

# Jim Hubbell

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StreetLight Data

# Tracking Pasadena Traffic Trends During COVID-19

## Challenge:

During COVID-19, the **City of Pasadena** wanted to be able to manage the traffic flow and traffic speeds, so they implemented various traffic signal timing techniques to reduce the speed on the corridors with outdoor dining and other arterials. They wanted to be able to efficiently monitor traffic volumes and speeds city-wide and measure the impact of their traffic-calming measures. They were able to access these insights remotely, without setting up traffic counters.

## StreetLight Solution and Results:

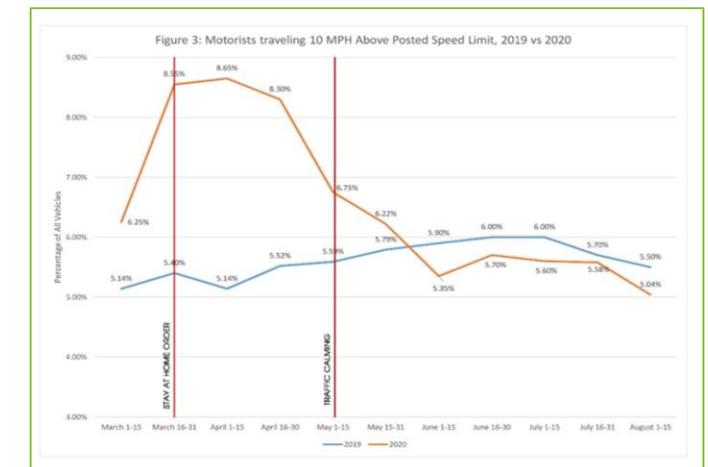
The city used the Segment Analysis feature in StreetLight InSight® to quantify volume reduction and increased speeds.

Key takeaways for traffic volume:

- 60% decrease in traffic volume after stay-at-home order
- Traffic volume steadily increased since the stay-at-home order drop
- As of August 2020, volume remains about 20% below 2019 levels

Key takeaways for vehicles traveling 10+ mph over the speed limit:

- Motorists speeding increased by 40% after stay-at-home order
- Motorists speeding decreased by 25% after traffic calming
- Motorists speeding is slightly below 2019 levels



View the full video here:  
<https://youtu.be/6VpjoFwN-hw>

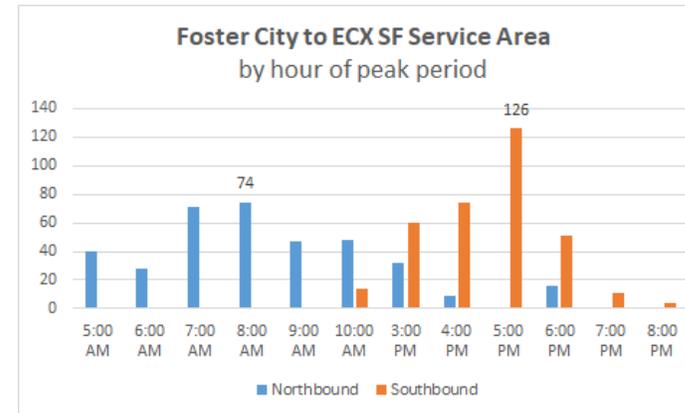
# Optimizing Bus Schedules to Best Serve Changing Commuting Patterns

## Challenge:

Bay Area public transit agency SamTrans needed to respond to shifts in commuting patterns as a result of COVID. They sought to find out why ridership on a previously popular express bus route to San Francisco had dropped disproportionately versus other modes.

## StreetLight Solution:

To investigate, SamTrans used Streetlight's Origin-Destination (O-D) Metrics to understand commuter behavior, including shorter stays downtown and analyze vehicle demand to see how the pandemic affected commutes overall. The Metrics shed light on shifting travel patterns and helped fine-tune the bus schedule, immediately boosting ridership by 30%.



Morning Peaks occurred between 7-9 a.m. Afternoon Peaks occurred between 4-6 p.m.



StreetLight InSight® visualization demonstrating the concentration of trips from SF Census Block Groups in the Bay area to and from Foster City.



“Due to COVID-19, we had to move and adapt quickly to rapidly changing conditions. With StreetLight, we can keep track of travel behavior trends in a way that hasn't been possible before. Accessing accurate and timely trip origins and destinations in our service area allows us to quickly plan better service.”  
- JONATHAN STEKETEE  
Manager of Operations Planning at SamTrans

# We answer the 5 critical EV questions that provide a comprehensive view of total vehicular demand today

## UNDERSTAND TOTAL DRIVING BEHAVIOR

## EV DRIVING BEHAVIOR

1

What is the existing traffic demand?

Get **traffic volumes** by day part to highlight the most optimal sites for EV chargers.

2

What are the demographics of existing drivers at these sites?

View aggregate **demographics** including income, race, and trip purpose to capture the profile of current drivers at sites.

3

Where are vehicles coming from and going?

Identify **origin-destination** travel patterns and **top routes** of vehicles to specific sites in order to determine where the traffic demand is.

4

How long are vehicles staying at certain sites?

Access vehicle **dwel time** with custom trip distances to determine how long they are stopping at potential charger locations.

5

How much EV driving activity is happening in your region?

Analyze the **relative activity of electric vehicle trips** to compare to the travel patterns of plug-in hybrid and gas-powered trips.

# Need to understand EV driving behavior? StreetLight's EV mode is here

Some key questions that we can help answer:

- 1. How much relative EV driving activity is happening in your region?
- 2. Where are common trip starts and trip ends?
- 3. Are EV trip patterns similar or different than plug-in hybrid and gas-powered trip patterns?

