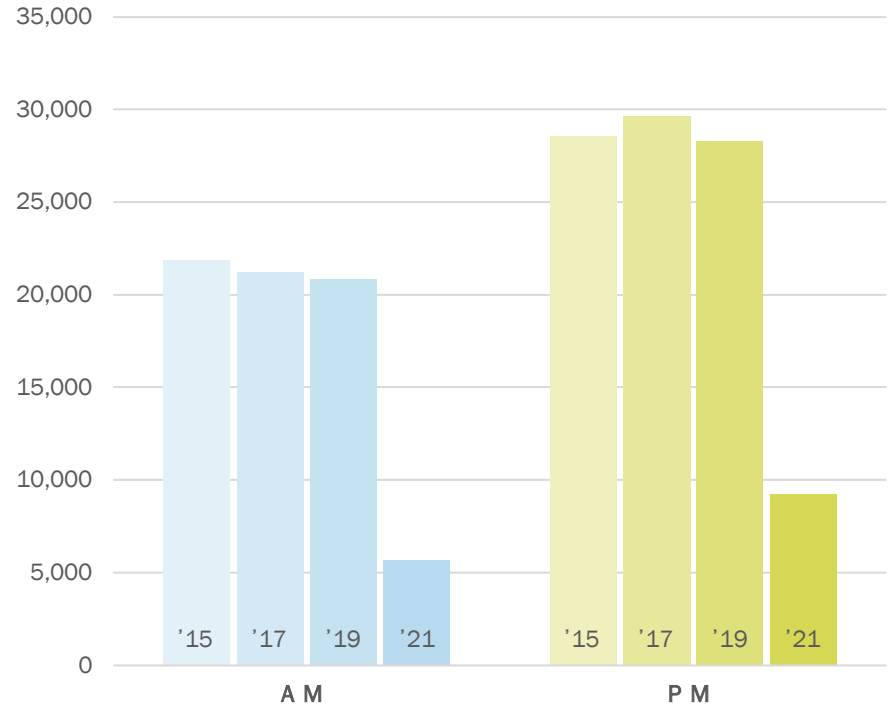


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BIKES



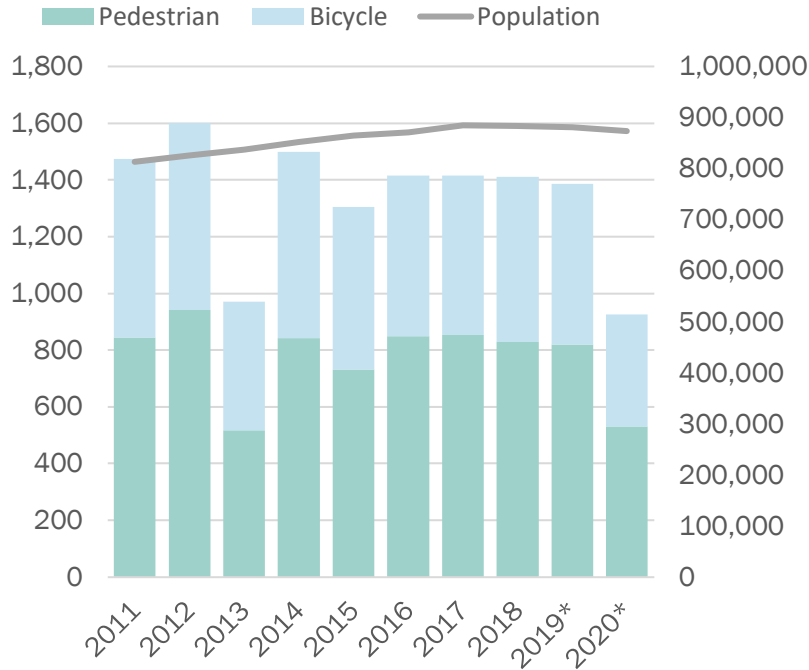
PEDESTRIANS



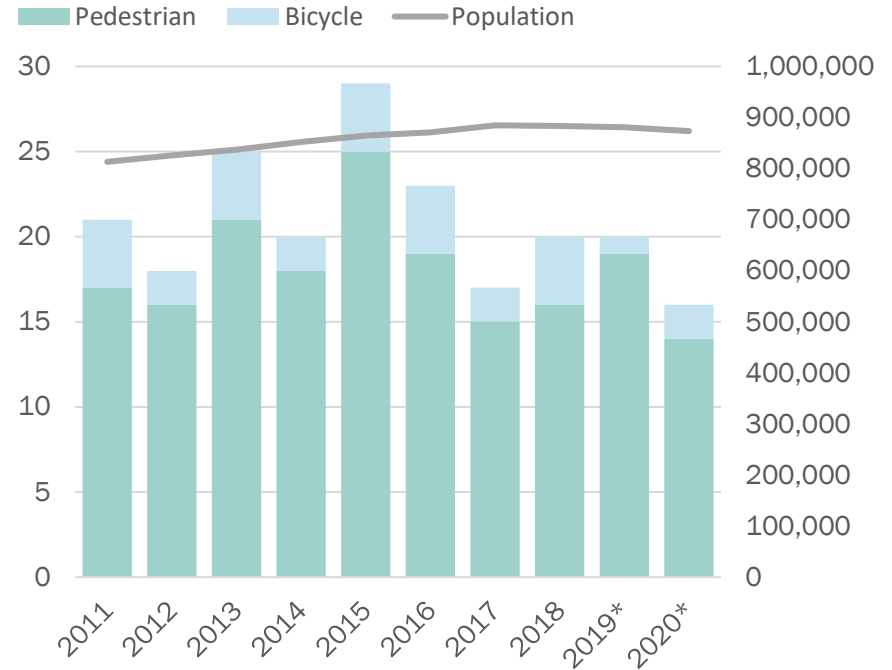
Collisions



INJURIES



FATALITIES



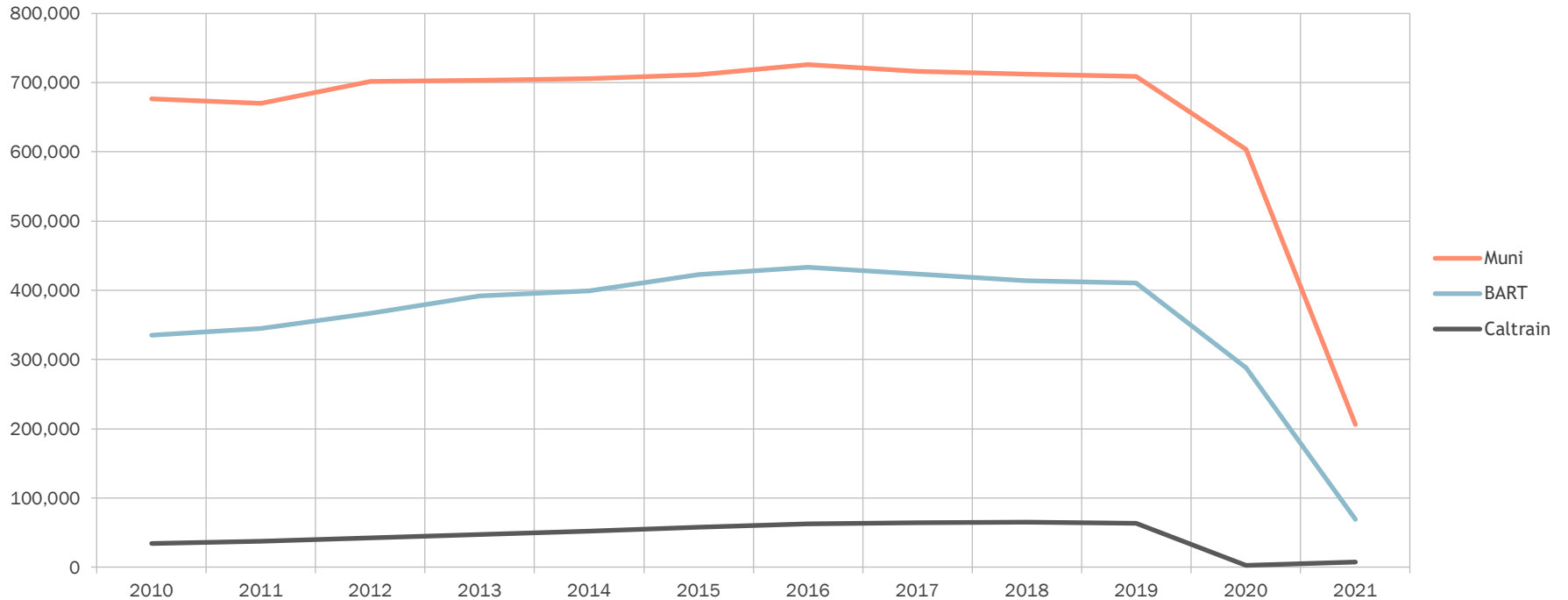
*Provisional SWITRS data (not final)

Transit Ridership



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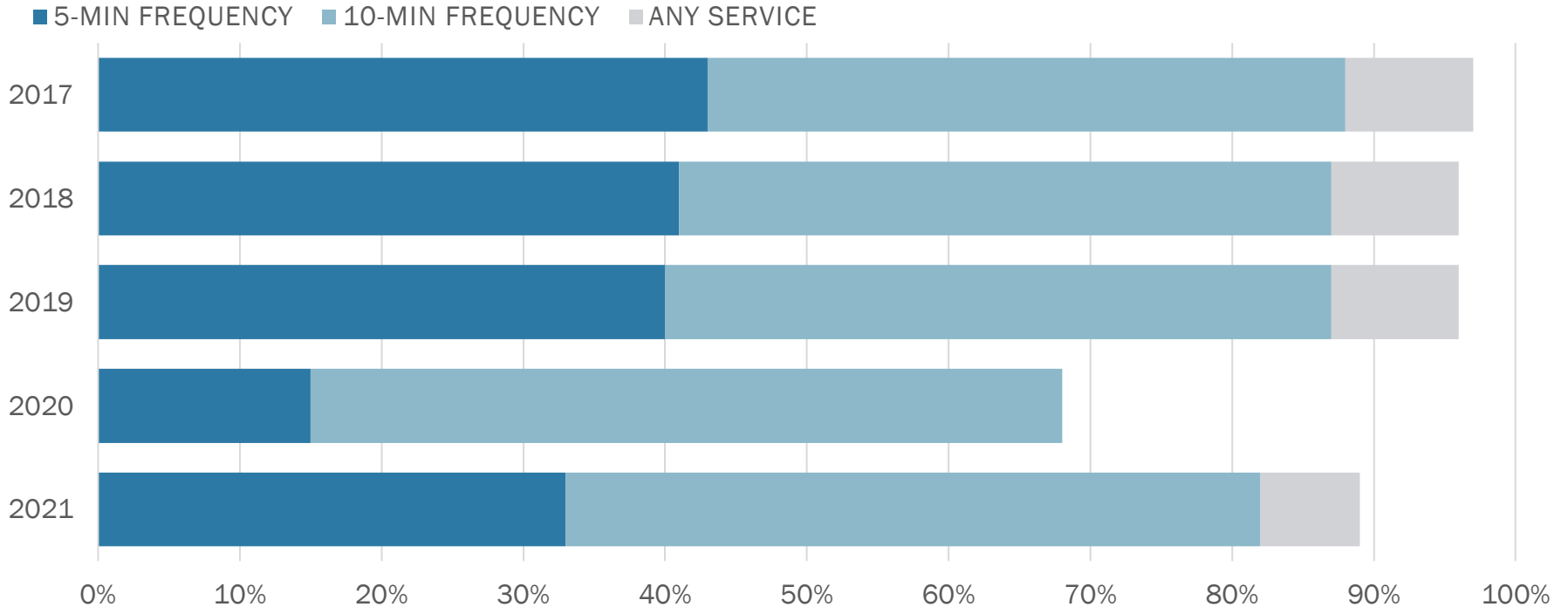
AVERAGE DAILY RIDERSHIP BETWEEN 2010 AND 2021



Transit Coverage



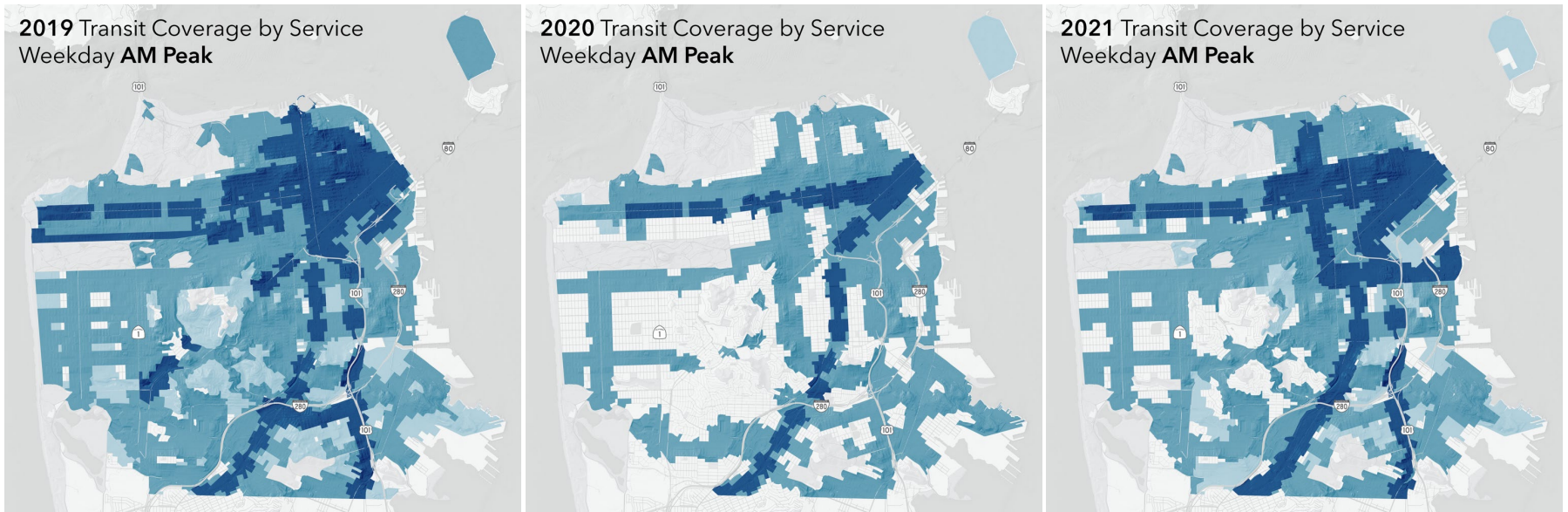
POPULATION COVERAGE BY SERVICE, WEEKDAY AM PEAK



Note: data collected April - May each year

AM Peak Transit Coverage by Service

■ 5-MIN FREQUENCY ■ 10-MIN FREQUENCY ■ ANY SERVICE



Source: Muni Google Transit Specification Feed (GTFS) April-May for each year

Note: For consistency of comparison with prior years, 2021 data does not reflect service restoration by Muni after May.

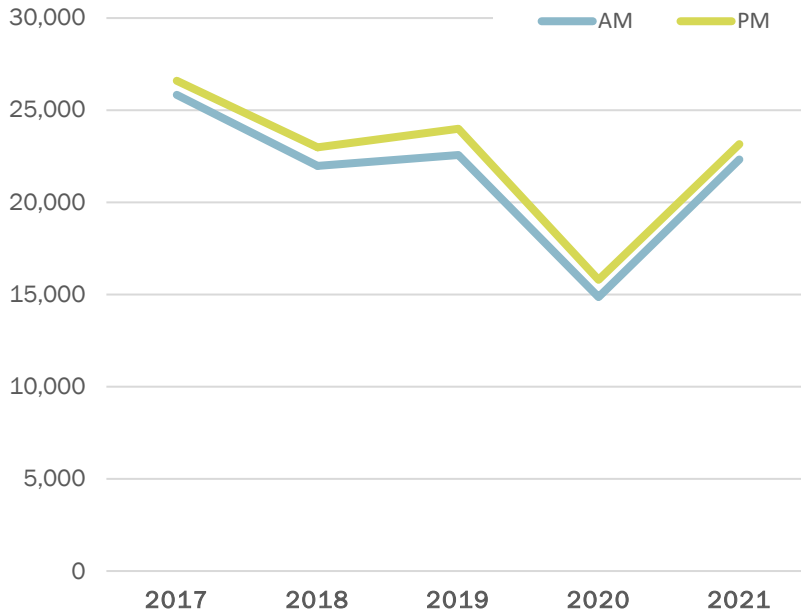
Highway Volumes



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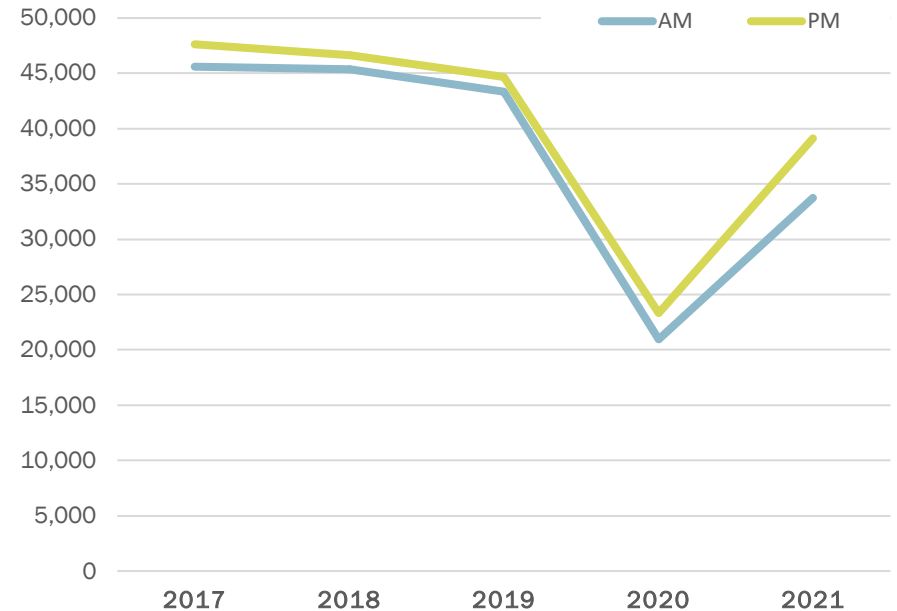
BAY BRIDGE

Average Bay Bridge Volumes, Weekday Peak Period



US-101 & I-280 TOTAL

Total Average US-101 and I-280 Volumes at San Mateo Countyline, Weekday Peak Period



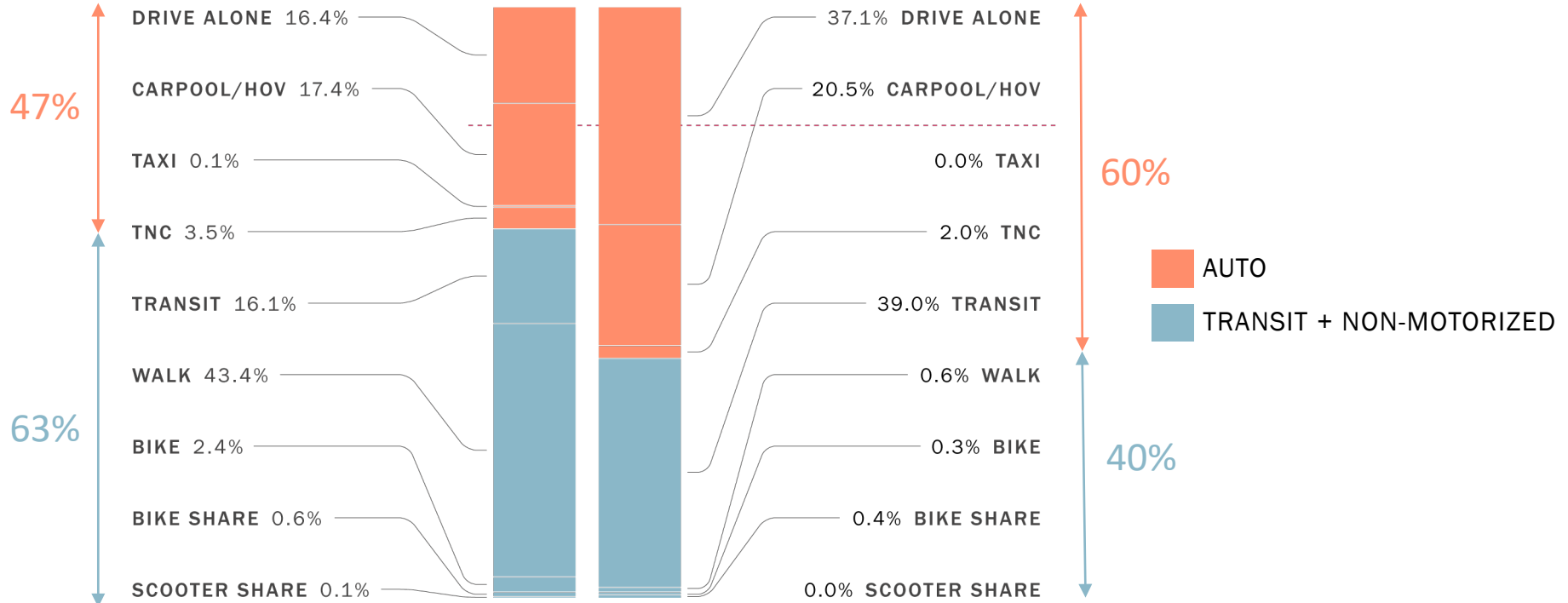
Source: Caltrans Performance Measurement System (PeMS)

Mode Share (Pre-COVID)



INTRA-SF PERSON TRIPS

TO/FROM SF PERSON TRIPS



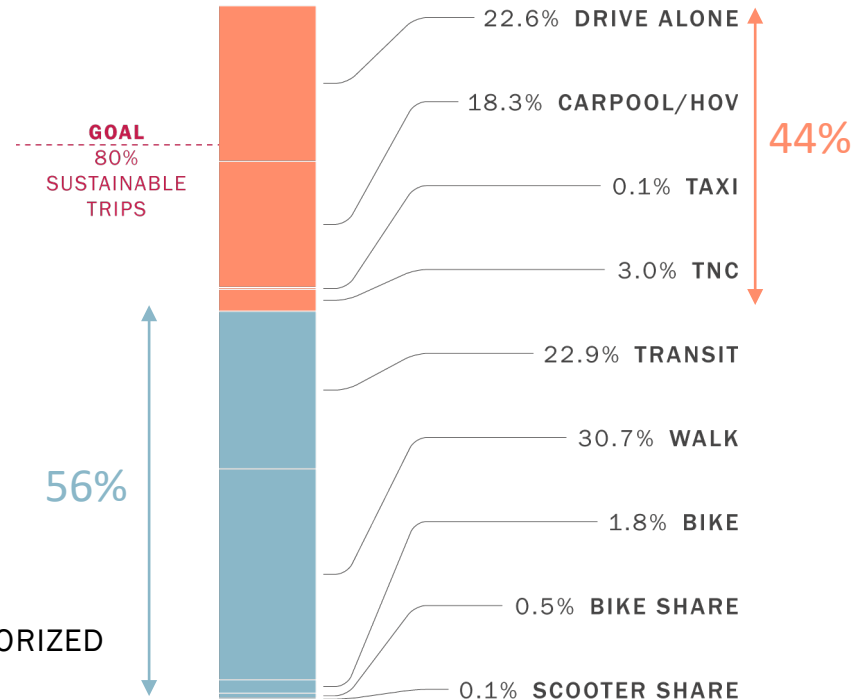
Mode Share (Pre-COVID)



- Implement a Continuous Travel Diary Survey Program
- Plan to field the next survey in 2022



INTRA/TO/FROM SF PERSON TRIPS



SF Congestion Management Strategy



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- COVID led to unprecedented changes to peoples' livelihoods and the economy overall
- Impact of changes on peoples' travel captured in update to the CMP
- Need to continually monitor traffic and transit conditions and performance, so that we can better understand and respond to evolving conditions
- **Work program highlights**
 - Continue data collection on roadway and transit performance as well as travel behavior
 - Present data publicly through interactive websites
 - Coordinate with other agencies on major planning projects such as ConnectSF, SFTP, and Link21
 - Continue maintenance of regional travel demand model and GIS database

Thank you

Questions?



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