SAFETY IN NUMBERS
Harnessing Data to Reduce Traffic Fatalities and Injuries

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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
Pedestrian Fatalities and Severe Injuries
San Francisco, San Jose, Oakland

Sources: NHTSA, MTC Vital Signs
Regiona l 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)
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
Bay Area Spatial Information System

Suite of Tools and Applications Supported by BASIS

Applications
- R
- TeamSql
- Business Intelligence
- Reporting
- Tableau
- Excel
- Online Mapping
- Spatial Analyses
- UrbanSim
- Custom Apps

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

Data Sources and Types Supported by BASIS

Data Sources
- csv
- Excel
- shp
- Published Reports
- APIs
- Other Geographic Formats
- Socrata Local Govt. Open Data
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

Data Source: FARS, via Caltrans
## Regional Safety Program: Proposed Action Plan

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Years 2-4</th>
<th>Ongoing</th>
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<tbody>
<tr>
<td></td>
<td>Lay the foundation</td>
<td>Procure consultant / Safety TAP Phase 1</td>
<td>Safety TAP Phase 2</td>
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<tr>
<td><strong>Policy</strong></td>
<td>• PDA Connected Communities safety requirement*</td>
<td>• Support safety legislation</td>
<td>• Prioritize or condition funding on safety and align funding investments, e.g. PDA/OBAG 3</td>
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<td>• Adopt Vision Zero Policy</td>
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<td><strong>Technical Assistance</strong></td>
<td>• Establish a Regional Vision Zero Group</td>
<td>• Regional Safety Campaign</td>
<td>• Coordinate safety projects across multiple jurisdictions</td>
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<td>• Traffic Safety Workshops – peer exchange/toolkit of countermeasures</td>
<td>• Assist with safety plans to comply with Caltrans requirement</td>
<td>• Provide guidance/implement region-wide safety policies</td>
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<tr>
<td><strong>Data System</strong></td>
<td>• FHWA Data Collection and Integration Plan*</td>
<td>• Develop Regional Safety Data System – HIN map/safety report</td>
<td>• Collect data to keep Regional Safety Data System up-to-date, ongoing safety analysis</td>
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<td></td>
<td>• Build prototype of a Regional Safety Data System</td>
<td>• Data analysis for HSIP applications</td>
<td>• Safety evaluation measures</td>
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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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