

# How the Pandemic has Reshaped How We Travel

## Scenario Analysis for Planning



**San Francisco  
County Transportation  
Authority**

**SPUR Digital Discourse**

**November 17, 2021**

# Outline



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1. Planning & Forecasting
2. Data & Tools
3. Scenario Analysis



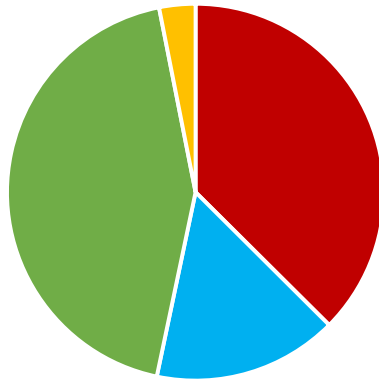


- What are **recent trends** and **present conditions**?
- What are our **goals for the future**?
- What might the future look like given **future trends, policy actions, and investments**?

**Forecasting helps provide decision-makers and the public with information needed to make equitable, environmentally sound, cost-effective policy and investment choices**

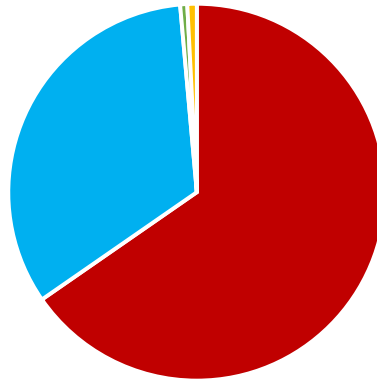
# San Francisco Travel is Multimodal

Intra-SF Mode Shares



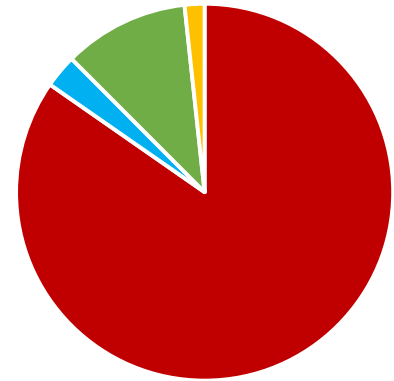
■ Drive ■ Transit ■ Walk ■ Bike

To / From SF Mode Shares



■ Drive ■ Transit ■ Walk ■ Bike

Non-SF Mode Shares



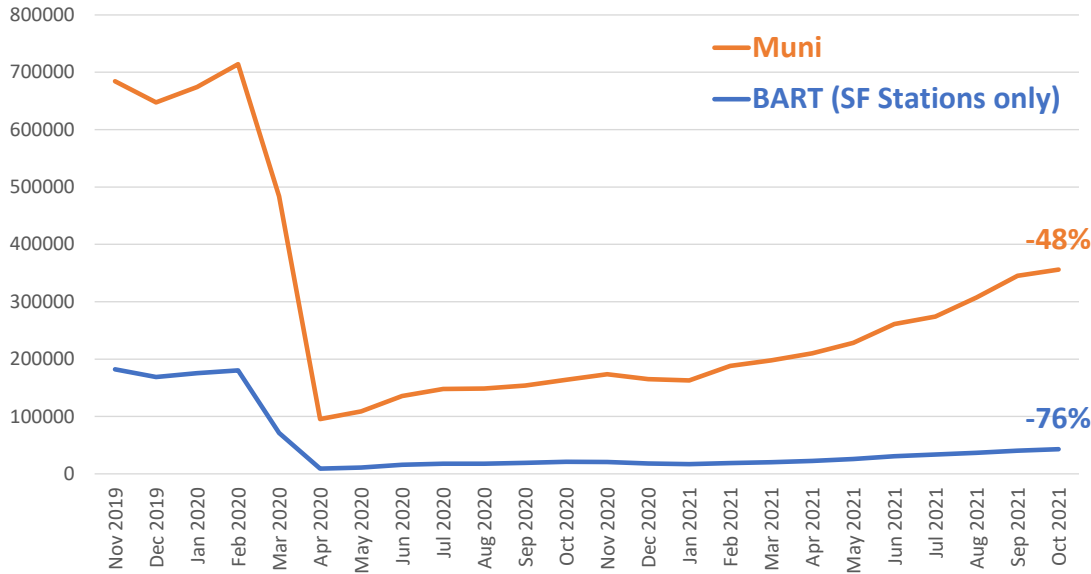
■ Drive ■ Transit ■ Walk ■ Bike

# Transit Trends

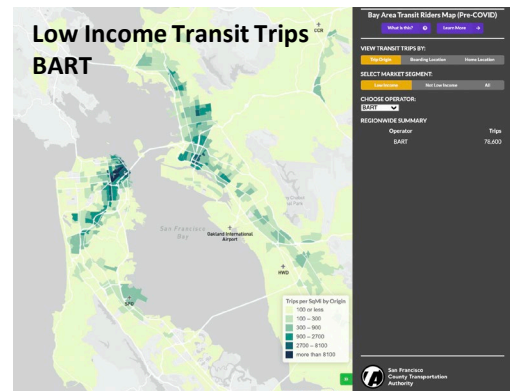
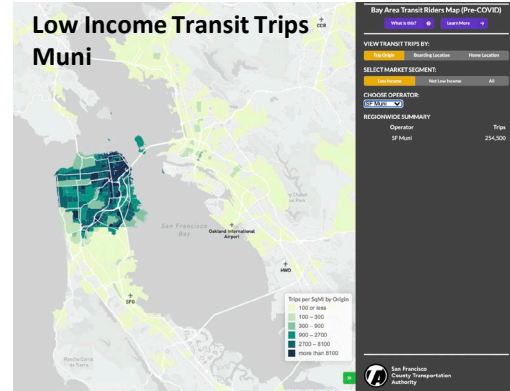


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Average Weekday Transit Boardings by Month

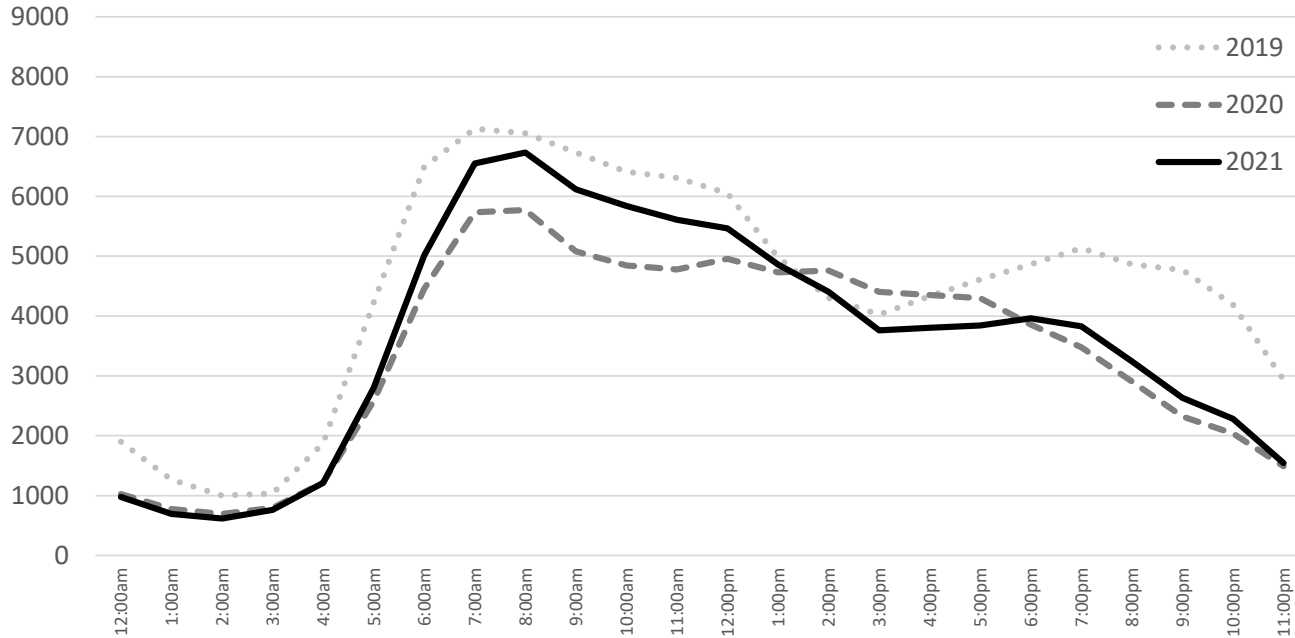


<https://www.sfmta.com/reports/muni-ridership>  
<https://www.bart.gov/about/reports/ridership>



# Traffic Trends

## 101 North of Split, Northbound

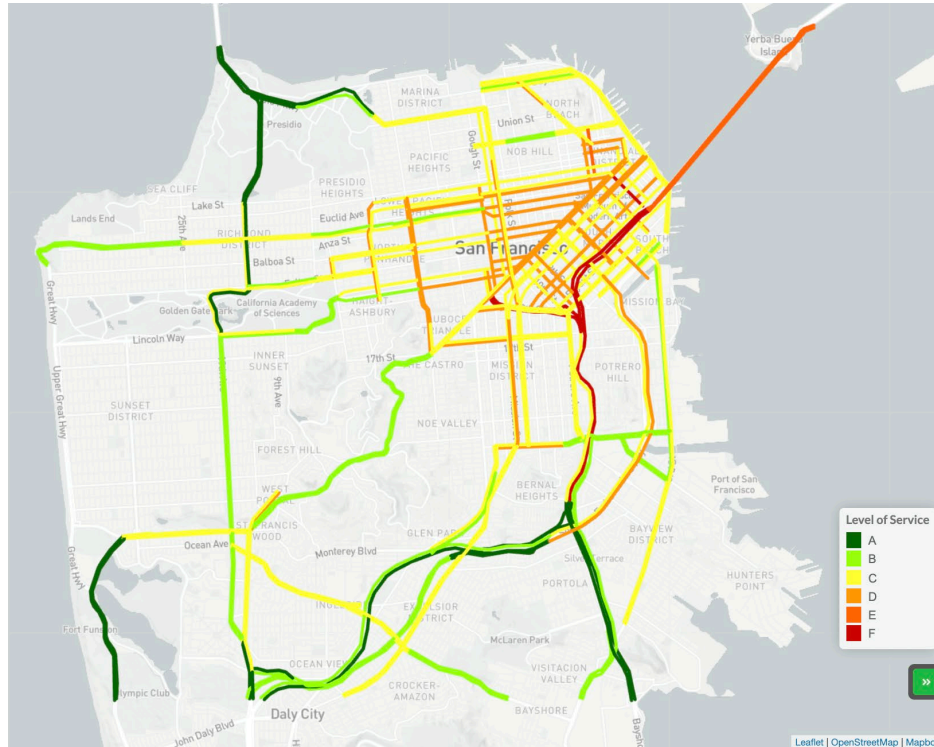


Caltrans PeMS

# Roadway Congestion Trends



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### 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

Year	Auto Speed (MPH)
2007	32
2008	38
2009	32
2010	32
2011	32
2012	32
2013	32
2014	30
2015	28
2016	28
2017	26
2018	26
2019	26
2020	26
2021	32

CHOOSE YEAR: 2007 2009 2011 2013 2015 2017 2019 2021

CHOOSE TIME PERIOD: AM PM

San Francisco County Transportation Authority

Pre-pandemic



Shelter-in-place



Today





## Predict Transportation System Performance

- Mode shares
- Congestion (e.g. VMT, delay)
- Ridership

## Performance based on

- Capital Investments
- Service provision and operations
- Policies (e.g. pricing)
- Population & demographics
- Employment
- Land Use



# Scenario Analysis

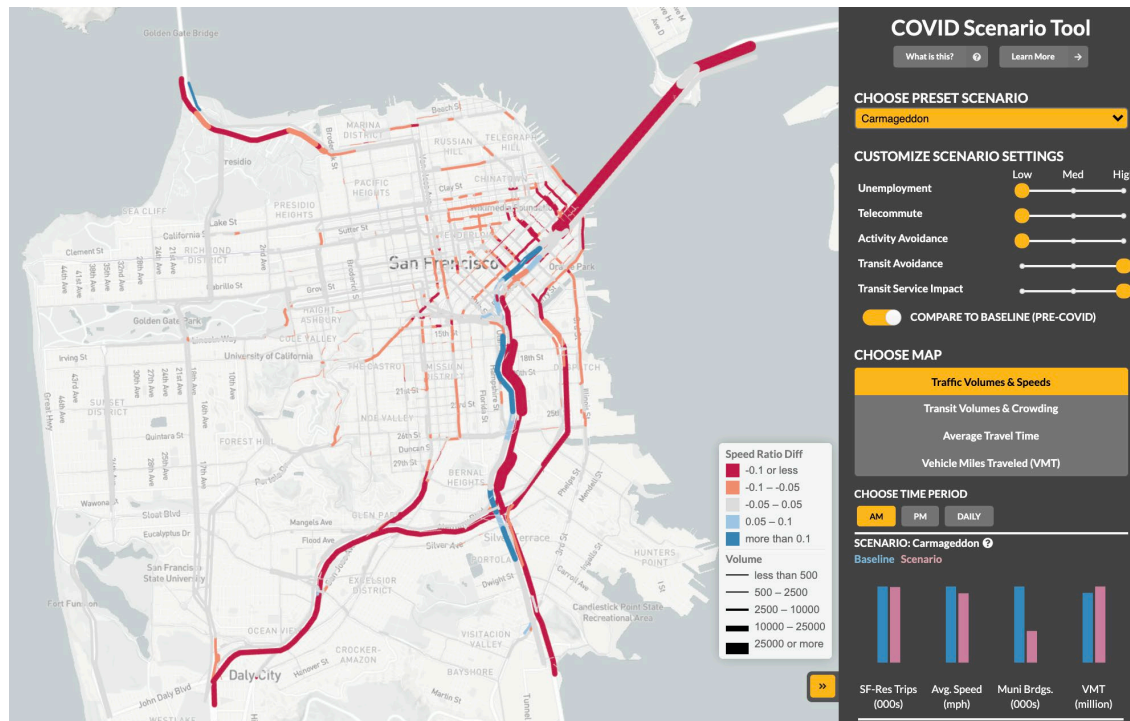


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SFCTA evaluated 250+ scenarios

Scenarios varied assumptions about

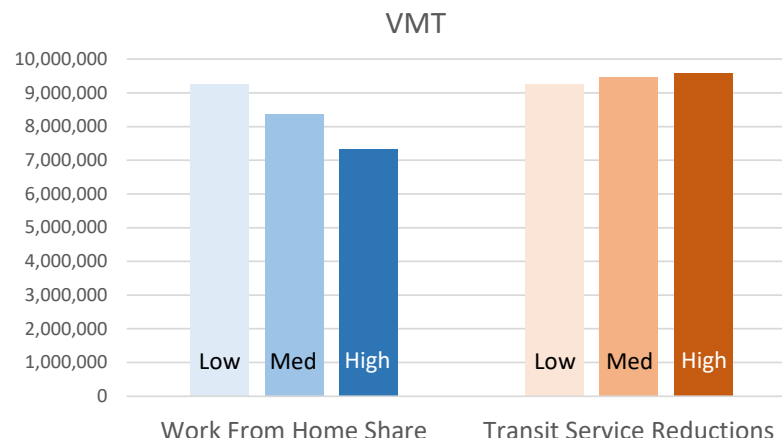
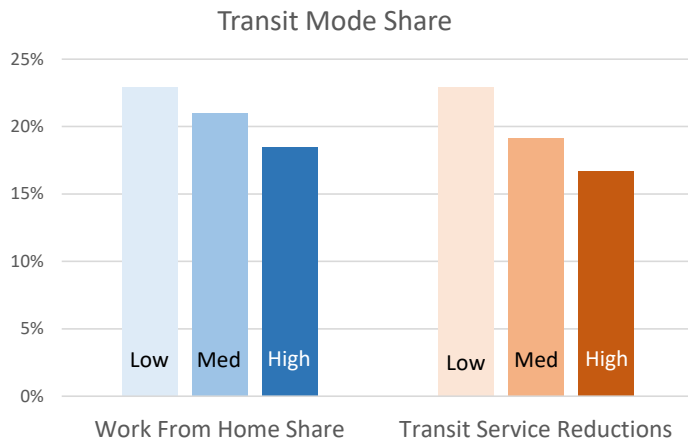
- Working from home
- Unemployment
- Activity participation (“shelter-in-place”)
- Transit Service Provision
- Transit avoidance



# Scenario Analysis: What can policy and investments influence?



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# Scenario Analysis: Back to Business + Transit Reductions & Avoidance



	Unemployment	Work From Home	Activity Participation Avoidance	Transit Avoidance	Transit Service Impact	VMT	Muni	Transit Mode Share	Inbound Bridge Traffic
Pre-COVID	Low	Low	Low	Low	Low	9,265,467	693,009	23%	251,690
Recovery with Limited Transit	Low	Low	Low	High	High	10,448,760	223,082	8%	276,360
						<b>13%</b>	<b>-68%</b>	<b>-67%</b>	<b>10%</b>

Thank you.  
Any Questions?

[sfcta.org](https://sfcta.org)



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