

# MTC's Bay Area Vision Zero System (BAYVIZ)

Background, Data, and Uses

C/CAG Bicycle and Pedestrian Advisory Committee



# Policy Background



# Regional Safety/Vision Zero Policy

Working together with our partner agencies, encourage and support equitable and data-driven actions towards eliminating traffic fatalities and serious injuries for the Bay Area region by 2030



**DATA  
DRIVEN**



**POLICY INITIATIVES  
AND LEGISLATION**



**EDUCATION  
AND ENGAGEMENT**

**REGIONAL LEADERSHIP AND EQUITY FOCUS**

# Principles & Actions



## Regional Safety Leadership

- Encourage local jurisdictions to prioritize safety.
- Work towards aligning funding investments with safety goals.



## Data Driven

- Regional safety data to inform safety policies, performance monitoring and target-setting.
- Serve as a regional safety data bank so cities can benefit from an integrated, reliable source of safety data.



## Equity Focused

- Focus on equity and consider effects of any safety policies on communities of concern.
- Emphasize the concerns of all roadway users, including vulnerable users.



## Evidence-based Policy and Legislation

- Support legislation and policy grounded in research and evidence.



## Education and Engagement

- Engage with key stakeholders for safety policy development and implementation.
- Conduct public outreach and provide education and technical assistance for local jurisdictions.

# Users and Use Cases



## USER TYPE

# Community, Urban or Regional Planner

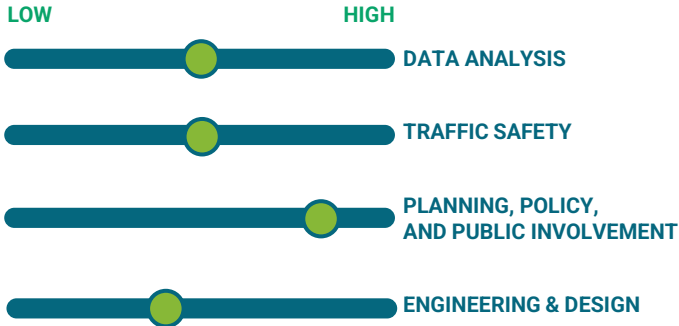
### ROLE DESCRIPTION:

A planner in a DOT, MPO, Transportation or Transit Authority, City, or consultant firm

### ROLE IN TRAFFIC SAFETY

- Strategic planning and policy documents
- Capital improvements planning
- Project management & conceptual design of safety projects

### EXPERTISE & SKILLS



### CHALLENGES

1. Usually not the final decision-maker in budgeting, design, or other safety decisions
2. Have to translate highly technical concepts to information anyone can understand

### USE CASE

### SAFETY DATA SYSTEM FUNCTIONS

Get evidence and data for use in planning docs



Dashboard generator will automatically tabulate crash data for a given area

Track performance measures over time



Regional dashboard with time series crash data

Communicate safety concepts and data to diverse stakeholders



Data and dashboard narrative to highlight value of safety projects

## Major Use Case Themes



Theme	Use Case Example
Get community <b>context</b>	<ul style="list-style-type: none"><li>• Learn about who lives in a community I serve</li><li>• Learn about who is impacted by crashes in the area I live</li><li>• Understand equity and vulnerable populations</li></ul>
Learn or <b>educate</b> others about traffic safety	<ul style="list-style-type: none"><li>• Add context to a news article</li><li>• Prepare public remarks or a news release</li></ul>
<b>Advocate</b> for safer streets	<ul style="list-style-type: none"><li>• Testify at a public hearing</li></ul>
<b>Design</b> safer and more inclusive streets	<ul style="list-style-type: none"><li>• Identify areas with high crash rates</li><li>• Identify an appropriate crash countermeasure</li></ul>
<b>Prioritize</b> , budget, and fund safety projects	<ul style="list-style-type: none"><li>• Apply for a grant</li><li>• Develop a Capital Improvements Plan</li><li>• Develop a TIP</li></ul>
Improve <b>policy and programs</b> around traffic safety	<ul style="list-style-type: none"><li>• Improve Safe Routes to School engagement</li><li>• Change speed limits laws</li><li>• Make traffic enforcement more equitable</li></ul>
Understand trends, set goals, and <b>measure progress</b>	<ul style="list-style-type: none"><li>• Produce public reports for strategic planning documents</li></ul>

# BAYVIZ Tool & Data Available





# Selection Experience

## Multi-Select

Select a shape or grouping of shapes to define an area of interest.

Selection(s):

- San Mateo, CA

**Delete All**

## Select map overlays

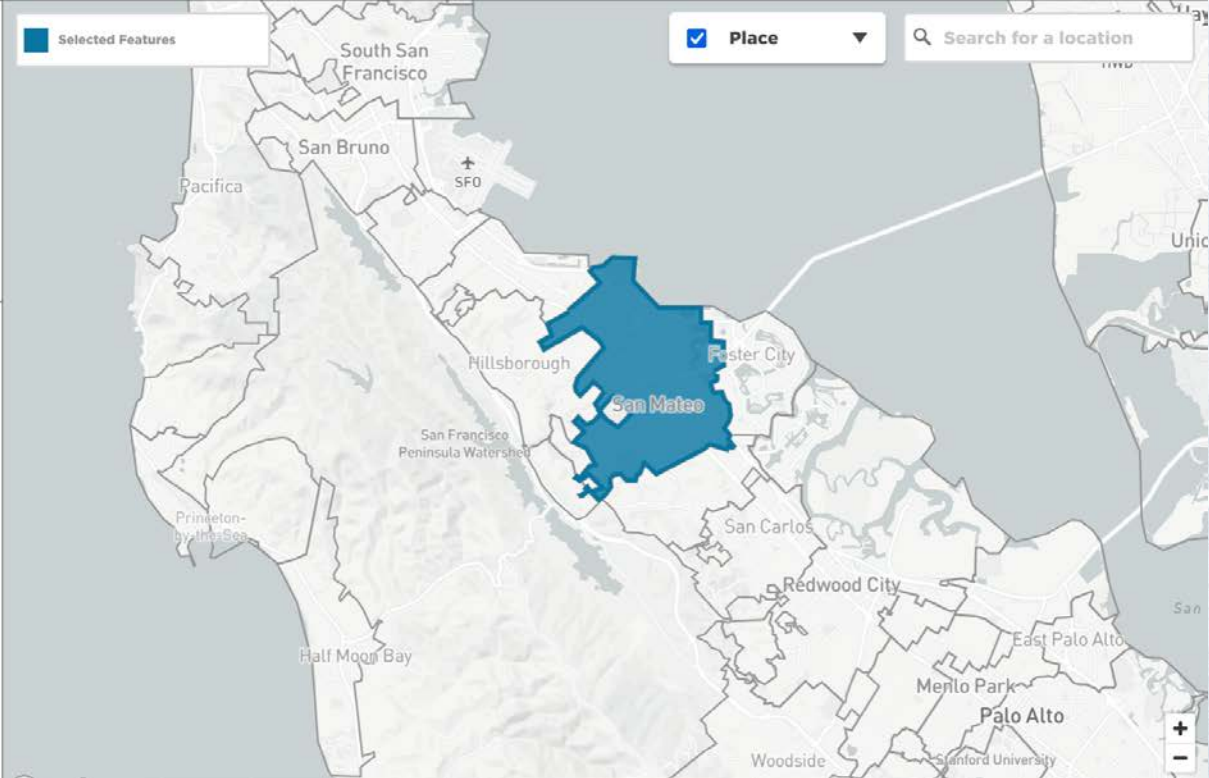
Select from the options below to add overlay map layers on your area of interest.

- Equity Priority Community
- Points of Interest
  - Transit
  - Childcare & Adult Care
  - Education
  - Health/ Medical Outpatient
  - Parks
- Regional High Injury Network**
  - Controlled Access Roadways
  - Full Access Roadways
    - All Modes
    - Driving
    - Walking
    - Biking

Selected Features

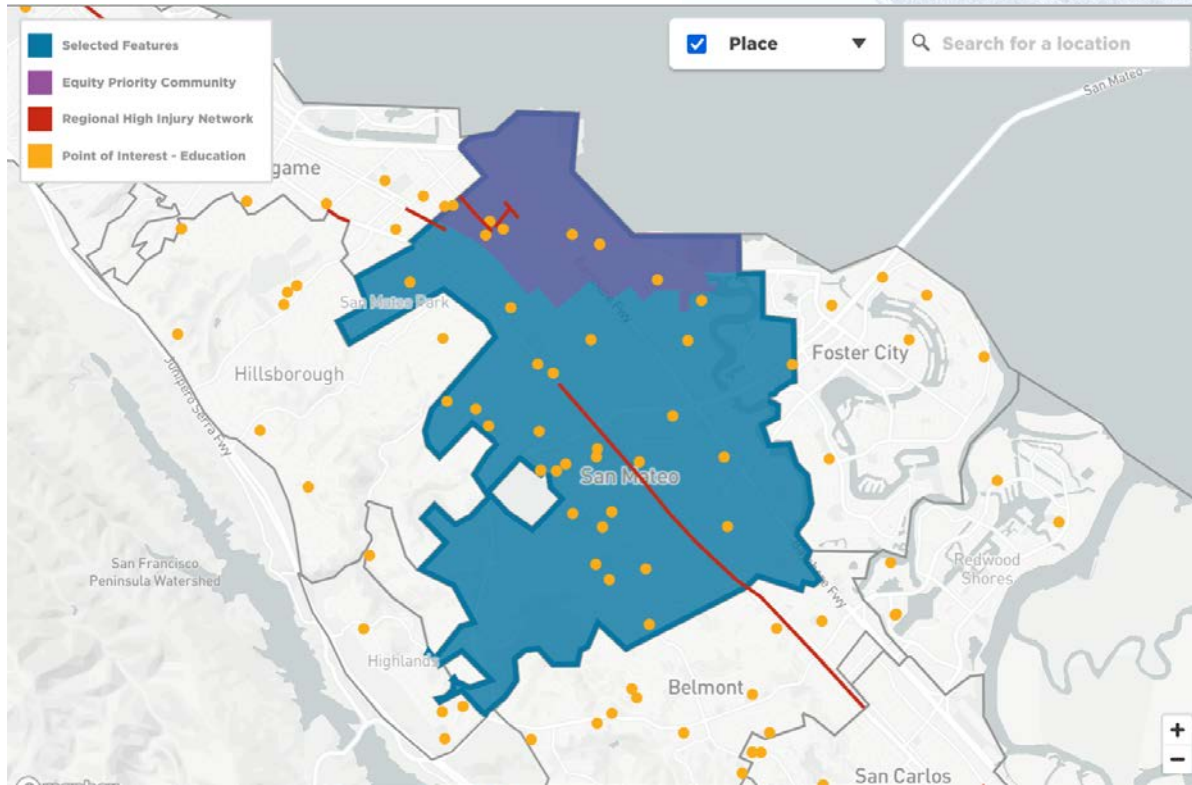
Place

Search for a location

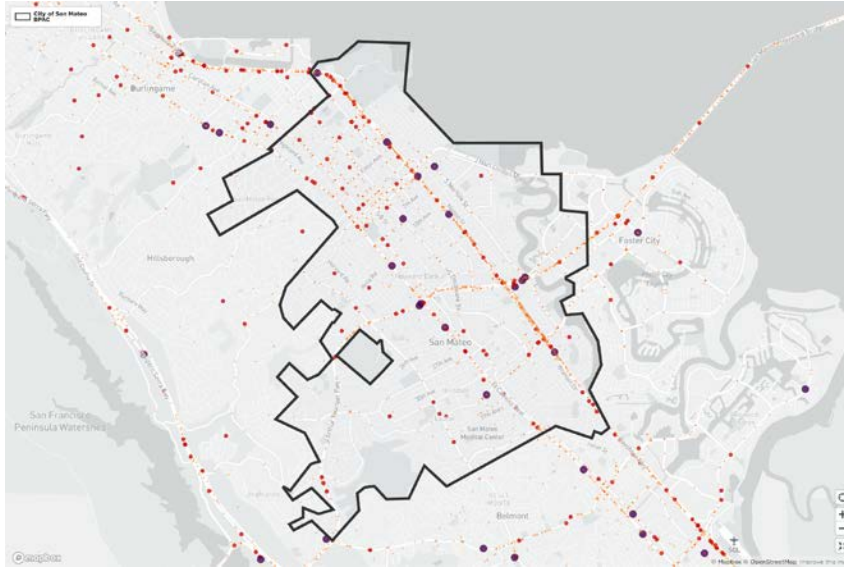




# Contextual Layers



# Collision Data Tab



- **Data from TIMS**
- **Provides high level data on crash causes**
- **Summarizes the victims of collisions in the selected area**
- **Identifies top 10-15% of roadway miles by collisions in the selected area**



# Community Data Tab

**Zero Car Households**  
**5.6%**  
 of households

City of San Mateo BPAC

**5.4%**  
 of households

San Mateo County, CA

**9.3%**  
 of households

Metropolitan Transportation Commission, CA

**Zero Car Households**  
**2,230**  
 Households

City of San Mateo BPAC

**14,264**  
 Households

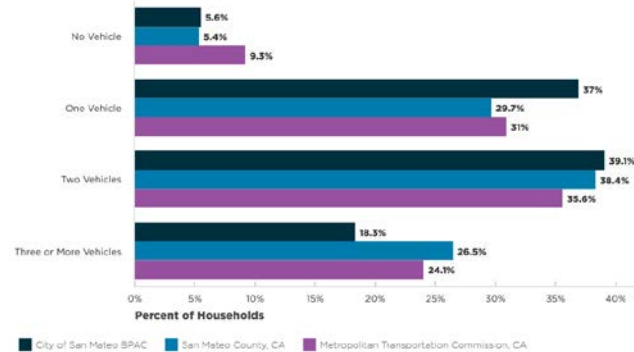
San Mateo County, CA

**255,771**  
 Households

Metropolitan Transportation Commission, CA

Sources: US Census Bureau ACS 5-year 2017-2021

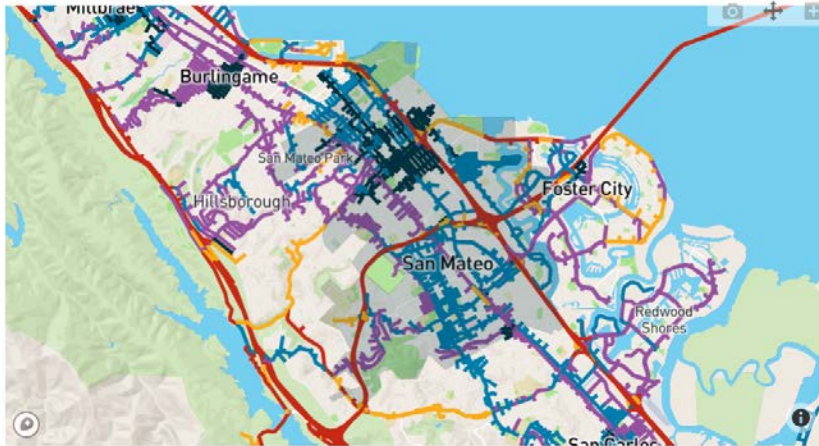
## Zero Car Households



- Equity data, including EPCs, demographics, and other factors
- Mobility data to understand commute mode and walkability
- Key community locations, such as schools, healthcare facilities, parks, and transit stops

# Infrastructure Data Tab

Observed Speeds



- Street characteristics, including functional class, lane number, daily traffic
- Speed data (see left) for AM peak and mid day
- Bicycle lane, sidewalk, and painted crosswalk locations



Questions: contact Bryan Redmond at [bredmond@bayareametro.gov](mailto:bredmond@bayareametro.gov)

**Thank you!**

