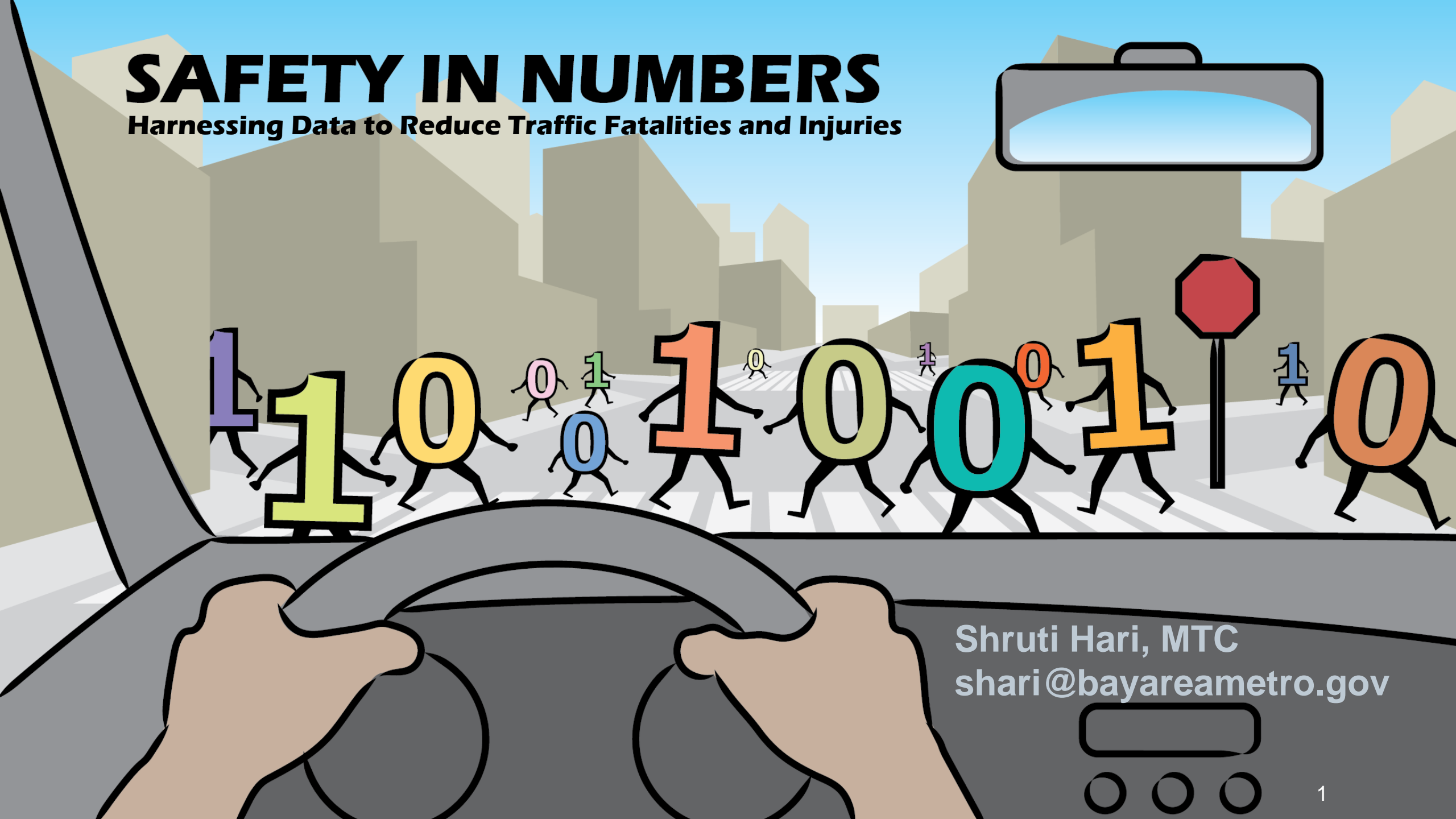


# SAFETY IN NUMBERS

Harnessing Data to Reduce Traffic Fatalities and Injuries



Shruti Hari, MTC  
[shari@bayareametro.gov](mailto:shari@bayareametro.gov)



# Safety in Planning

## TEA-21 (1998)

- MPOs to address Safety in Transportation Planning

## SAFETEA-LU (2005)

- Greater emphasis on addressing Safety
- Established the Highway Safety Improvement Program (HSIP) as a core Federal-aid program

## MAP-21 & FAST (2012 & 2015)

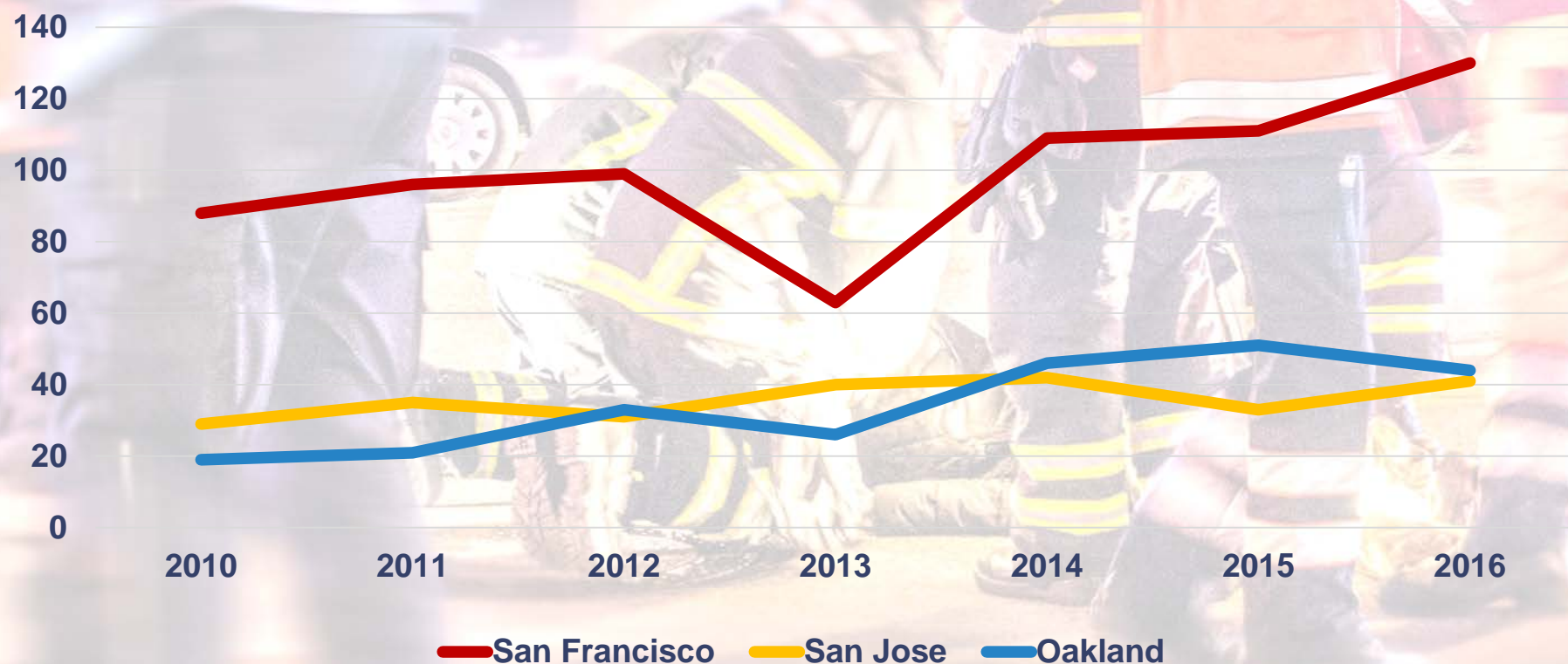
- Requires States and MPOs to adopt Safety performance measures and targets
- Increases size of HSIP



Plan Bay Area 2040

# Pedestrian Fatalities and Severe Injuries

## San Francisco, San Jose, Oakland



Sources: NHTSA, MTC Vital Signs

# Regional Role/What Assistance can MTC provide?

## Policy Initiatives

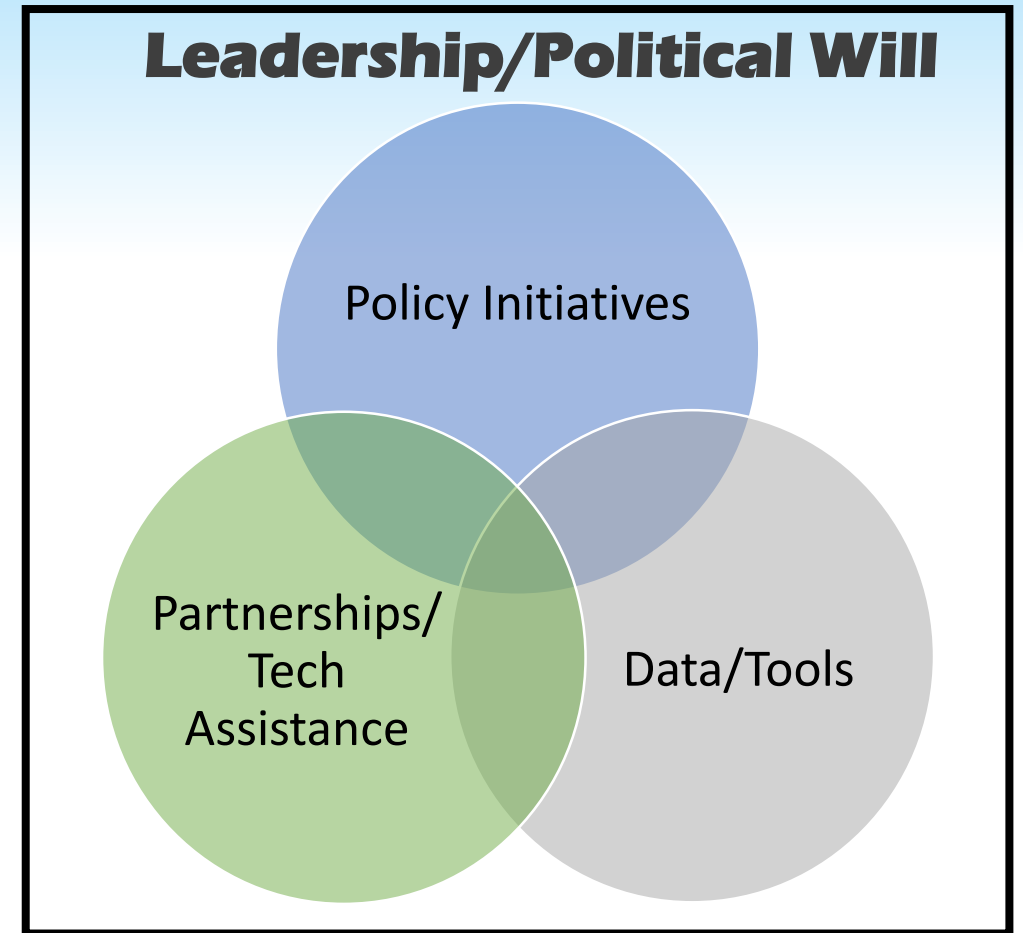
- Align **funding/program policies** with **safety** goals
- Support **safety legislation** — e.g. Cities' power to set speed limits, AB 2363 (Friedman) Vision Zero Taskforce

## Partnerships/Technical Assistance

- Coordinate with **State** for **consistency** with SHSP, CHP, HSIP committees and **funding advocacy**
- **Coordinate** between cities on safety projects spanning **multiple jurisdictions**
- **Technical support** and **best practices** in safety design process
- Region-wide **safety campaign**

## Data

- **Consistent** and **complete** source of **safety data**
- Incorporate **equity** considerations
- Identify problem **region-traversing arterials**



# Regional Safety Data System

## Environmental Data

- Roadway Infrastructure
- Traffic Volumes
- Community
- Demographics
- Land Use
- Health
- Education



## Crash/Injury Data

- Time
- Severity
- Collision Factors
- Sobriety
- Age & Gender
- Type of Vehicle
- Movement



**Policy Toolbox**  
(Targeted Implementation)



**Regional Safety  
Data System**



# Build on Success in Street Saver

- Used by all 100 cities and 9 counties within our region
- More than 350 cities and counties nationwide
- Use Federal Surface Transportation Program (STP) fund for data collection
- Local agencies use it to develop multiyear maintenance program
- MTC uses it for regional planning and advocacy

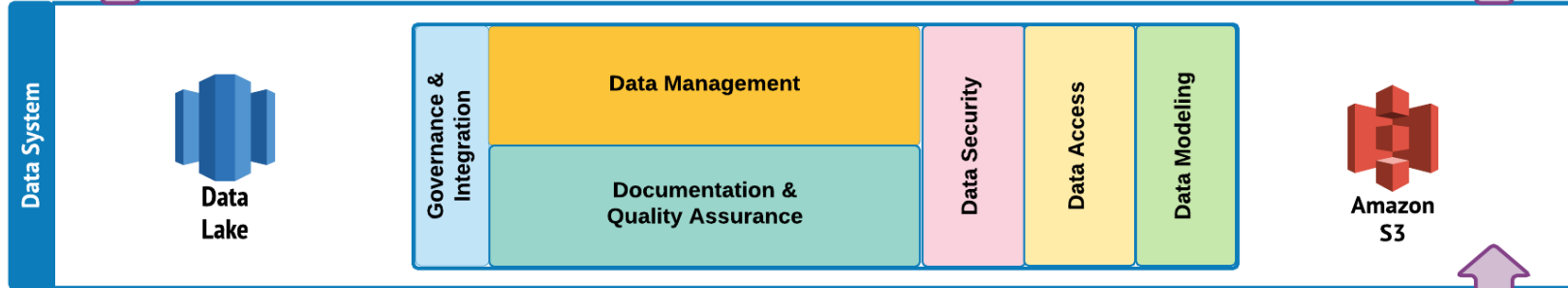
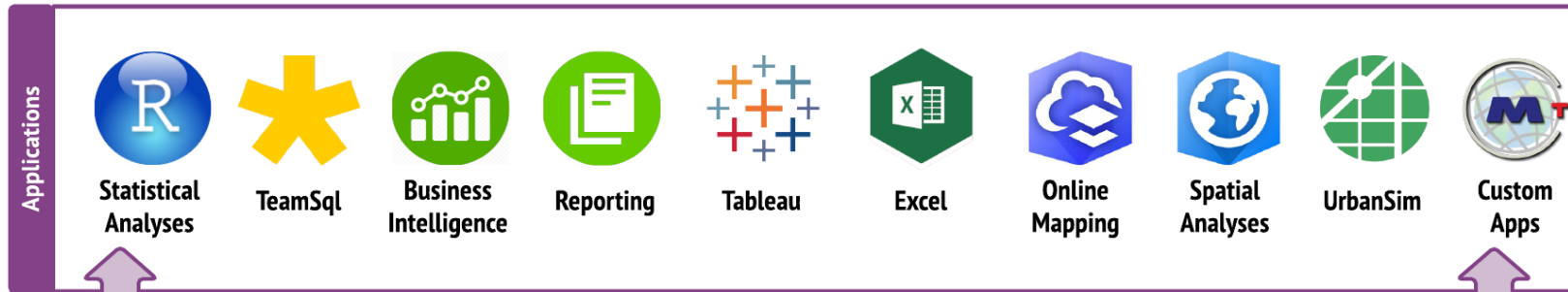




# System Architecture

## Bay Area Spatial Information System

### Suite of Tools and Applications Supported by BASIS



### Data Sources and Types Supported by BASIS



### Data Discovery Toolbox

#### Data Accessibility, Discovery, Process Documentation

Translate  
Discover  
Disseminate, Document



BASIS  
PORTAL



Socrata  
Regional  
Open Data

### Data Processing Toolbox

#### Data Ingestion & Wrangling Services/ Tools

Data Collector  
Data Cleansing  
Extract, Transform, Load (ETL)



Lambda  
function



AWS Data  
Pipeline



TRIFACTA



# **SSARP Funds – Regional Safety Report**

**MTC applied for \$500,000 in SSARP funds for:**

- Regional Safety Data System
  - Data Collection and Integration plan – FHWA pilot
  - Perform Data Integration
  - Conduct Safety Analyses & Effectiveness Evaluations
- State of Safety in the Region Report



# **Regional Safety Program: Steps taken so far**

## **1. Safety Data Integration Peer Exchange**

- Partnership with FHWA

## **2. Coordination with Cities/CMAs/Policy Advisory Council**

- Need for regional safety data, safety advocacy, regional safety campaigns and to prioritize safety in funding

## **3. Awarded State Funding for Safety Effort**

- \$500,000 in SSARP funds for a Regional Safety Data System and a State of Safety in the Region Report

## **4. PDA Connected Communities Safety Ordinance**

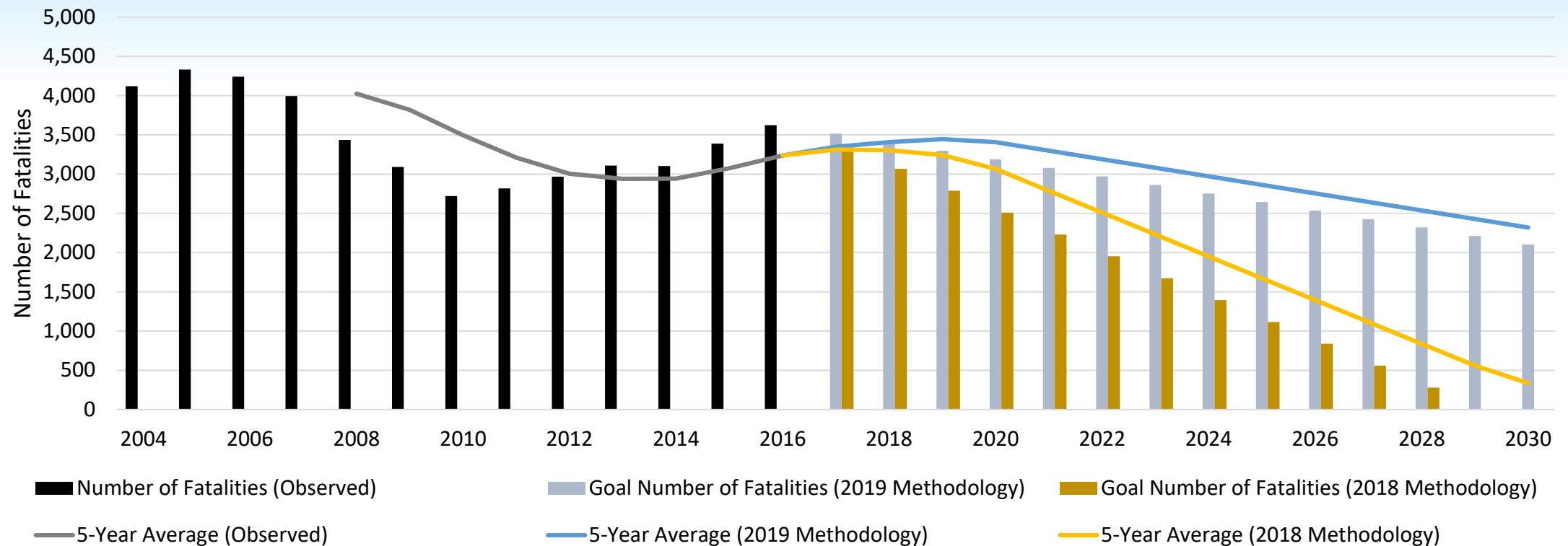
- Required jurisdictions to adopt a Safety/VZ action plan to support growth in PDAs with limited transit

## **5. Adopted 2018 & 2019 regional safety targets**

- In line with Towards Zero Deaths by 2030 for fatalities

# 2018 and 2019 State Safety Targets

California Number of Fatalities Target




Data Source: FARS, via Caltrans

# Regional Safety Program: Proposed Action Plan

	Year 1 Lay the foundation	Years 2-4 Procure consultant / Safety TAP Phase 1	Ongoing Safety TAP Phase 2
Policy	<ul style="list-style-type: none"> <li>PDA Connected Communities safety requirement*</li> <li>Adopt Vision Zero Policy</li> </ul>	<ul style="list-style-type: none"> <li>Support safety legislation</li> </ul>	<ul style="list-style-type: none"> <li>Prioritize or condition funding on safety and align funding investments, e.g. PDA/OBAG 3</li> </ul>
Technical Assistance	<ul style="list-style-type: none"> <li>Establish a Regional Vision Zero Group</li> <li>Traffic Safety Workshops – peer exchange/toolkit of countermeasures</li> </ul>	<ul style="list-style-type: none"> <li>Regional Safety Campaign</li> <li>Assist with safety plans to comply with Caltrans requirement</li> </ul>	<ul style="list-style-type: none"> <li>Coordinate safety projects across multiple jurisdictions</li> <li>Provide guidance/implement region-wide safety policies</li> </ul>
Data System	<ul style="list-style-type: none"> <li>FHWA Data Collection and Integration Plan*</li> <li>Build prototype of a Regional Safety Data System</li> </ul>	<ul style="list-style-type: none"> <li>Develop Regional Safety Data System – HIN map/safety report</li> <li>Data analysis for HSIP applications</li> </ul>	<ul style="list-style-type: none"> <li>Collect data to keep Regional Safety Data System up-to-date, ongoing safety analysis</li> <li>Safety evaluation measures</li> </ul>

# Regional Safety Program: Immediate Next Steps

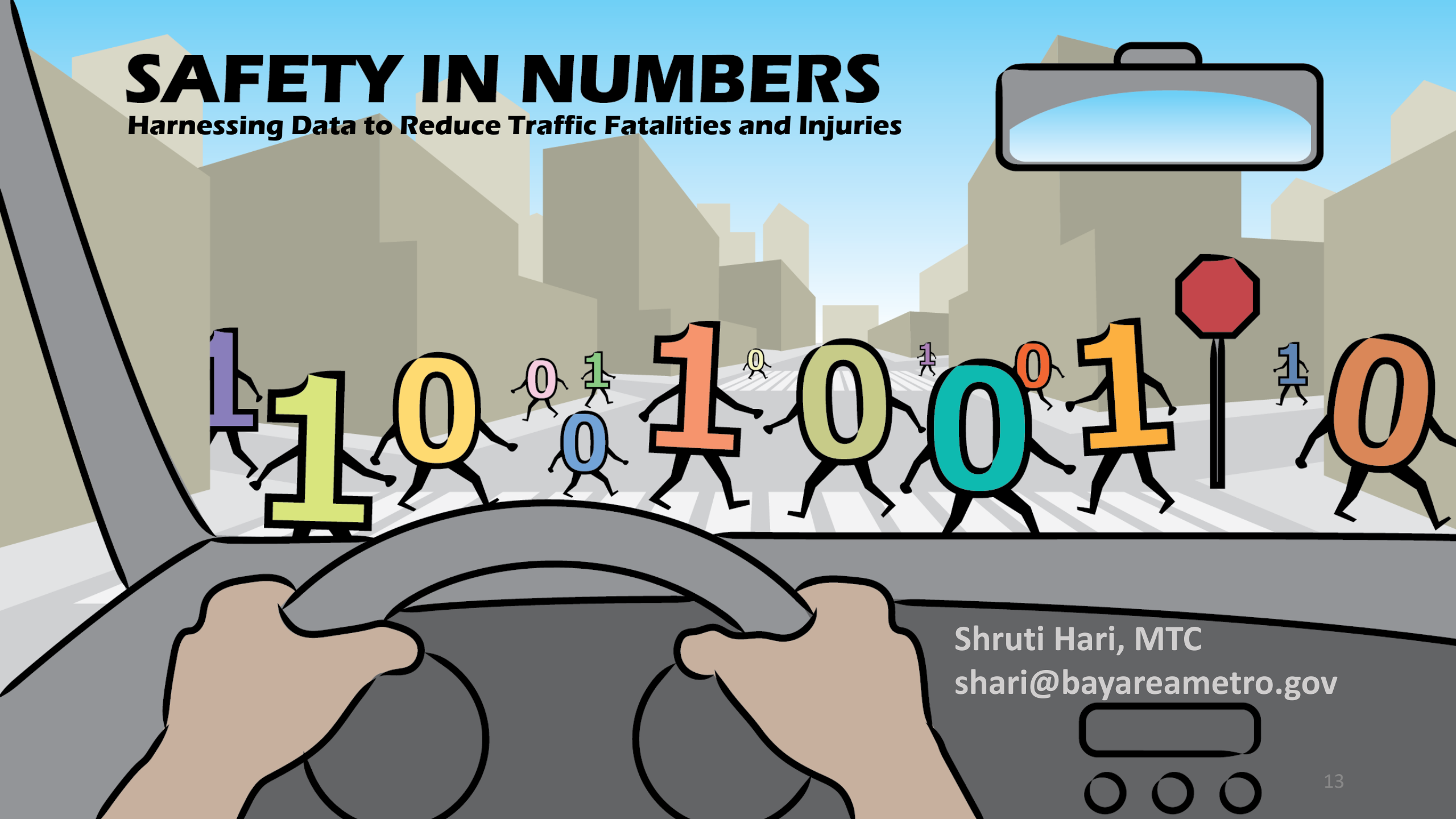
- PDA Connected Communities Safety Policy – provide guidance and implement
- Adopt a regional Vision Zero policy and form Vision Zero Task Force
- Consultant Procurement – develop regional safety data system and data-driven safety analyses and reports



Meet with Commissioners and stakeholders as needed

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