

# 2021 San Francisco Congestion Management Program



**San Francisco  
County Transportation  
Authority**

Agenda Item 8

December 7, 2021

# CMP Purpose and Requirements



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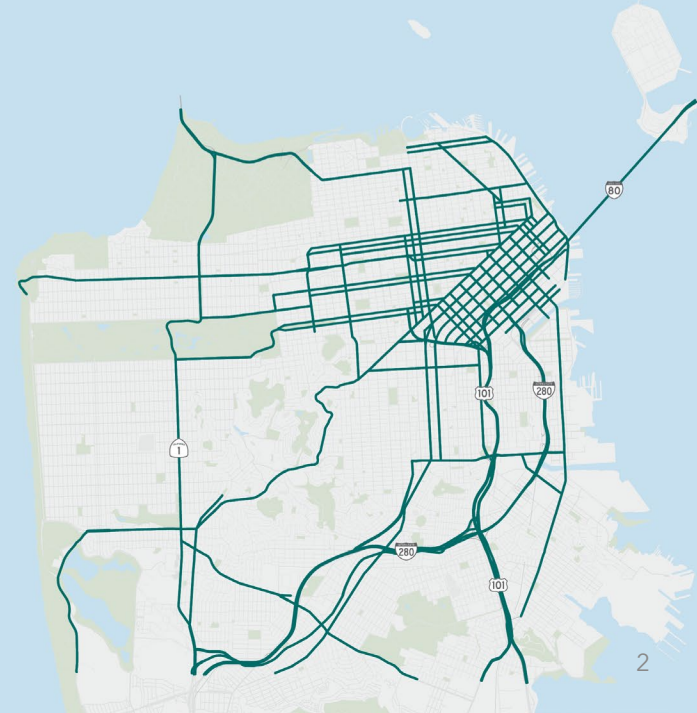
## Purpose

- 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



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# Performance Monitoring Outline

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

# Key Findings - 2021 vs. 2019



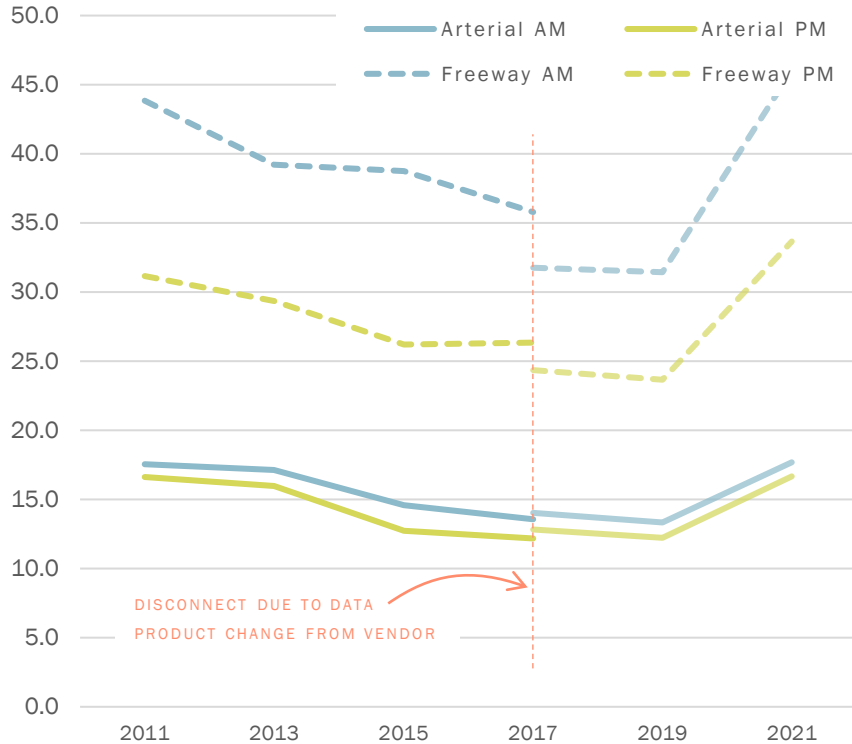
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- Auto speeds increased 30% to 45%
- Transit speeds increased 15% to 25%
- Auto travel time reliability increased 5% to 15%
- Bicycle and pedestrian collisions decreased 35%
- Bicycle and pedestrian volumes decreased 70%
- Vehicle volumes (local streets) decreased 20%
- Transit travel time reliability increased 2% to 4%
- Transit ridership decreased 65% to 85%

# Speed

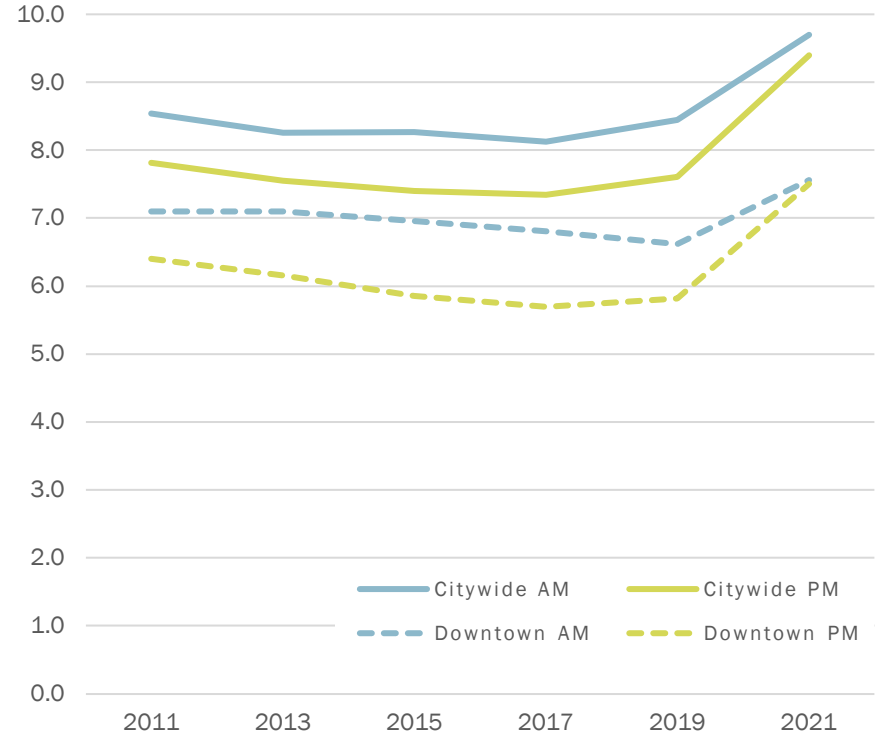


## Auto Speeds



AM: 7AM – 9AM, PM: 4:30PM – 6:30PM

## Transit (Bus) Speeds



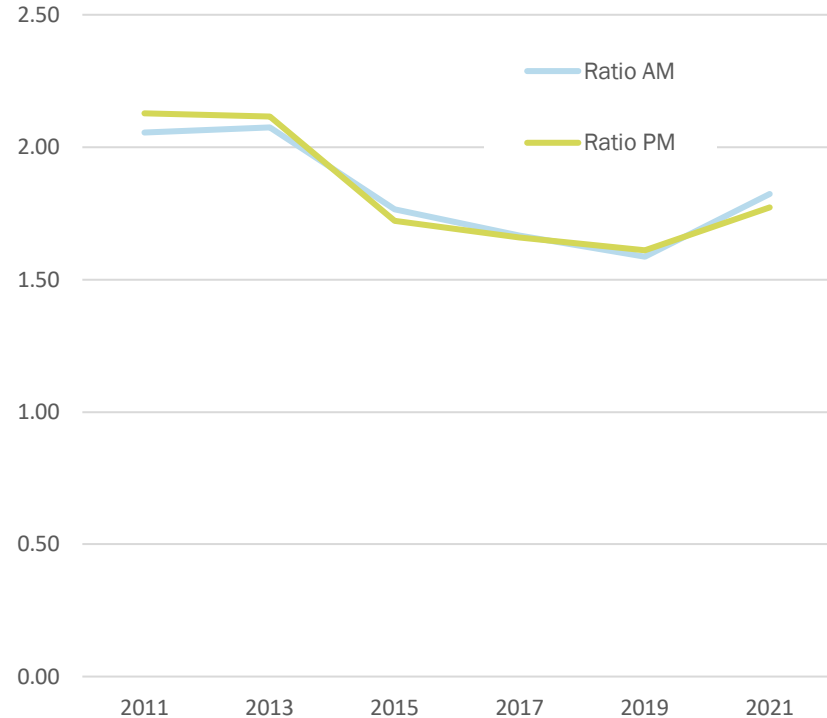
# Auto-Transit (Bus) Speed Ratio



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

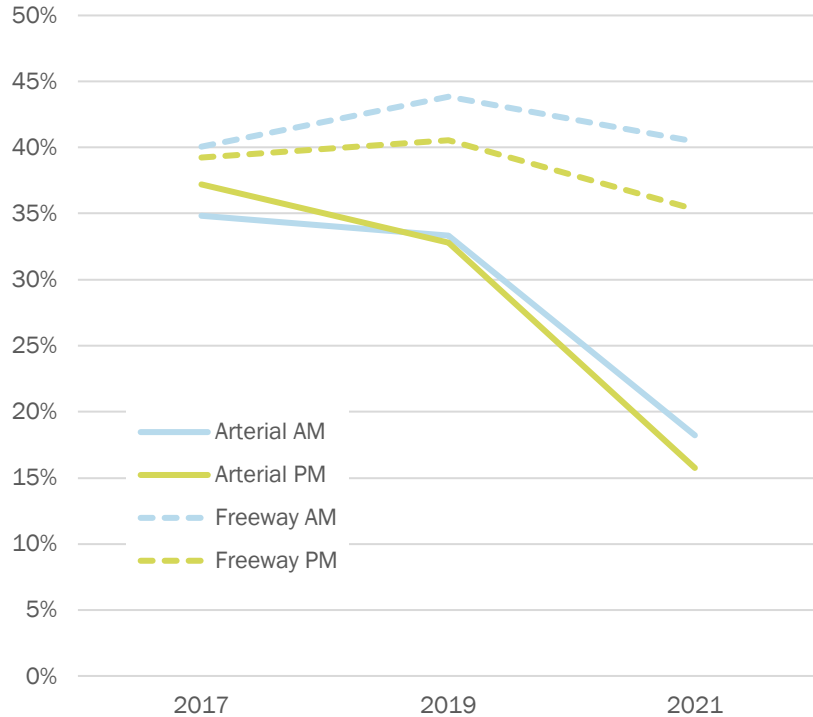
## AUTO-TRANSIT SPEED RATIO



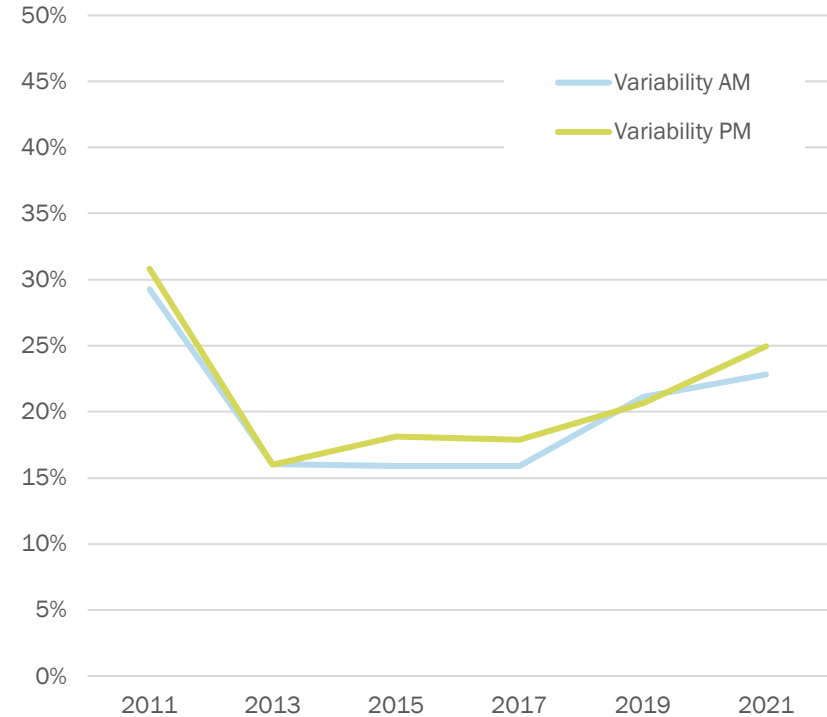
AM: 7AM – 9AM, PM: 4:30PM – 6:30PM

# Reliability

## AUTO BUFFER TIME INDEX (BTI)

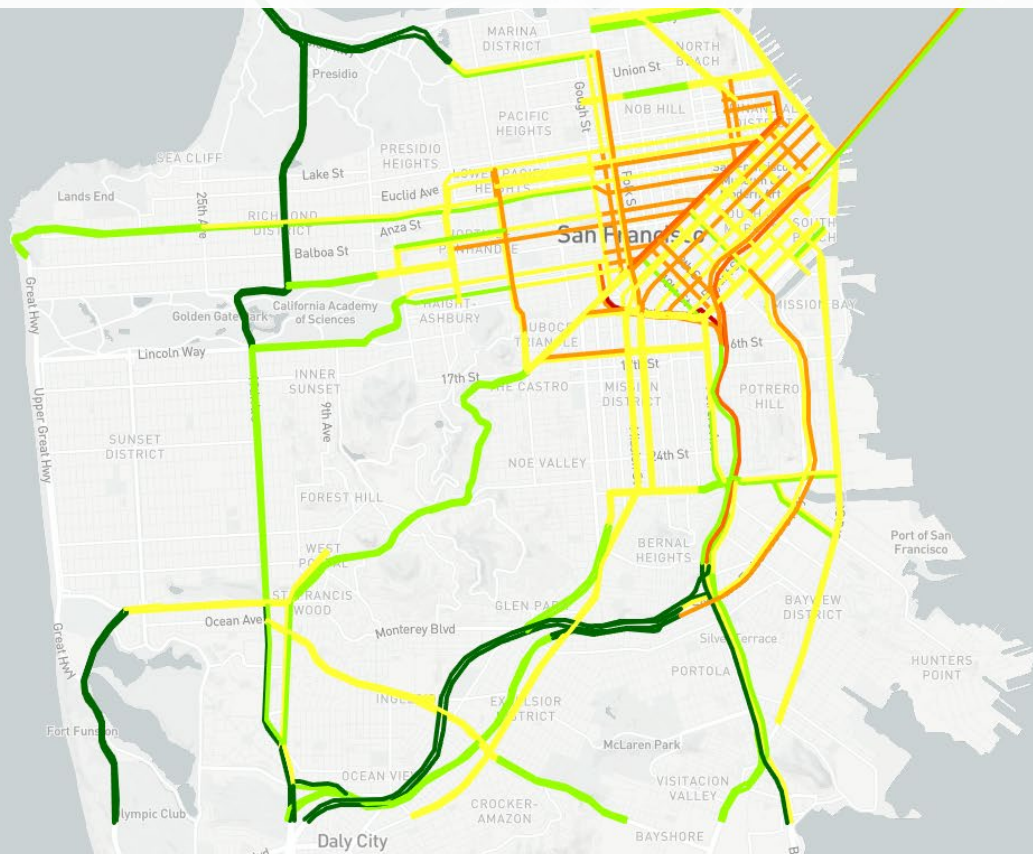


## TRANSIT COEFFICIENT OF VARIATION



# Long-Term Congestion Tracker

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



## CONGESTION EXPLORER

What is this?

Learn More →

Auto Level-of-Service (LOS)

Auto Buffer Time Index

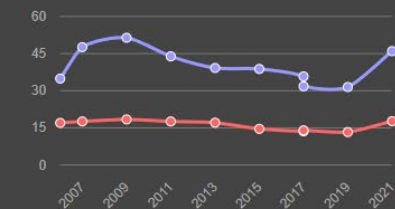
Transit Speed

Transit Reliability

Auto-Transit Speed Ratio

## AUTO SPEED TREND (MPH):

All Segments Combined



CHOOSE YEAR:



CHOOSE TIME PERIOD:

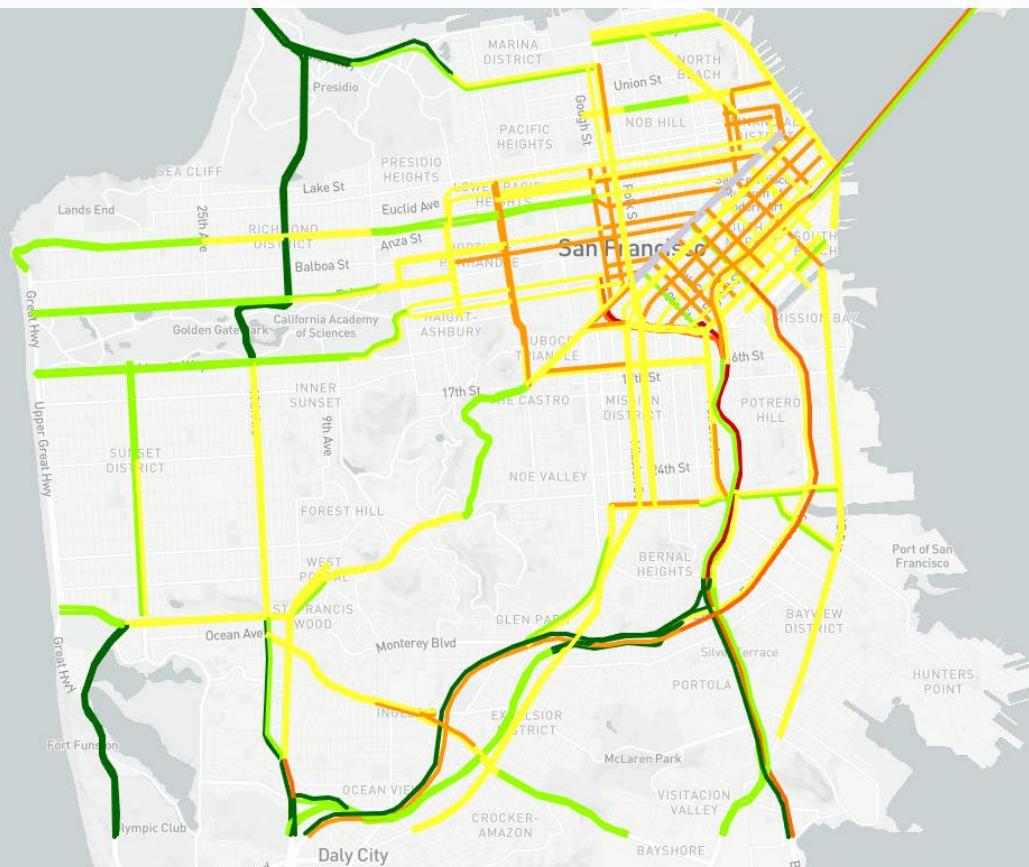
AM

PM



# COVID-Era Congestion Tracker

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

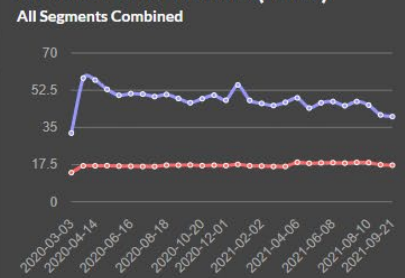


## COVID-ERA CONGESTION TRACKER

[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: 2021-09-21

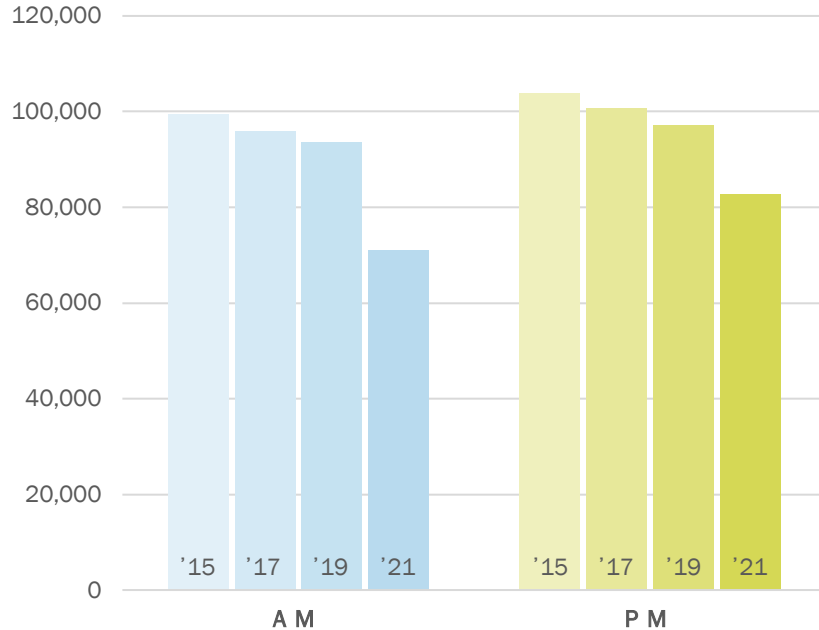
CHOOSE TIME PERIOD: AM PM

# Vehicle Counts

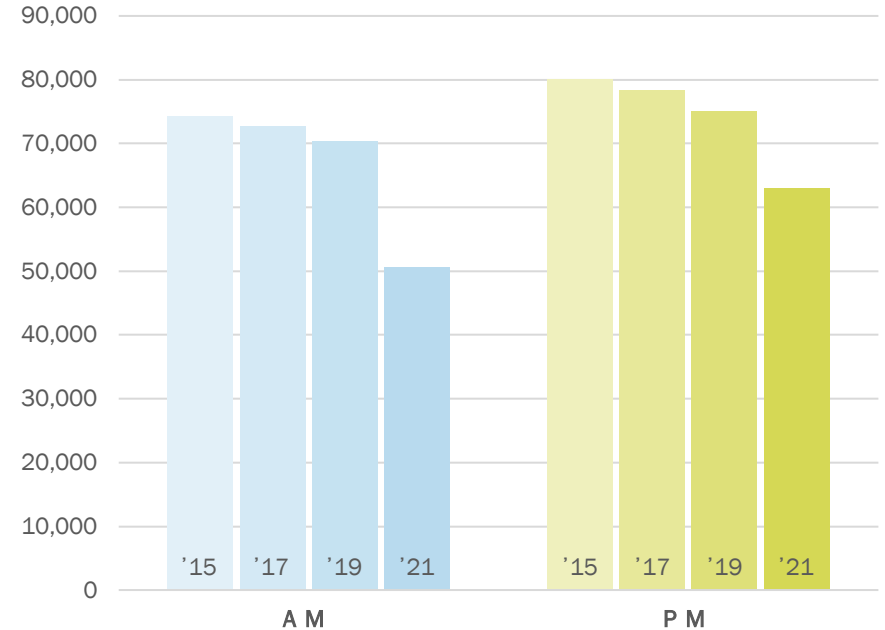


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## ADT\* (MID-BLOCK) COUNTS (37 LOCATIONS)



## INTERSECTION COUNTS (14 LOCATIONS)



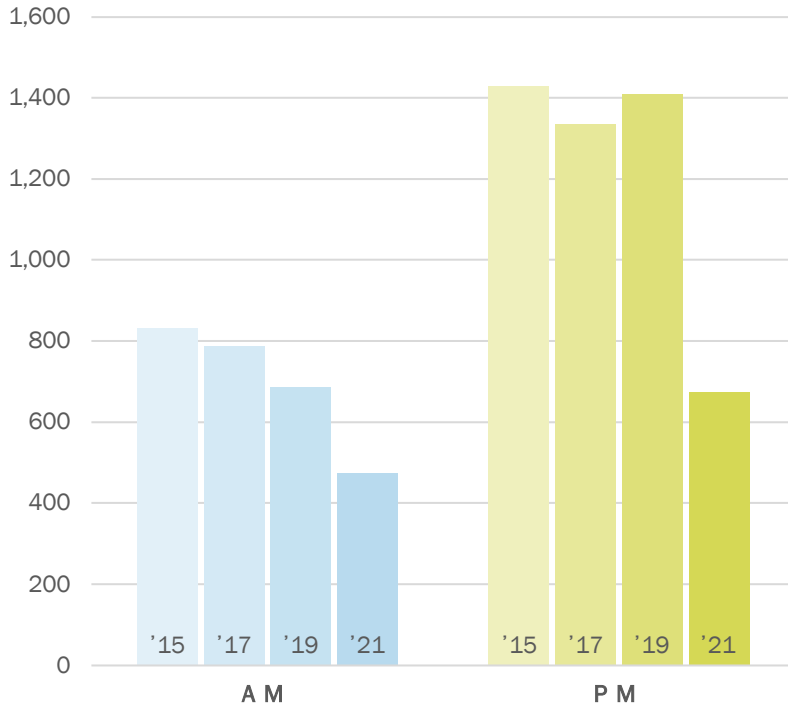
\*ADT is Average Daily Traffic

# Bike-Ped Counts (14 Intersections)

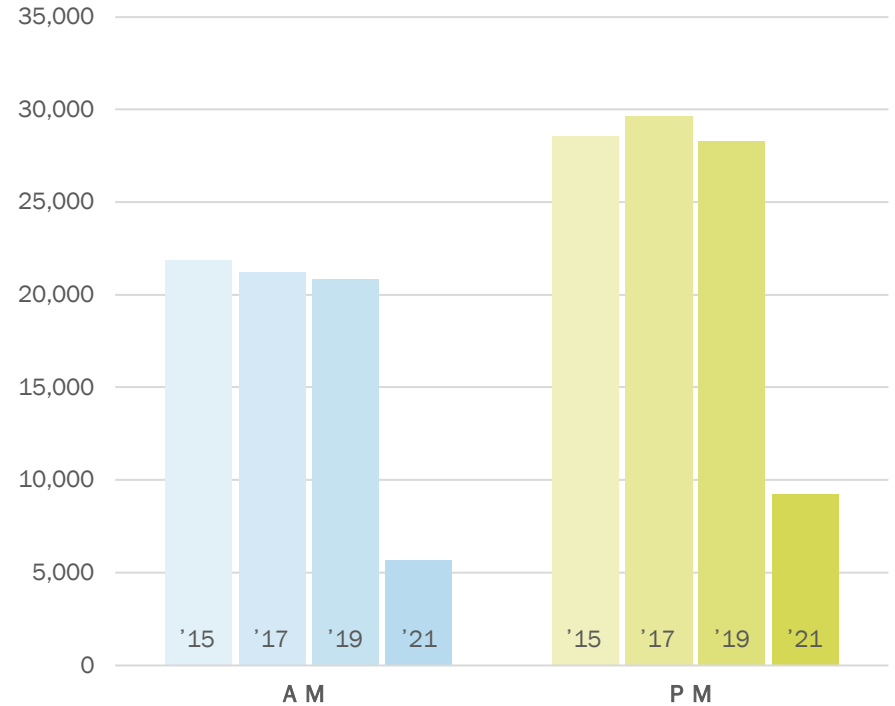


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## BIKES



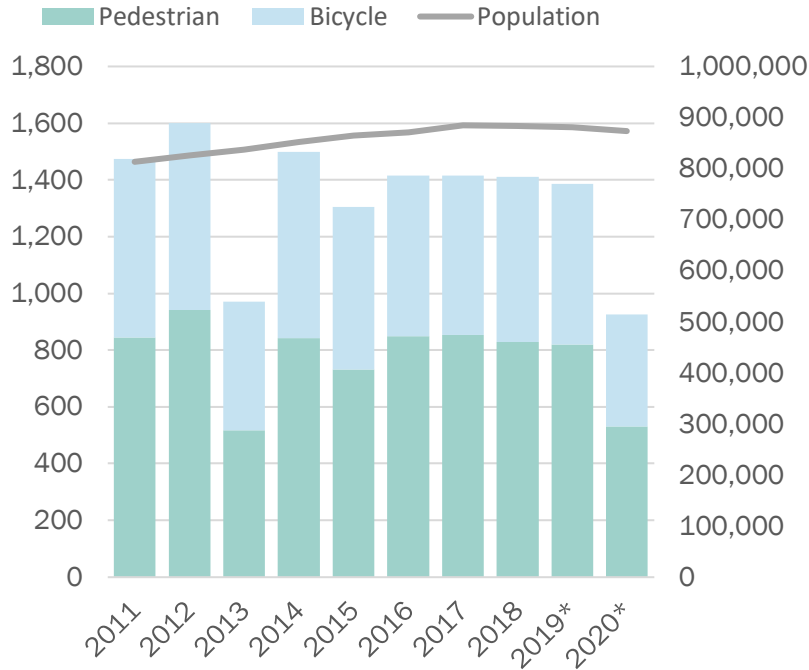
## PEDESTRIANS



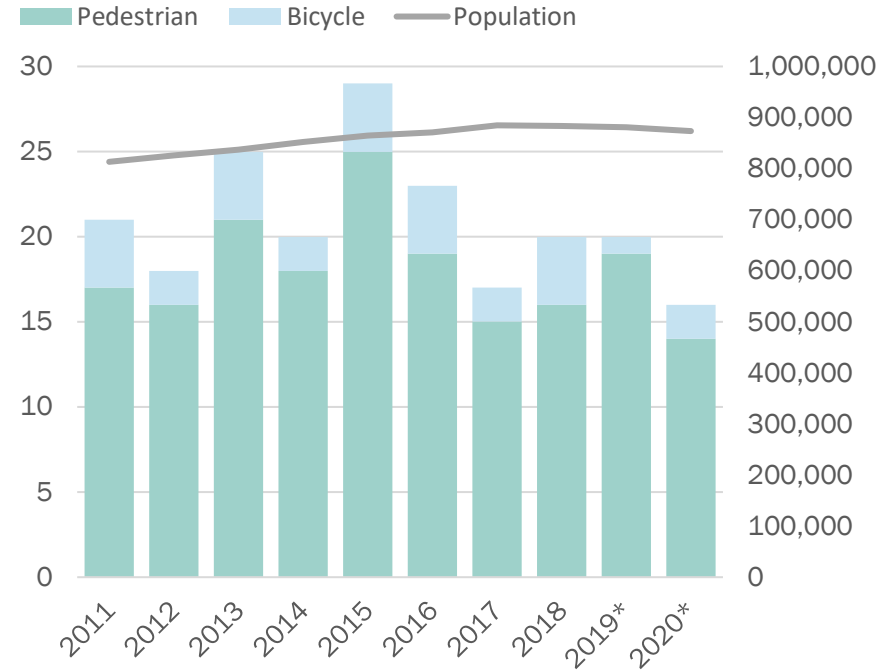
# Collisions



## INJURIES



## FATALITIES



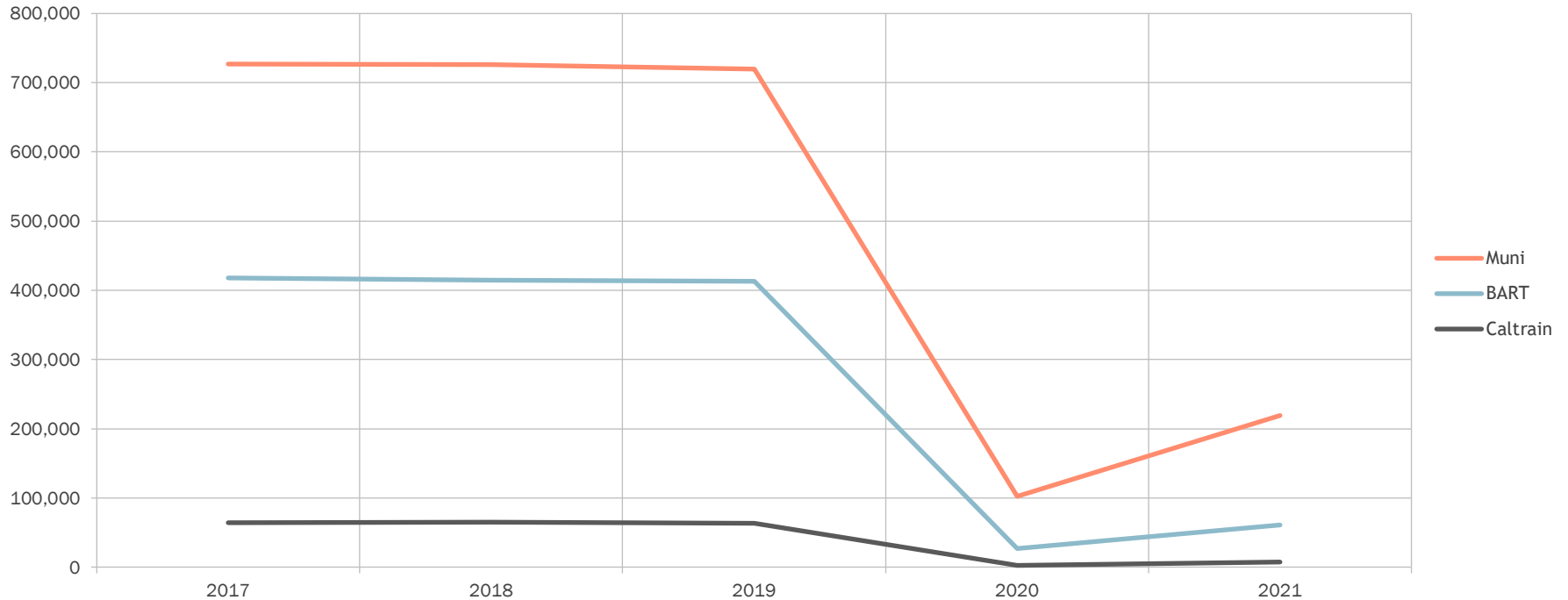
\*Provisional SWITRS data (not final)

# Transit Ridership



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## AVERAGE DAILY RIDERSHIP BETWEEN 2017 AND 2021

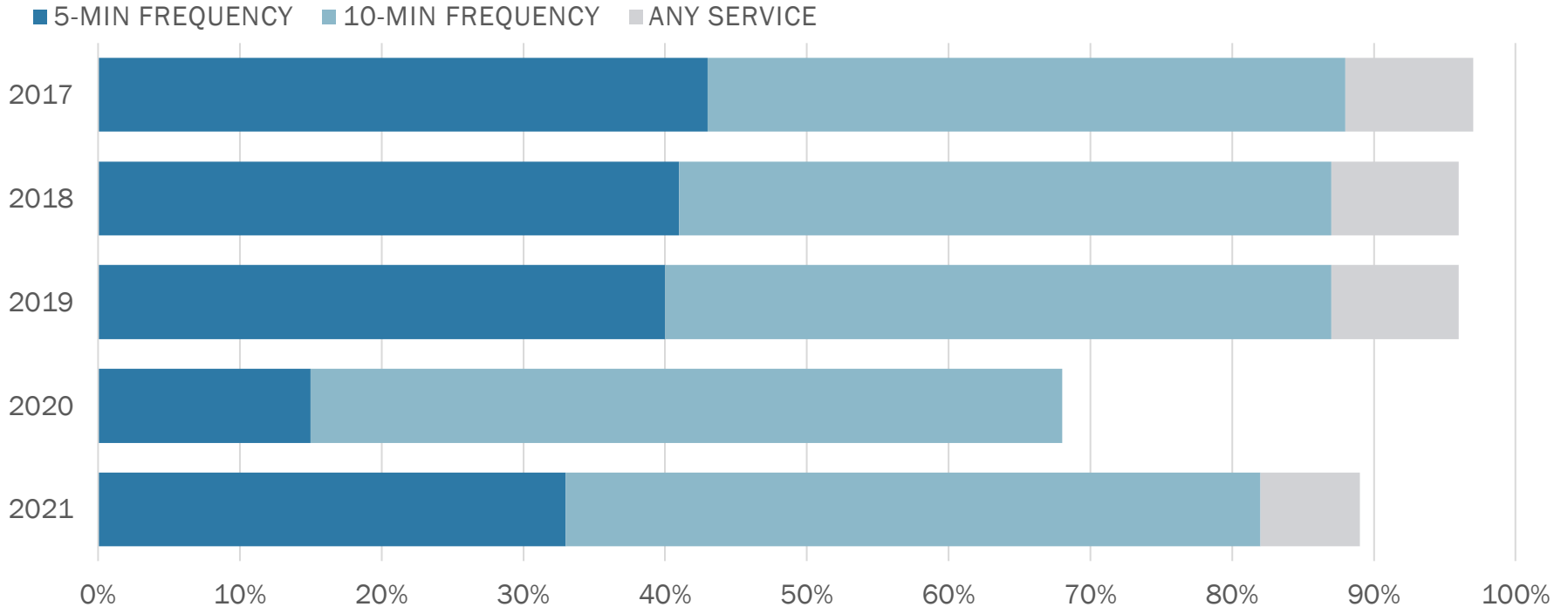


Note: data collected April - May each year except for Caltrain

# 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)

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

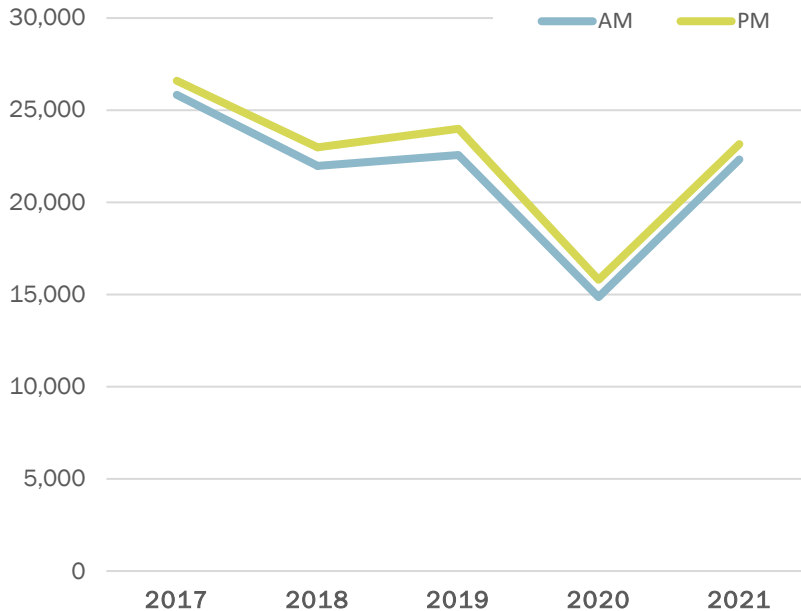
# Highway Volumes



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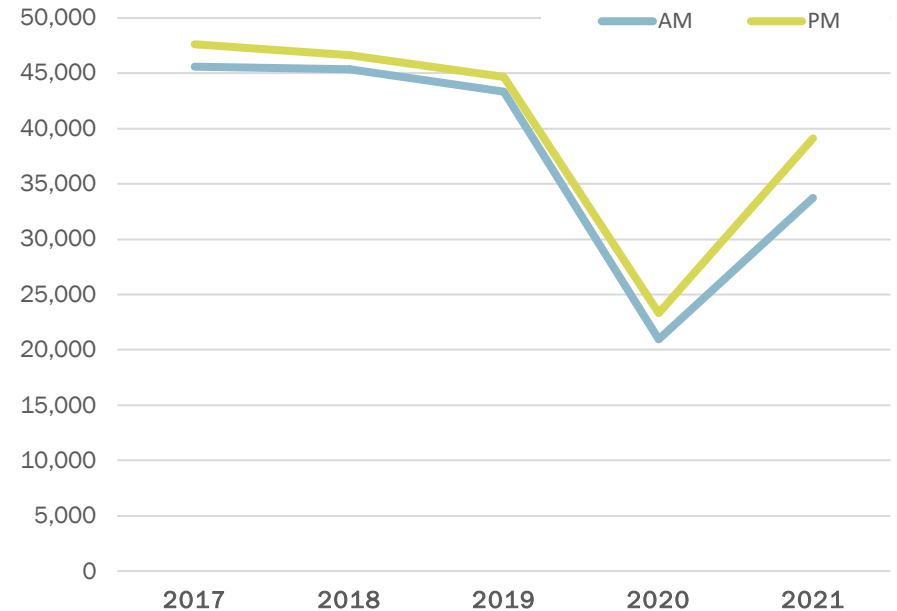
## BAY BRIDGE

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

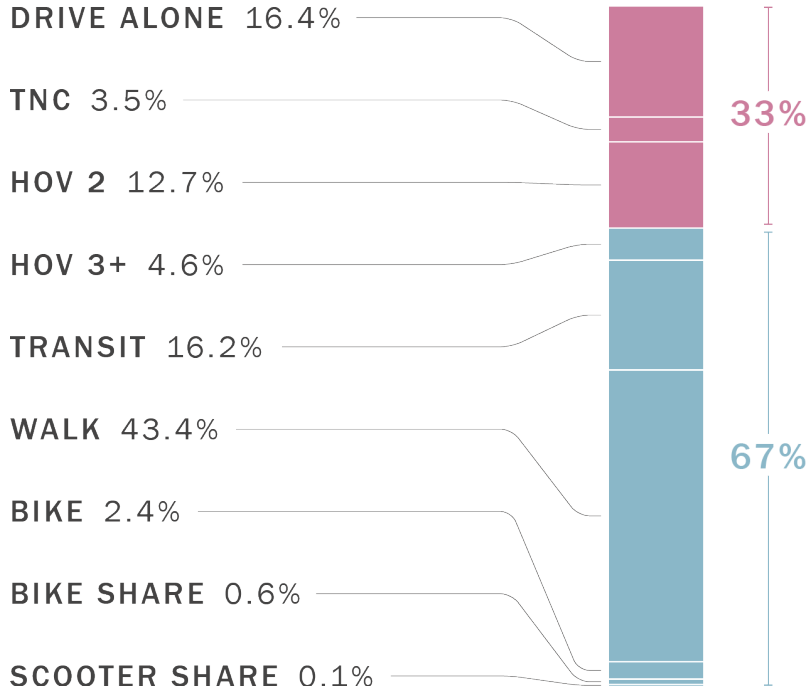


Source: Caltrans Performance Measurement System (PeMS)

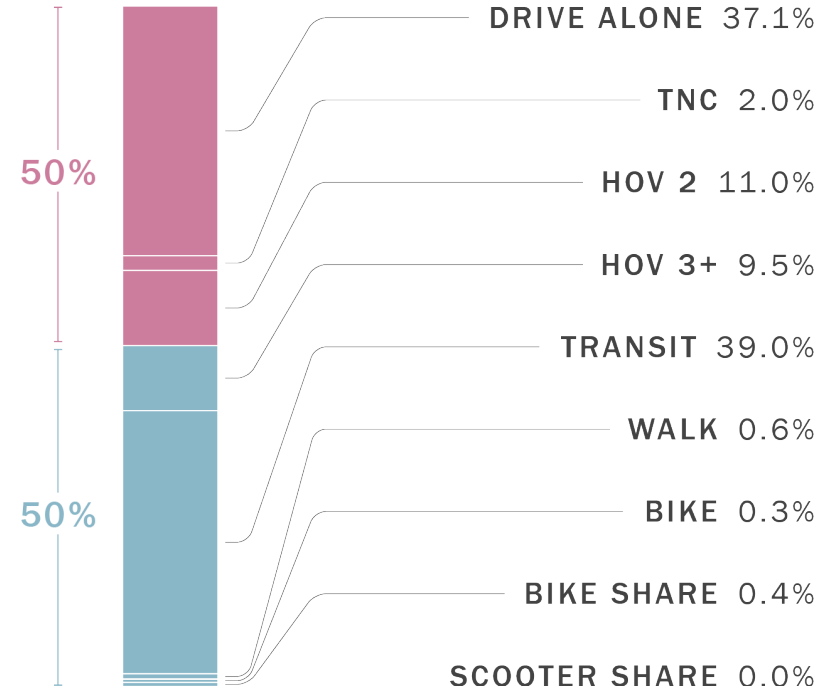


# Mode Share (Pre-COVID) by Market

## LOCAL PERSON TRIPS



## REGIONAL PERSON TRIPS



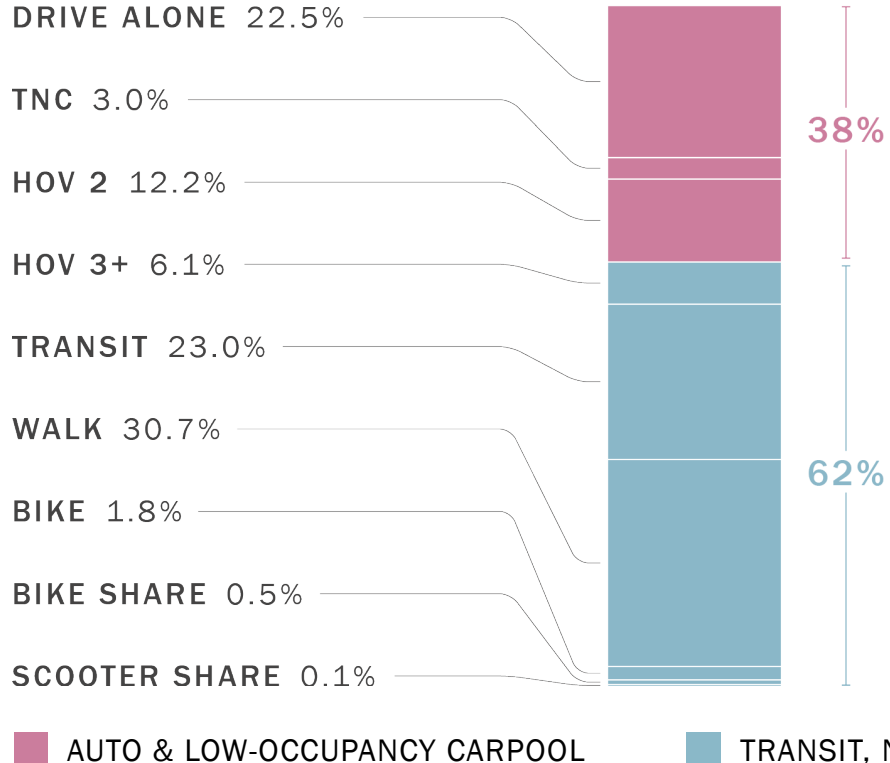
 AUTO & LOW-OCCUPANCY CARPOOL

 TRANSIT, NON-MOTORIZED & HIGH-OCCUPANCY CARPOOL

# Mode Share (Pre-COVID)



## ALL PERSON TRIPS



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

# 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

<http://sfcta.org/cmp>



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